



## Test Plan Execution Report

Test Project: VISIONSDK

Test Plan: PSDKV\_Test\_Plan\_3\_3\_Functional\_TDA3xx

Printed by TestLink on 06/04/2018

2017 (c) Testlink Community

## Table Of Contents

### 1.1.Network

#### 1.1.1.TCP/IP

VISIONSDK-100: NW\_Ctrl\_cmd\_echo  
VISIONSDK-101: NW\_Ctrl\_cmd\_sys\_reset  
VISIONSDK-102: NW\_Ctrl\_cmd\_qspi\_wr  
VISIONSDK-103: NW\_Ctrl\_cmd\_mem\_rd  
VISIONSDK-104: NW\_Ctrl\_cmd\_mem\_wr  
VISIONSDK-105: NW\_Ctrl\_cmd\_mem\_save  
VISIONSDK-106: NW\_Rx\_Display  
VISIONSDK-109: SingleCam\_Capture\_NW\_Tx  
VISIONSDK-110: MultiCam\_Capture\_NW\_Tx

#### 1.1.2.TFDTP

VISIONSDK-234: NW\_Rx\_Display\_TFDTP  
VISIONSDK-237: SingleCam\_Capture\_NW\_Tx\_TFDTP  
VISIONSDK-238: MultiCam\_Capture\_NW\_Tx\_TFDTP

### 1.2.FastBoot

VISIONSDK-118: Fast\_Boot\_AR140\_Sensor\_10inch\_LCD  
VISIONSDK-119: Fast\_Boot\_AR140\_Sensor\_10inch\_LCD\_RTI  
VISIONSDK-120: Fast\_Boot\_AR140\_Sensor\_10inch\_LCD\_Performance

### 1.3.SRV

#### 1.3.1.VIP\_SRV

##### 1.3.1.1.2D\_SRV

VISIONSDK-124: VIP\_2D\_SRV\_OV10635\_913deser  
VISIONSDK-146: VIP\_2D\_SRV\_OV10635\_913deser\_without\_TDAXX\_Folder

#### 1.3.2.CAL\_SRV

##### 1.3.2.1.2D\_SRV

VISIONSDK-128: ISS\_2D\_SRV\_960/964deser  
VISIONSDK-130: ISS\_2D\_SRV\_960/964deser\_AE\_AWB  
VISIONSDK-148: ISS\_2D\_SRV\_960/964deser\_without\_TDA3X\_Folder

**1.3.2.2.3D\_SRV**

VISIONSDK-131: ISS\_3D\_SRV\_960/964deser  
VISIONSDK-133: ISS\_3D\_SRV\_960/964deser\_360\_transition  
VISIONSDK-134: ISS\_3D\_SRV\_960/964deser\_Dump\_Frames  
VISIONSDK-135: ISS\_3D\_2D\_SRV\_960/964deser  
VISIONSDK-136: ISS\_3D\_SRV\_Rearview\_960/964deser  
VISIONSDK-144: ISS\_3D\_SRV\_960/964deser\_without\_TDA3X\_Folder  
VISIONSDK-321: ISS\_3D\_SRV\_960/964deser\_Different\_Output\_resolution

**1.3.3.SRV\_Calibration**

VISIONSDK-137: SRV\_Calibration\_UC\_auto\_calibration  
VISIONSDK-138: SRV\_Calibration\_UC\_manual\_calibration  
VISIONSDK-139: SRV\_Calibration\_UC\_default\_calibration  
VISIONSDK-140: SRV\_Calibration\_UC\_auto\_calibration\_Dump\_Frame  
VISIONSDK-141: SRV\_Calibration\_UC\_auto\_calibration\_update\_2D\_PERSMAT  
VISIONSDK-142: SRV\_Calibration\_UC\_auto\_calibration\_without\_MMC\_SD  
VISIONSDK-143: SRV\_Calibration\_UC\_auto\_calibration\_without\_TDAXX\_Folder

**1.3.4.FastBoot\_SRV**

VISIONSDK-255: FastBoot\_ISS\_3D\_SRV\_960/964deser

**1.4.Mono\_Cam****1.4.1.VIP****1.4.1.1.VIP\_SingleCam\_Capture\_Display**

VISIONSDK-1: VIP\_Capture\_Display\_Input\_OV10635\_Output\_7inch\_LCD  
VISIONSDK-2: VIP\_Capture\_Display\_Input\_OV10635\_Output\_HDMI\_720P  
VISIONSDK-5: VIP\_Capture\_Display\_Input\_OV10635\_Output\_HDMI\_1080P  
VISIONSDK-112: VIP\_Capture\_Display\_Input\_OV10635\_Output\_10inch\_LCD  
VISIONSDK-113: VIP\_Capture\_Display\_Input\_OV10635\_Output\_10inch\_OSD\_LCD  
VISIONSDK-114: VIP\_Capture\_Display\_Input\_OV10635\_Output\_SD\_PAL  
VISIONSDK-115: VIP\_Capture\_Display\_Input\_OV10635\_Output\_SD\_NTSC  
VISIONSDK-296: VIP\_Capture\_Display\_without\_Sensor

**1.4.1.2.VIP\_Capture\_FrameCopy\_Display**

VISIONSDK-7: VIP\_Capture\_FrameCopy\_DSP1\_Display  
VISIONSDK-8: VIP\_Capture\_FrameCopy\_EVE1\_Display

**1.4.1.3.VIP\_Capture\_SubFrameCopy\_Display**

VISIONSDK-168: VIP\_Capture\_SubFrameCopy\_EVE1\_Display

**1.4.1.4.VIP\_Capture\_IPC\_Display**

VISIONSDK-230: VIP\_Capture\_IPC\_Display\_Single\_core

VISIONSDK-231: VIP\_Capture\_IPC\_Display\_Multi\_core

#### **1.4.1.5.VIP\_Capture\_Color\_To\_Gray\_Display**

VISIONSDK-167: VIP\_Capture\_Color\_To\_Gray\_Display

#### **1.4.1.6.VIP\_Capture\_DSSWB\_Display**

VISIONSDK-179: VIP\_Capture\_DSSWB\_CRC\_Display

VISIONSDK-180: VIP\_Capture\_DisplayMultipipe\_DSSWB\_Metadata

#### **1.4.1.7.VIP\_Capture\_VPE\_Display**

VISIONSDK-189: VIP\_Capture\_VPE\_Display

#### **1.4.1.8.VIP\_SingleCam\_Capture\_Analytics\_Display**

VISIONSDK-9: VIP\_Capture\_Edge\_detect\_Display

VISIONSDK-10: VIP\_Capture\_DOF\_1Pyramid\_Display

VISIONSDK-11: VIP\_Capture\_DOF\_2Pyramid\_Display

### **1.4.2.HDMI**

#### **1.4.2.1.HDMI\_Capture\_Display**

VISIONSDK-3: HDMI\_Capture\_Display\_Input\_HDMI\_Output\_LCD

VISIONSDK-4: HDMI\_Capture\_Display\_Input\_HDMI\_Output\_HDMI

#### **1.4.2.2.HDMI\_Capture\_Analytics\_Display**

VISIONSDK-14: HDMI\_Capture\_SOF\_Display

VISIONSDK-15: HDMI\_Capture\_LD\_Display

VISIONSDK-16: HDMI\_Capture\_TLR\_Display

VISIONSDK-17: HDMI\_Capture\_PD\_Display

VISIONSDK-18: HDMI\_Capture\_TSR\_Display

VISIONSDK-19: HDMI\_Capture\_VD\_Display

VISIONSDK-20: HDMI\_Capture\_PD\_TSR\_VD\_Display

VISIONSDK-21: HDMI\_Capture\_FrontCam\_Analytics\_Display

### **1.4.3.ISS**

#### **1.4.3.1.ISS\_SingleCam\_Capture\_Display\_AR140**

VISIONSDK-24: ISS\_Capture\_AR140\_LM

VISIONSDK-25: ISS\_Capture\_AR140\_LM\_Performance

VISIONSDK-26: ISS\_Capture\_AR140\_LM\_Dyanmic\_Range

VISIONSDK-27: ISS\_Capture\_AR140\_1PASS\_WDR

VISIONSDK-29: ISS\_Capture\_AR140\_2PASS\_WDR

VISIONSDK-31: ISS\_Capture\_AR140\_2PASS\_WDR\_Performance

VISIONSDK-32: ISS\_Capture\_AR140\_2PASS\_WDR\_Dynamic\_Range

VISIONSDK-33: ISS\_Capture\_AR140\_2PASS\_WDR\_AE

VISIONSDK-34: ISS\_Capture\_AR140\_2PASS\_WDR\_VTNF  
VISIONSDK-36: ISS\_Capture\_AR140\_2PASS\_WDR\_LDC  
VISIONSDK-37: ISS\_Capture\_AR140\_2PASS\_WDR\_LDC\_VTNF  
VISIONSDK-38: ISS\_Capture\_AR140\_2PASS\_WDR\_Color\_Fidelity  
VISIONSDK-39: ISS\_Capture\_AR140\_2PASS\_WDR\_Noise\_Filter  
VISIONSDK-40: ISS\_Capture\_AR140\_2PASS\_WDR\_DUMP\_RAW\_FRAMES  
VISIONSDK-41: ISS\_Capture\_AR140\_2PASS\_WDR\_DUMP\_YUV\_FRAMES  
VISIONSDK-42: ISS\_Capture\_AR140\_2PASS\_WDR\_Read\_Sensor\_Reg  
VISIONSDK-43: ISS\_Capture\_AR140\_2PASS\_WDR\_Write\_Sensor\_Reg  
VISIONSDK-44: ISS\_Capture\_AR140\_2PASS\_WDR\_Save\_DCC\_Profile  
VISIONSDK-45: ISS\_Capture\_AR140\_2PASS\_WDR\_Send\_DCC\_Profile  
VISIONSDK-46: ISS\_Capture\_AR140\_2PASS\_WDR\_Clear\_DCC\_Profile

#### **1.4.3.2.ISS\_SingleCam\_Capture\_Display\_OV10640**

VISIONSDK-56: ISS\_Capture\_OV10640\_LM\_Performance  
VISIONSDK-57: ISS\_Capture\_OV10640\_LM\_Dyanmic\_Range  
VISIONSDK-59: ISS\_Capture\_OV10640\_2PASS\_WDR  
VISIONSDK-60: ISS\_Capture\_OV10640\_2PASS\_WDR\_Performance  
VISIONSDK-61: ISS\_Capture\_OV10640\_2PASS\_WDR\_Dynamic\_Range  
VISIONSDK-62: ISS\_Capture\_OV10640\_2PASS\_WDR\_AE  
VISIONSDK-63: ISS\_Capture\_OV10640\_2PASS\_WDR\_VTNF  
VISIONSDK-64: ISS\_Capture\_OV10640\_2PASS\_WDR\_LDC  
VISIONSDK-65: ISS\_Capture\_OV10640\_2PASS\_WDR\_LDC\_VTNF  
VISIONSDK-66: ISS\_Capture\_OV10640\_2PASS\_WDR\_Color\_Fidelity  
VISIONSDK-67: ISS\_Capture\_OV10640\_2PASS\_WDR\_Noise\_Filter  
VISIONSDK-68: ISS\_Capture\_OV10640\_2PASS\_WDR\_DUMP\_RAW\_FRAMES  
VISIONSDK-69: ISS\_Capture\_OV10640\_2PASS\_WDR\_DUMP\_YUV\_FRAMES  
VISIONSDK-70: ISS\_Capture\_OV10640\_2PASS\_WDR\_Read\_Sensor\_Reg  
VISIONSDK-71: ISS\_Capture\_OV10640\_2PASS\_WDR\_Write\_Sensor\_Reg  
VISIONSDK-72: ISS\_Capture\_OV10640\_2PASS\_WDR\_Save\_DCC\_Profile  
VISIONSDK-73: ISS\_Capture\_OV10640\_2PASS\_WDR\_Send\_DCC\_Profile  
VISIONSDK-74: ISS\_Capture\_OV10640\_2PASS\_WDR\_Clear\_DCC\_Profile  
VISIONSDK-47: ISS\_Capture\_OV10640\_LM

#### **1.4.3.3.ISS\_SingleCam\_Capture\_Display\_IMX224**

VISIONSDK-77: ISS\_Capture\_IMX224\_LM  
VISIONSDK-78: ISS\_Capture\_IMX224\_LM\_Performance  
VISIONSDK-79: ISS\_Capture\_IMX224\_LM\_Dyanmic\_Range  
VISIONSDK-80: ISS\_Capture\_IMX224\_2PASS\_WDR  
VISIONSDK-81: ISS\_Capture\_IMX224\_2PASS\_WDR\_Performance

VISIONSDK-82: ISS\_Capture\_IMX224\_2PASS\_WDR\_Dynamic\_Range

VISIONSDK-83: ISS\_Capture\_IMX224\_2PASS\_WDR\_AE

VISIONSDK-84: ISS\_Capture\_IMX224\_2PASS\_WDR\_VTNF

VISIONSDK-85: ISS\_Capture\_IMX224\_2PASS\_WDR\_LDC

VISIONSDK-86: ISS\_Capture\_IMX224\_2PASS\_WDR\_LDC\_VTNF

VISIONSDK-87: ISS\_Capture\_IMX224\_2PASS\_WDR\_Color\_Fidelity

VISIONSDK-88: ISS\_Capture\_IMX224\_2PASS\_WDR\_Noise\_Filter

VISIONSDK-89: ISS\_Capture\_IMX224\_2PASS\_WDR\_DUMP\_RAW\_FRAMES

VISIONSDK-90: ISS\_Capture\_IMX224\_2PASS\_WDR\_DUMP\_YUV\_FRAMES

VISIONSDK-91: ISS\_Capture\_IMX224\_2PASS\_WDR\_Read\_Sensor\_Reg

VISIONSDK-92: ISS\_Capture\_IMX224\_2PASS\_WDR\_Write\_Sensor\_Reg

VISIONSDK-93: ISS\_Capture\_IMX224\_2PASS\_WDR\_Save\_DCC\_Profile

VISIONSDK-94: ISS\_Capture\_IMX224\_2PASS\_WDR\_Send\_DCC\_Profile

VISIONSDK-95: ISS\_Capture\_IMX224\_2PASS\_WDR\_Clear\_DCC\_Profile

#### **1.4.3.4.ISS\_SingleCam\_Capture\_Display\_OV2775**

VISIONSDK-248: ISS\_Capture\_OV2775\_LM

VISIONSDK-291: ISS\_Capture\_OV2775\_LM\_performance

VISIONSDK-315: ISS\_Capture\_OV2775\_LM\_LDC\_VTNF

#### **1.4.3.5.ISS\_SingleCam\_Capture\_Display\_AR0143**

VISIONSDK-254: ISS\_Capture\_AR0143\_LM

VISIONSDK-292: ISS\_Capture\_AR0143\_LM\_Performance

VISIONSDK-334: ISS\_Capture\_AR143\_1PASS\_WDR

VISIONSDK-335: ISS\_Capture\_AR143\_2PASS\_WDR

VISIONSDK-336: ISS\_Capture\_AR143\_2PASS\_WDR\_Performance

VISIONSDK-337: ISS\_Capture\_AR143\_2PASS\_WDR\_Dynamic\_Range

VISIONSDK-338: ISS\_Capture\_AR143\_2PASS\_WDR\_AE

VISIONSDK-339: ISS\_Capture\_AR143\_2PASS\_WDR\_VTNF

VISIONSDK-340: ISS\_Capture\_AR143\_2PASS\_WDR\_LDC

VISIONSDK-341: ISS\_Capture\_AR143\_2PASS\_WDR\_LDC\_VTNF

#### **1.4.3.6.ISS\_SingleCam\_Capture\_Display\_AR132**

VISIONSDK-263: ISS\_Capture\_AR132\_LM

VISIONSDK-264: ISS\_Capture\_AR132\_LM\_Performance

VISIONSDK-265: ISS\_Capture\_AR132\_LM\_LDC\_VTNF

VISIONSDK-266: ISS\_Capture\_AR132\_LM\_DUMP\_RAW\_FRAMES

VISIONSDK-267: ISS\_Capture\_AR132\_LM\_DUMP\_YUV\_FRAMES

VISIONSDK-268: ISS\_Capture\_AR132\_LM\_Read\_Sensor\_Reg

VISIONSDK-269: ISS\_Capture\_AR132\_LM\_Write\_Sensor\_Reg

VISIONSDK-270: ISS\_Capture\_AR132\_LM\_Save\_DCC\_Profile

VISIONSDK-271: ISS\_Capture\_AR132\_LM\_Send\_DCC\_Profile

VISIONSDK-272: ISS\_Capture\_AR132\_LM\_Clear\_DCC\_Profile

VISIONSDK-286: ISS\_Capture\_AR132\_LM\_Monochrome

VISIONSDK-307: ISS\_dump\_frames\_various\_tap\_points

#### **1.4.4.TIDL**

##### **1.4.4.1.TIDL\_FILE\_IO**

VISIONSDK-158: TIDL\_File\_IO\_UC\_DSP\_Performance

VISIONSDK-159: TIDL\_File\_IO\_UC\_DSP\_Dump\_Frames\_File

VISIONSDK-160: TIDL\_File\_IO\_UC\_DSP\_Free\_Run

VISIONSDK-161: TIDL\_File\_IO\_UC\_EVE\_Performance

VISIONSDK-162: TIDL\_File\_IO\_UC\_EVE\_Dump\_Frames\_File

VISIONSDK-163: TIDL\_File\_IO\_UC\_EVE\_Free\_Run

#### **1.4.5.MISC**

##### **1.4.5.1.SyncLink**

VISIONSDK-187: VIP\_Capture\_Sync\_Null

##### **1.4.5.2.DupLink**

VISIONSDK-165: VIP\_Capture\_Dup\_Display

##### **1.4.5.3.MergeLink**

VISIONSDK-166: VIP\_Capture\_Merge\_Display

##### **1.4.5.4.StatisticsLogs**

VISIONSDK-211: VIP\_SingleCam\_Capture\_Display\_Statistics\_Logs

VISIONSDK-212: Print\_PRCM\_Statistics\_Dpll\_Status

VISIONSDK-213: Print\_PRCM\_Statistics\_Temperature

VISIONSDK-214: Print\_PRCM\_Statistics\_Voltage

VISIONSDK-215: Print\_PRCM\_Statistics\_Module\_Power\_State

VISIONSDK-216: Print\_PRCM\_Statistics\_CPU\_Frequency

VISIONSDK-217: Print\_PRCM\_Statistics\_Peripherals\_Frequency

VISIONSDK-218: Print\_PRCM\_Statistics\_Prcm\_Register\_Data

VISIONSDK-219: Print\_PRCM\_Statistics\_Power\_Consumption

VISIONSDK-220: Print\_PRCM\_Statistics\_All\_PRCM\_Stats

##### **1.4.5.5.FATFS**

VISIONSDK-228: File\_IO\_UC\_MMCSd\_IPU1\_0

##### **1.4.5.6.Limp\_Home\_Mode**

VISIONSDK-277: Limp\_Home\_Mode

##### **1.4.5.7.Task\_time\_measure\_utility**

VISIONSDK-289: VIP\_Capture\_Display\_task\_time\_measure\_utility

**1.4.5.8.TLFW\_verify**

VISIONSDK-309: TLFW\_verification

VISIONSDK-325: VSDK\_restructuring\_directory\_structure

**1.4.6.ECC\_FFI**

VISIONSDK-121: Capture\_FrameCopy\_FFI\_DSP1\_Display

VISIONSDK-122: Capture\_FrameCopy\_FFI\_EVE1\_Display

**1.4.7.IPC\_LIB**

VISIONSDK-123: IPC\_LIB

VISIONSDK-240: Low\_Latency\_IPC

**1.4.8.RTI**

VISIONSDK-226: VIP\_Capture\_Display\_suspend\_IPU1\_0

VISIONSDK-227: VIP\_Capture\_FrameCopy\_Display\_suspend\_DSP\_EVE

**1.5.Open\_Compute****1.5.1.OpenVX**

VISIONSDK-223: OpenVX\_Confirmation\_Test

VISIONSDK-224: OpenVX\_Tutorials

VISIONSDK-225: VIP\_Capture\_OpenVX\_Display\_Input\_OV10635\_Output\_HDMI\_1080P

**1.6.Multi\_Cam****1.6.1.Multi\_Channel\_LVDS\_Capture\_Display**

VISIONSDK-22: VIP\_4CH\_Capture\_Display\_OV10635\_913deser

VISIONSDK-132: CSI2\_4CH\_Capture\_Display\_OV10635\_964deser

**1.6.2.SelectLink**

VISIONSDK-186: VIP\_4CH\_Capture\_Select\_Display

**1.6.3.VIP\_4CH\_Capture\_Color\_To\_Gray\_Display**

VISIONSDK-188: VIP\_4CH\_Capture\_Color\_To\_Gray\_Display

**1.6.4.VIP\_4CH\_Capture\_VPE\_Sync\_DMA\_SWMS\_Display**

VISIONSDK-192: VIP\_4CH\_Capture\_VPE\_Sync\_DMA\_SWMS\_Display

**1.6.5.Rear\_View\_Panorama**

VISIONSDK-301: RSVP\_4CH\_VIP\_Capture\_960deser\_IMI



## VISIONSDK-302: RSVP\_Manual\_LDC\_LUT\_Generation

**1.7.Radar**

VISIONSDK-150: Radar\_AR12\_Capture\_Null  
VISIONSDK-152: Radar\_AR12\_Capture\_Radar\_FrameCopy\_DSP1\_Null  
VISIONSDK-154: NullSrc\_Capture\_Radar\_FFT\_EVE1\_Null\_Read\_Frames\_SDcard  
VISIONSDK-155: NullSrc\_Capture\_Radar\_FFT\_EVE1\_Null\_Write\_Frames\_SDcard  
VISIONSDK-156: NullSrc\_Capture\_Radar\_FFT\_EVE1\_Null\_Read\_Frames\_NW  
VISIONSDK-157: NullSrc\_Capture\_Radar\_FFT\_EVE1\_Null\_Write\_Frames\_NW  
VISIONSDK-232: Radar\_AR12\_Capture\_Radar\_Object\_Detect\_EVE1\_Null  
VISIONSDK-233: Radar\_AR12\_Capture\_Radar\_Object\_Detect\_EVE1\_Display  
VISIONSDK-243: Radar\_Flash\_AR12\_Firmware  
VISIONSDK-313: Radar\_AR12\_Multi\_Capture\_Radar\_FFT\_EVE1\_Display  
VISIONSDK-314: Radar\_Test\_Source\_Object\_Detection

**1.8.Build****1.8.1.VSDK\_Builds**

VISIONSDK-249: VSDK\_BIOS\_different\_builds  
VISIONSDK-278: VSDK\_KW\_build

**1.8.2.Radar\_Builds**

VISIONSDK-242: Radar\_default\_build  
VISIONSDK-280: Radar\_different\_builds

**1.9.Release\_Process**

VISIONSDK-245: VSDK\_Radar\_release\_check\_list  
VISIONSDK-246: VSDK\_package\_creation\_and\_installation  
VISIONSDK-247: Radar\_package\_creation\_and\_installation

**1.10.Boot\_Modes****1.10.1.Secure\_Boot**

VISIONSDK-229: VIP\_Capture\_Display\_UC\_HS\_Sample

**1.10.2.QSPI\_Boot**

VISIONSDK-274: Load\_Binaries\_using\_QSPI

**1.10.3.QSPI\_SD\_Boot**

VISIONSDK-275: Load\_Binaries\_using\_QSPI\_SD

**1.10.4.CCS\_Boot**

VISIONSDK-332: Load\_Binaries\_using\_CCS

## **Test Project: VISIONSDK**

---

Project: VISIONSDK Location: TII Owner: Sivasankaran, Shiju

## **Test Plan: PSDKV\_Test\_Plan\_3\_3\_Functional\_TDA3xx**

---

TDA3xx Functional Test Plan

Will cover all functional test for tda3xx-evm

## 1.1.Test Suite : Network

---

### 1.1.1.Test Suite : TCP/IP

|   |   |  |                          |
|---|---|--|--------------------------|
| Test Case VISIONSDK-100: NW_Ctrl_cmd_echo   |   |  |                          |
| <u>Summary:</u><br>Network Control Command "echo"   |   |  |                          |
| <u>Preconditions:</u><br>verify that host and target can communicate and execute command accordingly<br>Boot with SD card<br>Make network cable connected |   |  |                          |
| <u>#:</u>   | <u>Step actions:</u>  | <u>Expected Results:</u>   | <u>Execution Status:</u> |
| 1   | Boot EVM  | EVM boots without any error and usecase menu displayed                                   |                          |
| 2   | Open command prompt in host PC<br><br>Execute "echo" command using network_ctrl.exe<br><br>#network_ctrl --ipaddr <ipaddr> [--port <server port>] --cmd <command string> <command parameters> | EVM should not hang, and network command should work according to command on target side |                          |
| <u>Execution type:</u>  | Manual  |  |                          |
| <u>Estimated exec. duration (sec):</u>  |   |  |                          |
| <u>Priority:</u>  | Medium  |  |                          |
| <u>Keywords:</u>  | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm<br>m_nw  |  |                          |
| <b>Execution Details</b>  |   |  |                          |
| Build   | REL_3_3   |  |                          |
| Tester  | x0246581  |  |                          |
| <u>Execution Result:</u>  | <b>Passed</b>   |  |                          |
| <u>Execution Mode:</u>  | <b>Manual</b>   |  |                          |
| <u>Execution duration (sec):</u>  |   |  |                          |

| <b>Test Case VISIONSDK-101: NW_Ctrl_cmd_sys_reset</b>   |  |  |                   |
|---|--|--|-------------------|
| <u>Summary:</u><br>Network Control Command "sys_reset"  |  |  |                   |
| <u>Preconditions:</u><br>verify that host and target can communicate and execute command accordingly<br>Boot with SD card<br>Make network cable connected |  |  |                   |
| #:  | Step actions:  | Expected Results:  | Execution Status: |
| 1   | Boot EVM   | EVM boots without any error and usecase menu displayed                                   |                   |
| 2   | Open command prompt in host PC<br><br>Execute "sys_reset" command using network_ctrl.exe | EVM should not hang, and network command should work according to command on target side |                   |

|  |  |  |  |
|--|--|--|--|
|  | #network_ctrl --ipaddr <ipaddr> [--port <server port>] --cmd <command string> <command parameters> |  |  |
| <u>Execution type:</u>                 | Manual   |  |  |
| <u>Estimated exec. duration (sec):</u> |  |  |  |
| <u>Priority:</u>                       | Medium   |  |  |
| <u>Keywords:</u>                       | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm                               |  |  |
| <b>Execution Details</b>               |  |  |  |
| Build                                  | REL_3_3  |  |  |
| Tester                                 | x0246581   |  |  |
| <u>Execution Result:</u>               | <b>Passed</b>  |  |  |
| <u>Execution Mode:</u>                 | <b>Manual</b>  |  |  |
| <u>Execution duration (sec):</u>       |  |  |  |

**Test Case VISIONSDK-102: NW\_Ctrl\_cmd\_qspi\_wr**Summary:

Network Control Command "qspi\_wr"

Preconditions:

verify that host and target can communicate and execute command accordingly

Boot with SD card

Make network cable connected

| <u>#:</u>                              | <u>Step actions:</u>   | <u>Expected Results:</u>   | <u>Execution Status:</u> |
|--|--|--|--------------------------|
| 1                                      | Boot EVM   | EVM boots without any error and usecase menu displayed                                   |                          |
| 2                                      | Open command prompt in host PC<br><br>Execute "qspi_wr" command using network_ctrl.exe<br><br>#network_ctrl --ipaddr <ipaddr> [--port <server port>] --cmd <command string> <command parameters> | EVM should not hang, and network command should work according to command on target side |                          |
| <u>Execution type:</u>                 | Manual   |  |                          |
| <u>Estimated exec. duration (sec):</u> |  |  |                          |
| <u>Priority:</u>                       | Medium   |  |                          |
| <u>Keywords:</u>                       | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm   |  |                          |
| <b>Execution Details</b>               |  |  |                          |
| Build                                  | REL_3_3  |  |                          |
| Tester                                 | x0246581   |  |                          |
| <u>Execution Result:</u>               | <b>Passed</b>  |  |                          |
| <u>Execution Mode:</u>                 | <b>Manual</b>  |  |                          |
| <u>Execution duration (sec):</u>       |  |  |                          |

**Test Case VISIONSDK-103: NW\_Ctrl\_cmd\_mem\_rd**Summary:

Network Control Command "mem\_rd"

Preconditions:

verify that host and target can communicate and execute command accordingly

Boot with SD card

Make network cable connected

| #:                              | Step actions:   | Expected Results:  | Execution Status: |
|---------------------------------|---|--|-------------------|
| 1                               | Boot EVM  | EVM boots without any error and usecase menu displayed                                   |                   |
| 2                               | Open command prompt in host PC<br><br>Execute "mem_rd" command using network_ctrl.exe<br><br>#network_ctrl --ipaddr <ipaddr> [--port <server port>] --cmd <command string> <command parameters> | EVM should not hang, and network command should work according to command on target side |                   |
| Execution type:                 | Manual  |  |                   |
| Estimated exec. duration (sec): |   |  |                   |
| Priority:                       | Medium  |  |                   |
| Keywords:                       | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm  |  |                   |
| Execution Details               |   |  |                   |
| Build                           | REL_3_3   |  |                   |
| Tester                          | x0246581  |  |                   |
| Execution Result:               | Passed  |  |                   |
| Execution Mode:                 | Manual  |  |                   |
| Execution duration (sec):       |   |  |                   |

#### Test Case VISIONSDK-104: NW\_Ctrl\_cmd\_mem\_wr

Summary:

Network Control Command "mem\_wr"

Preconditions:

verify that host and target can communicate and execute command accordingly

Boot with SD card

Make network cable connected

| #:                              | Step actions:   | Expected Results:  | Execution Status: |
|---------------------------------|---|--|-------------------|
| 1                               | Boot EVM  | EVM boots without any error and usecase menu displayed                                   |                   |
| 2                               | Open command prompt in host PC<br><br>Execute "mem_wr" command using network_ctrl.exe<br><br>#network_ctrl --ipaddr <ipaddr> [--port <server port>] --cmd <command string> <command parameters> | EVM should not hang, and network command should work according to command on target side |                   |
| Execution type:                 | Manual  |  |                   |
| Estimated exec. duration (sec): |   |  |                   |
| Priority:                       | Medium  |  |                   |
| Keywords:                       | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm  |  |                   |
| Execution Details               |   |  |                   |
| Build                           | REL_3_3   |  |                   |
| Tester                          | x0246581  |  |                   |

|                                  |               |
|----------------------------------|---------------|
| <u>Execution Result:</u>         | <b>Passed</b> |
| <u>Execution Mode:</u>           | <b>Manual</b> |
| <u>Execution duration (sec):</u> |               |

**Test Case VISIONSDK-105: NW\_Ctrl\_cmd\_mem\_save**Summary:

Network Control Command "mem\_save"

Preconditions:

verify that host and target can communicate and execute command accordingly

Boot with SD card

Make network cable connected

| <u>#:</u>                              | <u>Step actions:</u>  | <u>Expected Results:</u>   | <u>Execution Status:</u> |
|--|---|--|--------------------------|
| 1                                      | Boot EVM  | EVM boots without any error and usecase menu displayed                                   |                          |
| 2                                      | Open command prompt in host PC<br><br>Execute "mem_save" command using network_ctrl.exe<br><br>#network_ctrl --ipaddr <ipaddr> [--port <server port>] --cmd <command string> <command parameters> | EVM should not hang, and network command should work according to command on target side |                          |
| <u>Execution type:</u>                 | Manual  |  |                          |
| <u>Estimated exec. duration (sec):</u> |   |  |                          |
| <u>Priority:</u>                       | Medium  |  |                          |
| <u>Keywords:</u>                       | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm  |  |                          |
| <b>Execution Details</b>               |   |  |                          |
| Build                                  | REL_3_3   |  |                          |
| Tester                                 | x0246581  |  |                          |
| <u>Execution Result:</u>               | <b>Passed</b>   |  |                          |
| <u>Execution Mode:</u>                 | <b>Manual</b>   |  |                          |
| <u>Execution duration (sec):</u>       |   |  |                          |

**Test Case VISIONSDK-106: NW\_Rx\_Display**Summary:

Network Rx Display UC

Input : RAW frames

Output : HDMI 1080P

Preconditions:

verify that host and target can communicate and execute command accordingly

Boot with SD card

Make network cable connected

| <u>#:</u> | <u>Step actions:</u>  | <u>Expected Results:</u>   | <u>Execution Status:</u> |
|-----------|---|--|--------------------------|
| 1         | Boot EVM  | EVM boots without any error and usecase menu displayed                                   |                          |
| 2         | Run "Network RX + Display" UC under Network UCs   | UC should run without any issues   |                          |
| 3         | Open command prompt in host PC & Send RAW frames to target using network_tx.exe<br># network_tx --host_ip <ipaddr> --target_ip <ipaddr> [--port | EVM should not hang, and network command should work according to command on target side |                          |



|  |   |  |
|--|---|--|
|  | <server port> --usetfdtp --verbose --no_loop --delay <delay in secs>] --files <CH0 file> <CH1 file>                     |  |
| <u>Execution type:</u>                 | Manual  |  |
| <u>Estimated exec. duration (sec):</u> |   |  |
| <u>Priority:</u>                       | Medium  |  |
| <u>Keywords:</u>                       | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm<br>c_regression<br>c_stress<br>c_stability<br>m_nw |  |
| <b>Execution Details</b>               |   |  |
| Build                                  | REL_3_3   |  |
| Tester                                 | x0246581  |  |
| <u>Execution Result:</u>               | <b>Passed</b>   |  |
| <u>Execution Mode:</u>                 | <b>Manual</b>   |  |
| <u>Execution duration (sec):</u>       |   |  |

**Test Case VISIONSDK-109: SingleCam\_Capture\_NW\_Tx**Summary:

1 Channel capture + Network Tx UC

Preconditions:

verify that host and target can communicate and execute command accordingly

Boot with SD card

Make network cable connected

| <u>#:</u>                              | <u>Step actions:</u>   | <u>Expected Results:</u>   | <u>Execution Status:</u> |
|--|--|--|--------------------------|
| 1                                      | Boot EVM   | EVM boots without any error and usecase menu displayed                                   |                          |
| 2                                      | Run "1CH VIP Capture + Network TX" UC under Network UCs  | UC should run without any issues   |                          |
| 3                                      | Open command prompt in host PC & Recieve RAW frames from target using network_rx.exe<br># network_rx --host_ip <ipaddr> --target_ip <ipaddr> [--port <server port> --usetfdtp --verbose --no_loop --delay <delay in secs>] --files <CH0 file> <CH1 file> | EVM should not hang, and network command should work according to command on target side |                          |
| <u>Execution type:</u>                 | Manual   |  |                          |
| <u>Estimated exec. duration (sec):</u> |  |  |                          |
| <u>Priority:</u>                       | Medium   |  |                          |
| <u>Keywords:</u>                       | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm<br>c_regression<br>m_nw   |  |                          |
| <b>Execution Details</b>               |  |  |                          |
| Build                                  | REL_3_3  |  |                          |
| Tester                                 | x0246581   |  |                          |
| <u>Execution Result:</u>               | <b>Passed</b>  |  |                          |
| <u>Execution Mode:</u>                 | <b>Manual</b>  |  |                          |
| <u>Execution duration (sec):</u>       |  |  |                          |

**Test Case VISIONSDK-110: MultiCam\_Capture\_NW\_Tx**

Summary:

4 Channel VIP capture + Network Tx UC

Preconditions:

verify that host and target can communicate and execute command accordingly

Boot with SD card

Make network cable connected

| <u>#:</u>                              | <u>Step actions:</u>   | <u>Expected Results:</u>   | <u>Execution Status:</u> |
|--|--|--|--------------------------|
| 1                                      | Boot EVM   | EVM boots without any error and usecase menu displayed                                   |                          |
| 2                                      | Run "4CH VIP Capture + Network TX" UC under Network UCs  | UC should run without any issues   |                          |
| 3                                      | Open command prompt in host PC & Recieve RAW frames from target using network_rx.exe<br># network_rx --host_ip <ipaddr> --target_ip <ipaddr> [--port <server port> --usetfdtp --verbose --no_loop --delay <delay in secs>] --files <CH0 file> <CH1 file> | EVM should not hang, and network command should work according to command on target side |                          |
| <u>Execution type:</u>                 | Manual   |  |                          |
| <u>Estimated exec. duration (sec):</u> |  |  |                          |
| <u>Priority:</u>                       | Medium   |  |                          |
| <u>Keywords:</u>                       | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm   |  |                          |
| <b>Execution Details</b>               |  |  |                          |
| Build                                  | REL_3_3  |  |                          |
| Tester                                 | x0246581   |  |                          |
| <u>Execution Result:</u>               | <b>Passed</b>  |  |                          |
| <u>Execution Mode:</u>                 | <b>Manual</b>  |  |                          |
| <u>Execution duration (sec):</u>       |  |  |                          |

## 1.1.2.Test Suite : TFDTP

|   |   |  |                          |
|---|---|--|--------------------------|
| <b>Test Case VISIONSDK-234: NW_Rx_Display_TFDTP</b>                         |   |  |                          |
| <u>Summary:</u>   |   |  |                          |
| Network Rx Display UC using TFDTP   |   |  |                          |
| Input : RAW frames  |   |  |                          |
| Output : HDMI 1080P   |   |  |                          |
| <u>Preconditions:</u>   |   |  |                          |
| Binaries should be built with NSP_TFDTP_INCLUDE=yes                         |   |  |                          |
| verify that host and target can communicate and execute command accordingly |   |  |                          |
| Boot with SD card   |   |  |                          |
| Make network cable connected  |   |  |                          |
| <u>#:</u>   | <u>Step actions:</u>  | <u>Expected Results:</u>   | <u>Execution Status:</u> |
| 1   | Boot EVM  | EVM boots without any error and usecase menu displayed                                   |                          |
| 2   | Run "Network RX + Display" UC under Network UCs   | UC should run without any issues   |                          |
| 3   | Select TFDTP  | TFDTP should be selected   |                          |
| 4   | Open command prompt in host PC & Send RAW frames to target using network_tx.exe<br># network_tx --host_ip <ipaddr> --target_ip <ipaddr> [--port <server port> --usetfdtp --verbose --no_loop --delay <delay in secs>] --files <CH0 file> <CH1 file> | EVM should not hang, and network command should work according to command on target side |                          |
| <u>Execution type:</u>  | Manual  |  |                          |
| <u>Estimated exec. duration (sec):</u>                                      |   |  |                          |
| <u>Priority:</u>  | Medium  |  |                          |
| <u>Keywords:</u>  | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm  |  |                          |
| <b>Execution Details</b>  |   |  |                          |
| Build   | REL_3_3   |  |                          |
| Tester  | x0246581  |  |                          |
| <u>Execution Result:</u>  | <b>Passed</b>   |  |                          |
| <u>Execution Mode:</u>  | <b>Manual</b>   |  |                          |
| <u>Execution duration (sec):</u>  |   |  |                          |

|   |  |  |  |
|---|--|--|--|
| <b>Test Case VISIONSDK-237: SingleCam_Capture_NW_Tx_TFDTP</b>               |  |  |  |
| <u>Summary:</u>   |  |  |  |
| Single Channel capture + Network Tx UC using TFDTP                          |  |  |  |
| <u>Preconditions:</u>   |  |  |  |
| Binaries should be built with NSP_TFDTP_INCLUDE=yes                         |  |  |  |
| verify that host and target can communicate and execute command accordingly |  |  |  |
| Boot with SD card   |  |  |  |
| Make network cable connected  |  |  |  |

| #:                              | Step actions:  | Expected Results:  | Execution Status: |
|---------------------------------|--|--|-------------------|
| 1                               | Boot EVM   | EVM boots without any error and usecase menu displayed                                   |                   |
| 2                               | Run "1CH VIP Capture + Network TX" UC under Network UCs  | UC should run without any issues   |                   |
| 3                               | Select TFDTP   | TFDTP should be selected   |                   |
| 4                               | Open command prompt in host PC & Recieve RAW frames from target using network_rx.exe<br># network_rx --host_ip <ipaddr> --target_ip <ipaddr> [--port <server port> --usetfdtp --verbose --no_loop --delay <delay in secs>] --files <CH0 file> <CH1 file> | EVM should not hang, and network command should work according to command on target side |                   |
| Execution type:                 | Manual   |  |                   |
| Estimated exec. duration (sec): |  |  |                   |
| Priority:                       | Medium   |  |                   |
| Keywords:                       | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm   |  |                   |
| Execution Details               |  |  |                   |
| Build                           | REL_3_3  |  |                   |
| Tester                          | x0246581   |  |                   |
| Execution Result:               | Passed   |  |                   |
| Execution Mode:                 | Manual   |  |                   |
| Execution duration (sec):       |  |  |                   |

**Test Case VISIONSDK-238: MultiCam\_Capture\_NW\_Tx\_TFDTP**Summary:

4 Channel VIP capture + Network Tx UC using TFDTP

Preconditions:

Binaries should be built with NSP\_TFDTP\_INCLUDE=yes

verify that host and target can communicate and execute command accordingly

Boot with SD card

Make network cable connected

| #:                              | Step actions:  | Expected Results:  | Execution Status: |
|---------------------------------|--|--|-------------------|
| 1                               | Boot EVM   | EVM boots without any error and usecase menu displayed                                   |                   |
| 2                               | Run "4CH VIP Capture + Network TX" UC under Network UCs  | UC should run without any issues   |                   |
| 3                               | Select TFDTP   | TFDTP should be selected   |                   |
| 4                               | Open command prompt in host PC & Recieve RAW frames from target using network_rx.exe<br># network_rx --host_ip <ipaddr> --target_ip <ipaddr> [--port <server port> --usetfdtp --verbose --no_loop --delay <delay in secs>] --files <CH0 file> <CH1 file> | EVM should not hang, and network command should work according to command on target side |                   |
| Execution type:                 |  | Manual   |                   |
| Estimated exec. duration (sec): |  |  |                   |
| Priority:                       |  | Medium   |                   |
| Keywords:                       |  | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm                     |                   |
| Execution Details               |  |  |                   |
| Build                           | REL_3_3  |  |                   |
| Tester                          | x0246581   |  |                   |

|                           |        |
|---------------------------|--------|
| Execution Result:         | Passed |
| Execution Mode:           | Manual |
| Execution duration (sec): |        |

## 1.2.Test Suite : FastBoot

|   |   |  |                          |
|---|---|--|--------------------------|
| <b>Test Case VISIONSDK-118: Fast_Boot_AR140_Sensor_10inch_LCD</b> |   |  |                          |
| <u>Summary:</u>   |   |  |                          |
| Fast Boot UC - 1CH ISS Capture + ISP + LDC + Obj detect + Display |   |  |                          |
| Capture - AR140 sensor  |   |  |                          |
| Display - 10 inch LCD   |   |  |                          |
| Binaries - TDA3xx FastBoot QSPI Binaries                          |   |  |                          |
| <u>Preconditions:</u>   |   |  |                          |
| Verify I2C to run at 400KHz                                       |   |  |                          |
| Binaries should be built with FAST_BOOT_INCLUDE=yes               |   |  |                          |
| <u>#:</u>   | <u>Step actions:</u>                                      | <u>Expected Results:</u>   | <u>Execution Status:</u> |
| 1   | Follow UserGuide & Flash FastBoot QSPI Binaries on TDA3xx | Flashing should be successfull   |                          |
| 2   | Boot EVM  | 1. Display should flash up with preview in < 1 sec<br>2. Usecase should switch to Object detect algorithm and Pedestrian / Traffic signs detection should start as soon as they are in field of view after boot up<br>3.You should see boot time printed on the LCD<br>4.Display must come up and no buffer drops should be observed |                          |
| <u>Execution type:</u>  | Manual  |  |                          |
| <u>Estimated exec. duration (sec):</u>                            |   |  |                          |
| <u>Priority:</u>  | Medium  |  |                          |
| <u>Keywords:</u>  | tda3xx-evm  |  |                          |
| <b>Execution Details</b>  |   |  |                          |
| Build   | REL_3_3   |  |                          |
| Tester  | x0246581  |  |                          |
| <u>Execution Result:</u>  | <b>Passed</b>   |  |                          |
| <u>Execution Mode:</u>  | <b>Manual</b>   |  |                          |
| <u>Execution duration (sec):</u>                                  |   |  |                          |

|   |   |                                |                          |
|---|---|--------------------------------|--------------------------|
| <b>Test Case VISIONSDK-119: Fast_Boot_AR140_Sensor_10inch_LCD_RTI</b> |   |                                |                          |
| <u>Summary:</u>   |   |                                |                          |
| Fast Boot UC - 1CH ISS Capture + ISP + LDC + Obj detect + Display     |   |                                |                          |
| Capture - AR140 sensor  |   |                                |                          |
| Display - 10 inch LCD   |   |                                |                          |
| Binaries - TDA3xx FastBoot QSPI Binaries                              |   |                                |                          |
| <u>Preconditions:</u>   |   |                                |                          |
| Verify I2C to run at 400KHz   |   |                                |                          |
| Verify RTI is enabled in the Build                                    |   |                                |                          |
| <u>#:</u>   | <u>Step actions:</u>                                      | <u>Expected Results:</u>       | <u>Execution Status:</u> |
| 1   | Follow UserGuide & Flash FastBoot QSPI Binaries on TDA3xx | Flashing should be successfull |                          |

|  |               |  |  |
|--|---------------|--|--|
| 2                                      | Boot EVM      | 1. Display should flash up with preview in < 1 sec<br>2. Usecase should switch to Object detect algorithm and Pedestrian / Traffic signs detection should start as soon as they are in field of view after boot up<br>3. You should see boot time printed on the LCD<br>4. Display must come up and no buffer drops should be observed |  |
| <u>Execution type:</u>                 | Manual        |  |  |
| <u>Estimated exec. duration (sec):</u> |               |  |  |
| <u>Priority:</u>                       | Medium        |  |  |
| <u>Keywords:</u>                       | tda3xx-evm    |  |  |
| <b>Execution Details</b>               |               |  |  |
| Build                                  | REL_3_3       |  |  |
| Tester                                 | x0246581      |  |  |
| <u>Execution Result:</u>               | <b>Passed</b> |  |  |
| <u>Execution Mode:</u>                 | <b>Manual</b> |  |  |
| <u>Execution duration (sec):</u>       |               |  |  |

**Test Case VISIONSDK-120: Fast\_Boot\_AR140\_Sensor\_10inch\_LCD\_Performance**Summary:

Fast Boot UC - 1CH ISS Capture + ISP + LDC + Obj detect + Display

Capture - AR140 sensor

Display - 10 inch LCD

Binaries - TDA3xx FastBoot QSPI Binaries

Preconditions:

Verify I2C to run at 400KHz

| <u>#:</u>                              | <u>Step actions:</u>   | <u>Expected Results:</u>   | <u>Execution Status:</u> |
|--|--|--|--------------------------|
| 1                                      | Follow UserGuide & Flash FastBoot QSPI Binaries on TDA3xx  | Flashing should be successfull   |                          |
| 2                                      | Boot EVM   | 1. Display should flash up with preview in < 1 sec<br>2. Usecase should switch to Object detect algorithm and Pedestrian / Traffic signs detection should start as soon as they are in field of view after boot up<br>3. You should see boot time printed on the LCD<br>4. Display must come up and no buffer drops should be observed |                          |
| 3                                      | Check Performance stats for<br>1. SBL time<br>2. Sensor initialization time with I2C 400 KHz<br>3. Time take by Framework<br>4. Power On Reset to Display Time<br>5. Power On to reset to Object Detect<br>6. Low power load | Performance stats should match with datasheet of release binaries  |                          |
| <u>Execution type:</u>                 | Manual   |  |                          |
| <u>Estimated exec. duration (sec):</u> |  |  |                          |
| <u>Priority:</u>                       | Medium   |  |                          |
| <u>Keywords:</u>                       | tda3xx-evm   |  |                          |
| <b>Execution Details</b>               |  |  |                          |
| Build                                  | REL_3_3  |  |                          |
| Tester                                 | x0246581   |  |                          |
| <u>Execution Result:</u>               | <b>Passed</b>  |  |                          |
| <u>Execution Mode:</u>                 | <b>Manual</b>  |  |                          |
| <u>Execution duration (sec):</u>       |  |  |                          |

### 1.3.Test Suite : SRV

---



### 1.3.1.Test Suite : VIP\_SRV

#### 1.3.1.1.Test Suite : 2D\_SRV

##### Test Case VISIONSDK-124: VIP\_2D\_SRV\_OV10635\_913deser

###### Summary:

VIP 2D SRV UC supported on TDA2x/TDA2Ex/TDA3x

Input : OV10635 with 913/914 deserializer

Output : HDMI 1080P (TDA2x/TDA2Ex) , HDMI XGA TDM mode (TDA3x ONLY)

###### Preconditions:

In case of TDA2x/TDA2Ex:

Ensure TDA2x folder present in SD card with CHARTPOS.BIN & LENS\_2D.BIN

Run SRV calibration to generate PERSMAT.BIN if required

In case of TDA3x:

Ensure TDA3x folder present in SD card with CHARTPOS.BIN & LENS\_2D.BIN

Run SRV calibration to generate LUT.BIN if required

Verify whether display shows a smooth stitching of all 4 cameras.

All running at 30fps, Also check performance stats match with datasheet

| #: | Step actions:  | Expected Results:   | Execution Status: |
|----|--|---|-------------------|
| 1  | Go to System Settings<br><br>Select Capture Source as OV10635<br><br>& Display Output as HDMI 1080P (TDA2x/TDA2Ex), HDMI XGA TDM mode (TDA3x ONLY) | Capture Source should be OV10635<br><br>& Display device as HDMI 1080P (TDA2x/TDA2Ex), HDMI XGA TDM mode (TDA3x ONLY) |                   |
| 2  | Run "4CH VIP Capture + Surround View (DSP) + Display (HDMI)" UC  | Display must come up and no buffer drops should be observed   |                   |

Execution type: Automated

Estimated exec. duration (sec): 60.00

Priority: Medium

Keywords:  
tda2xx-evm  
tda2ex-evm  
tda3xx-evm  
tda2ex-entry  
tda2px-evm  
c\_regression  
c\_qualification  
m\_capture  
m\_display

###### Execution Details

Build: REL\_3\_3

Tester: x0246581

Execution Result: **Passed**

Execution Mode: **Manual**

Execution duration (sec):

**Test Case VISIONSDK-146: VIP\_2D\_SRV\_OV10635\_913deser\_without\_TDAXX\_Folder**Summary:

VIP 2D SRV UC supported on TDA2x/TDA2Ex/TDA3x

Input : OV10635 with 913/914 deserializer

Output : HDMI 1080P (TDA2x/TDA2Ex) , HDMI XGA TDM mode (TDA3x ONLY)

Preconditions:

In case of TDA2x/TDA2Ex:

Ensure TDA2x folder not present in SD card

In case of TDA3x:

Ensure TDA3x folder not present in SD card

Verify whether display shows a smooth stitching of all 4 cameras.

All running at 30fps, Also check performance stats match with datasheet

| #:                                     | Step actions:  | Expected Results:   | Execution Status: |
|--|--|---|-------------------|
| 1                                      | Go to System Settings<br>Select Capture Source as OV10635<br>& Display Output as HDMI 1080P (TDA2x/TDA2Ex), HDMI XGA TDM mode (TDA3x ONLY) | Capture Source should be OV10635<br>& Display device as HDMI 1080P (TDA2x/TDA2Ex), HDMI XGA TDM mode (TDA3x ONLY) |                   |
| 2                                      | Run "4CH VIP Capture + Surround View (DSP) + Display (HDMI)" UC  | Display must come up and no buffer drops should be observe  |                   |
| <u>Execution type:</u>                 | Manual   |   |                   |
| <u>Estimated exec. duration (sec):</u> |  |   |                   |
| <u>Priority:</u>                       | Medium   |   |                   |
| <u>Keywords:</u>                       | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm   |   |                   |
| <b>Execution Details</b>               |  |   |                   |
| Build                                  | REL_3_3  |   |                   |
| Tester                                 | x0246581   |   |                   |
| <u>Execution Result:</u>               | <b>Passed</b>  |   |                   |
| <u>Execution Mode:</u>                 | <b>Manual</b>  |   |                   |
| <u>Execution duration (sec):</u>       |  |   |                   |

### 1.3.2.Test Suite : CAL\_SRV

#### 1.3.2.1.Test Suite : 2D\_SRV

##### Test Case VISIONSDK-128: ISS\_2D\_SRV\_960/964deser

###### Summary:

ISS 2D SRV UC

Input : IMI OV10640 / TIDA AR140 with 960 deserializer  
or OV10635 with 964 deserializer

Output : HDMI 1080P

Binaries: 512MB & 128MB

###### Preconditions:

Ensure TDA3x folder present in SD card with CHARTPOS.BIN & LENS.BIN

Run SRV calibration UC if required to generate LUT.BIN

Verify whether display shows a smooth stitching of all 4 cameras.

All running at 30fps, Also check performance stats match with datasheet

| #: | Step actions:  | Expected Results:  | Execution Status: |
|----|--|--|-------------------|
| 1  | Go to System Settings<br>Select Capture Source as<br>"OV10640 Sensor for SV - IMI (TDA3x ONLY)"<br>or<br>"AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)"<br>& Display Output as HDMI 1080P | Capture Source should be<br>OV10640 Sensor for SV - IMI (TDA3x ONLY) or<br>AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)<br>depending upon the hardware connected & selected by user<br>& Display device as HDMI 1080P |                   |
| 2  | Run "4CH ISS capture + ISS ISP + Simcop + Surround View (DSP1) + Display" UC   | Display must come up and no buffer drops should be observe   |                   |

Execution type: Automated

Estimated exec. duration (sec): 60.00

Priority: Medium

Keywords: tda3xx-evm  
tda3xx\_rvp  
c\_qualification  
m\_iss

###### Execution Details

Build REL\_3\_3

Tester x0246581

Execution Result: **Passed**

Execution Mode: **Manual**

Execution duration (sec):

##### Test Case VISIONSDK-130: ISS\_2D\_SRV\_960/964deser\_AE\_AWB

###### Summary:

## ISS 2D SRV UC

Input : IMI OV10640 / TIDA AR140 with 960 deserializer

or OV10635 with 964 deserializer

Output : HDMI 1080P

Preconditions:

Ensure TDA3x folder present in SD card with CHARTPOS.BIN &amp; LENS.BIN

Run SRV calibration UC if required to generate LUT.BIN

Verify whether display shows a smooth stitching of all 4 cameras.

All running at 30fps, Also check performance stats match with datasheet

| #:                                     | Step actions:  | Expected Results:   | Execution Status: |
|--|--|---|-------------------|
| 1                                      | Go to System Settings<br><br>Select Capture Source as<br>"OV10640 Sensor for SV - IMI (TDA3x ONLY)"<br>or<br>"AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)"<br><br>& Display Output as HDMI 1080P | Capture Source should be<br><br>OV10640 Sensor for SV - IMI (TDA3x ONLY)<br>or<br>AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)<br><br>depending upon the hardware connected & selected by user<br><br>& Display device as HDMI 1080P |                   |
| 2                                      | Go to ISS setting<br><br>Select LDC = OFF, VTNF = OFF, WDR = 1 PASS WDR  | Selected ISS settings will be saved   |                   |
| 3                                      | Run "4CH ISS capture + ISS ISP + Simcop + Surround View (DSP1) + Display" UC   | Display must come up and no buffer drops should be observed<br><br>All the details in the scene should be visible. Noise levels should be very low.   |                   |
| <u>Execution type:</u>                 | Manual   |   |                   |
| <u>Estimated exec. duration (sec):</u> |  |   |                   |
| <u>Priority:</u>                       | Medium   |   |                   |
| <u>Keywords:</u>                       | tda3xx-evm<br>tda3xx_rvp   |   |                   |
| <b>Execution Details</b>               |  |   |                   |
| Build                                  | REL_3_3  |   |                   |
| Tester                                 | x0246581   |   |                   |
| <u>Execution Result:</u>               | <b>Passed</b>  |   |                   |
| <u>Execution Mode:</u>                 | <b>Manual</b>  |   |                   |
| <u>Execution duration (sec):</u>       |  |   |                   |

**Test Case VISIONSDK-148: ISS\_2D\_SRV\_960/964deser\_without\_TDA3X\_Folder**Summary:

ISS 2D SRV UC

Input : IMI OV10640 / TIDA AR140 with 960 deserializer

or OV10635 with 964 deserializer

Output : HDMI 1080P

Preconditions:

Ensure TDA3x folder not present in SD card

Verify whether display shows a smooth stitching of all 4 cameras.

All running at 30fps, Also check performance stats match with datasheet

| #:                                     | Step actions:  | Expected Results:  | Execution Status: |
|--|--|--|-------------------|
| 1                                      | Go to System Settings<br>Select Capture Source as<br>"OV10640 Sensor for SV - IMI (TDA3x ONLY)"<br>or<br>"AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)"<br>& Display Output as HDMI 1080P | Capture Source should be<br>OV10640 Sensor for SV - IMI (TDA3x ONLY) or<br>AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)<br>depending upon the hardware connected & selected by user<br>& Display device as HDMI 1080P |                   |
| 2                                      | Run "4CH ISS capture + ISS ISP + Simcop + Surround View (DSP1) + Display" UC   | Display must come up and no buffer drops should be observe   |                   |
| <u>Execution type:</u>                 | Manual   |  |                   |
| <u>Estimated exec. duration (sec):</u> |  |  |                   |
| <u>Priority:</u>                       | Medium   |  |                   |
| <u>Keywords:</u>                       | tda3xx-evm<br>tda3xx_rvp   |  |                   |
| <b>Execution Details</b>               |  |  |                   |
| Build                                  | REL_3_3  |  |                   |
| Tester                                 | x0246581   |  |                   |
| <u>Execution Result:</u>               | <b>Passed</b>  |  |                   |
| <u>Execution Mode:</u>                 | <b>Manual</b>  |  |                   |
| <u>Execution duration (sec):</u>       |  |  |                   |

### 1.3.2.2.Test Suite : 3D\_SRV

| <b>Test Case VISIONSDK-131: ISS_3D_SRV_960/964deser</b>  |  |  |                   |
|--|--|--|-------------------|
| <u>Summary:</u><br>ISS 3D SRV UC<br><br>Input : IMI OV10640 / TIDA AR140 / TIDA AR143 with 960/964 deserializer<br>or OV10635 with 964 deserializer<br><br>Output : HDMI 1080P<br><br>Binaries: 512MB & 128MB  |  |  |                   |
| <u>Preconditions:</u><br><br>Ensure TDA3x folder present in SD card with CHARTPOS.BIN & LENS.BIN<br><br>Run SRV calibration UC if required to generate LUT.BIN<br><br>Verify whether display shows a smooth stitching of all 4 cameras.<br><br>All running at 30fps, Also check performance stats match with datasheet |  |  |                   |
| #:   | Step actions:  | Expected Results:  | Execution Status: |
| 1  | Go to System Settings<br>Select Capture Source as<br>"OV10640 Sensor for SV - IMI (TDA3x ONLY)"<br>or<br>"AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)"<br>& Display Output as HDMI 1080P | Capture Source should be<br>OV10640 Sensor for SV - IMI (TDA3x ONLY) or<br>AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)<br>depending upon the hardware connected & selected by user<br>& Display device as HDMI 1080P |                   |
| 2  | Run "3D SRV 4CH ISS capture + ISS ISP + DeWarp + Synthesis (DSP1) + Display" UC  | Display must come up and no buffer drops should be observed  |                   |

|  |   |   |
|--|---|---|
|  |   | All the details in the scene should be visible.<br>Noise levels should be very low. |
| <u>Execution type:</u>                 | Automated                                   |   |
| <u>Estimated exec. duration (sec):</u> | 60.00                                       |   |
| <u>Priority:</u>                       | Medium                                      |   |
| <u>Keywords:</u>                       | tda3xx-evm<br>tda3xx_rvp<br>c_qualification |   |
| <b>Execution Details</b>               |   |   |
| Build                                  | REL_3_3                                     |   |
| Tester                                 | x0246581                                    |   |
| <u>Execution Result:</u>               | <b>Passed</b>                               |   |
| <u>Execution Mode:</u>                 | <b>Manual</b>                               |   |
| <u>Execution duration (sec):</u>       |   |   |

**Test Case VISIONSDK-133: ISS\_3D\_SRV\_960/964deser\_360\_transition**Summary:

ISS 3D SRV UC

Input : IMI OV10640 / TIDA AR140 with 960 deserializer  
or OV10635 with 964 deserializer

Output : HDMI 1080P

Preconditions:

Ensure TDA3x folder present in SD card with CHARTPOS.BIN &amp; LENS.BIN

Run SRV calibration UC if required to generate LUT.BIN

Verify whether display shows a smooth stitching of all 4 cameras.

All running at 30fps, Also check performance stats match with datasheet

| <u>#:</u> | <u>Step actions:</u>   | <u>Expected Results:</u>   | <u>Execution Status:</u> |
|-----------|--|--|--------------------------|
| 1         | Go to System Settings<br>Select Capture Source as<br>"OV10640 Sensor for SV - IMI (TDA3x ONLY)"<br>or<br>"AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)"<br>& Display Output as HDMI 1080P | Capture Source should be<br>OV10640 Sensor for SV - IMI (TDA3x ONLY) or<br>AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)<br>depending upon the hardware connected & selected by user<br>& Display device as HDMI 1080P |                          |
| 2         | Run "3D SRV 4CH ISS capture + ISS ISP + DeWarp + Synthesis (DSP1) + Display" UC  | Display must come up and no buffer drops should be observed<br>All the details in the scene should be visible.<br>Noise levels should be very low.   |                          |
| 3         | Check for 3D SRV transition  | SRV transition should cover 360 degree   |                          |
| 4         | Check User is able to Start/Stop transition<br>Select "s" to Start/Stop transition<br>Select "n" to change to next View Point<br>Select "r" to change to previous View Point               | On selecting "s"<br>Transitions should stop<br>On selecting "n"<br>Transition should happen to next view point<br>On selecting "r"<br>Transition should happen to previous view point                                  |                          |

|  |  |  |
|--|--|--|
|  | On selecting "s" again<br>Transition should start normally |  |
| <u>Execution type:</u>                 | Manual   |  |
| <u>Estimated exec. duration (sec):</u> |  |  |
| <u>Priority:</u>                       | Medium   |  |
| <u>Keywords:</u>                       | tda3xx-evm<br>tda3xx_rvp<br>c_integration                  |  |
| <b>Execution Details</b>               |  |  |
| Build                                  | REL_3_3  |  |
| Tester                                 | x0246581   |  |
| <u>Execution Result:</u>               | <b>Passed</b>  |  |
| <u>Execution Mode:</u>                 | <b>Manual</b>  |  |
| <u>Execution duration (sec):</u>       |  |  |

**Test Case VISIONSDK-134: ISS\_3D\_SRV\_960/964deser\_Dump\_Frames**Summary:

ISS 3D SRV UC

Input : IMI OV10640 / TIDA AR140 with 960 deserializer

or OV10635 with 964 deserializer

Output : HDMI 1080P

Preconditions:

Ensure TDA3x folder present in SD card with CHARTPOS.BIN &amp; LENS.BIN

Run SRV calibration UC if required to generate LUT.BIN

Verify whether display shows a smooth stitching of all 4 cameras.

All running at 30fps, Also check performance stats match with datasheet

| <u>#:</u> | <u>Step actions:</u>   | <u>Expected Results:</u>  | <u>Execution Status:</u> |
|-----------|--|---|--------------------------|
| 1         | Go to System Settings<br>Select Capture Source as<br>"OV10640 Sensor for SV - IMI (TDA3x ONLY)"<br>or<br>"AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)"<br>& Display Output as HDMI 1080P   | Capture Source should be<br>OV10640 Sensor for SV - IMI (TDA3x ONLY) or<br>AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)<br>depending upon the hardware connected & selected by user<br>& Display device as HDMI 1080P  |                          |
| 2         | Run "3D SRV 4CH ISS capture + ISS ISP + DeWarp + Synthesis (DSP1) + Display" UC  | Display must come up and no buffer drops should be observed<br>All the details in the scene should be visible.<br>Noise levels should be very low.  |                          |
| 3         | Select "1" to Save a Captured RAW frame from channel 0 (Will be saved in DDR)<br>Select "2" to Save a DeWarp Output Frame (Will be saved in DDR)<br>Select "3" to Save ISP output frames (Will be saved in MMC/SD : All channels)<br>Select "d" to Save Display Frame to MMC/SD card | On selecting "1"<br>RAW frame from channel 0 should be saved in DDR<br>On selecting "2"<br>DeWarp Output Frame should be saved in DDR<br>On selecting "3"<br>ISP output frames should be saved in MMC/SD : All channels |                          |

|  |  |  |
|--|--|--|
|  | On selecting "d"                             |  |
|  | Display Frame should be saved to MMC/SD card |  |
| <u>Execution type:</u>                 | Manual                                       |  |
| <u>Estimated exec. duration (sec):</u> |  |  |
| <u>Priority:</u>                       | Medium                                       |  |
| <u>Keywords:</u>                       | tda3xx-evm<br>tda3xx_rvp                     |  |
| <b>Execution Details</b>               |  |  |
| Build                                  | REL_3_3                                      |  |
| Tester                                 | x0246581                                     |  |
| <u>Execution Result:</u>               | <b>Passed</b>                                |  |
| <u>Execution Mode:</u>                 | <b>Manual</b>                                |  |
| <u>Execution duration (sec):</u>       |  |  |

**Test Case VISIONSDK-135: ISS\_3D\_2D\_SRV\_960/964deser**Summary:

ISS 2D + 3D SRV UC

Input : IMI OV10640 / TIDA AR140 / TIDA AR143 with 960/964 deserializer

Output : HDMI 1080P

Preconditions:

Ensure TDA3x folder present in SD card with CHARTPOS.BIN &amp; LENS.BIN

Run SRV calibration UC if required to generate LUT.BIN

Verify whether display shows a smooth stitching of all 4 cameras.

All running at 30fps, Also check performance stats match with datasheet

| <u>#:</u> | <u>Step actions:</u>   | <u>Expected Results:</u>   | <u>Execution Status:</u> |
|-----------|--|--|--------------------------|
| 1         | Go to System Settings<br><br>Select Capture Source as<br>"OV10640 Sensor for SV - IMI (TDA3x ONLY)"<br>or<br>"AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)"<br><br>& Display Output as HDMI 1080P | Capture Source should be<br><br>OV10640 Sensor for SV - IMI (TDA3x ONLY) or<br><br>AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)<br><br>depending upon the hardware connected & selected by user<br><br>& Display device as HDMI 1080P |                          |
| 2         | Run "3D + 2D SRV 4CH ISS capture + ISS ISP + DeWarp + Synthesis (DSP1) + Display" UC   | Display must come up and no buffer drops should be observed<br><br>All the details in the scene should be visible. Noise levels should be very low.  |                          |

|  |  |
|--|--|
| <u>Execution type:</u>                 | Automated  |
| <u>Estimated exec. duration (sec):</u> | 60.00  |
| <u>Priority:</u>                       | Medium   |
| <u>Keywords:</u>                       | tda3xx-evm<br>tda3xx_rvp<br>c_regression<br>c_stress<br>c_qualification<br>c_stability<br>m_iss<br>m_algorithm |
| <b>Execution Details</b>               |  |
| Build                                  | REL_3_3  |



|                           |               |
|---------------------------|---------------|
| Tester                    | x0246581      |
| Execution Result:         | <b>Passed</b> |
| Execution Mode:           | <b>Manual</b> |
| Execution duration (sec): |               |

**Test Case VISIONSDK-136: ISS\_3D\_SRV\_Rearview\_960/964deser**Summary:

ISS 3D SRV + Rearview UC

Input : IMI OV10640 / TIDA AR140 with 960 deserializer  
 or OV10635 with 964 deserializer

Output : HDMI 1080P

Preconditions:

Ensure TDA3x folder present in SD card with CHARTPOS.BIN &amp; LENS.BIN

Run SRV calibration UC if required to generate LUT.BIN

Verify whether display shows a smooth stitching of all 4 cameras.

All running at 30fps, Also check performance stats match with datasheet

| #: | Step actions:  | Expected Results:  | Execution Status: |
|----|--|--|-------------------|
| 1  | Go to System Settings<br>Select Capture Source as<br>"OV10640 Sensor for SV - IMI (TDA3x ONLY)"<br>or<br>"AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)"<br>& Display Output as HDMI 1080P | Capture Source should be<br>OV10640 Sensor for SV - IMI (TDA3x ONLY) or<br>AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)<br>depending upon the hardware connected & selected by user<br>& Display device as HDMI 1080P |                   |
| 2  | Run "3D SRV 4CH ISS capture + ISS ISP + DeWarp + Synthesis (DSP1) + RearView + Display" UC   | Display must come up with 3D SRV output & Rear view camera output<br>and no buffer drops should be observed  |                   |

|                                 |                          |
|---------------------------------|--------------------------|
| Execution type:                 | Automated                |
| Estimated exec. duration (sec): | 60.00                    |
| Priority:                       | Medium                   |
| Keywords:                       | tda3xx-evm<br>tda3xx_rvp |
| <b>Execution Details</b>        |                          |
| Build                           | REL_3_3                  |
| Tester                          | x0246581                 |
| Execution Result:               | <b>Passed</b>            |
| Execution Mode:                 | <b>Manual</b>            |
| Execution duration (sec):       |                          |

**Test Case VISIONSDK-144: ISS\_3D\_SRV\_960/964deser\_without\_TDA3X\_Folder**Summary:

ISS 3D SRV UC

Input : IMI OV10640 / TIDA AR140 with 960 deserializer  
 or OV10635 with 964 deserializer

Output : HDMI 1080P

Preconditions:

Ensure TDA3x folder not present in SD card

Verify whether display shows a smooth stitching of all 4 cameras.

All running at 30fps, Also check performance stats match with datasheet

| #:                                     | Step actions:  | Expected Results:  | Execution Status: |
|--|--|--|-------------------|
| 1                                      | Go to System Settings<br>Select Capture Source as<br>"OV10640 Sensor for SV - IMI (TDA3x ONLY)"<br>or<br>"AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)"<br>& Display Output as HDMI 1080P | Capture Source should be<br>OV10640 Sensor for SV - IMI (TDA3x ONLY) or<br>AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)<br>depending upon the hardware connected & selected by user<br>& Display device as HDMI 1080P |                   |
| 2                                      | Run "3D SRV 4CH ISS capture + ISS ISP + DeWarp + Synthesis (DSP1) + Display" UC  | It throws error  |                   |
| <u>Execution type:</u>                 | Manual   |  |                   |
| <u>Estimated exec. duration (sec):</u> |  |  |                   |
| <u>Priority:</u>                       | Medium   |  |                   |
| <u>Keywords:</u>                       | tda3xx-evm<br>tda3xx_rvp   |  |                   |
| <b>Execution Details</b>               |  |  |                   |
| Build                                  | REL_3_3  |  |                   |
| Tester                                 | x0246581   |  |                   |
| <u>Execution Result:</u>               | <b>Passed</b>  |  |                   |
| <u>Execution Mode:</u>                 | <b>Manual</b>  |  |                   |
| <u>Execution duration (sec):</u>       |  |  |                   |

**Test Case VISIONSDK-321: ISS\_3D\_SRV\_960/964deser\_Different\_Output\_resolution**

Summary:

ISS 3D SRV UC

Input : IMI OV10640 / TIDA AR140 with 960 deserializer

or OV10635 with 964 deserializer

Output : HDMI 1080P

Binaries: 512MB & 128MB

Preconditions:

Ensure TDA3x folder present in SD card with CHARTPOS,CARIMG,V2W & LENS.BIN

Using Mesh generation tool generate V2W with resolution same as set in UC

Run SRV calibration UC if required to generate LUT.BIN

Verify whether display shows a smooth stitching of all 4 cameras.

All running at 30fps, Also check performance stats match with datasheet

| #: | Step actions:   | Expected Results:   | Execution Status: |
|----|---|---|-------------------|
| 1  | Change output resolution for 3D SRV UC & build  | User should be able to build for different resolution than default      |                   |
| 2  | Go to System Settings<br>Select Capture Source as<br>"OV10640 Sensor for SV - IMI (TDA3x ONLY)" | Capture Source should be<br>OV10640 Sensor for SV - IMI (TDA3x ONLY) or |                   |

|  |   |   |  |
|--|---|---|--|
|  | or<br>"AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)"<br>& Display Output as HDMI 1080P | AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)<br><br>depending upon the hardware connected & selected by user<br><br>& Display device as HDMI 1080P |  |
| 3  | Run "3D SRV 4CH ISS capture + ISS ISP + DeWarp + Synthesis (DSP1) + Display" UC         | Display must come up and no buffer drops should be observed<br><br>All the details in the scene should be visible. Noise levels should be very low. |  |
| <u>Execution type:</u> Automated                             |   |   |  |
| <u>Estimated exec. duration (sec):</u> 60.00                 |   |   |  |
| <u>Priority:</u> Medium                                      |   |   |  |
| <u>Keywords:</u> tda3xx-evm<br>tda3xx_rvp<br>c_qualification |   |   |  |
| <b>Execution Details</b>                                     |   |   |  |
| Build REL_3_3  |   |   |  |
| Tester x0246581  |   |   |  |
| <u>Execution Result:</u> <b>Passed</b>                       |   |   |  |
| <u>Execution Mode:</u> <b>Manual</b>                         |   |   |  |
| <u>Execution duration (sec):</u>                             |   |   |  |

### 1.3.3.Test Suite : SRV\_Calibration

#### Test Case VISIONSDK-137: SRV\_Calibration\_UC\_auto\_calibration

##### Summary:

SRV Calibration UC supported on TDA2x/TDA2ex/TDA3x

Input : OV10635 with 913/914 deserializer or

Imx290 with 913/914 deserializer or

OV10635 with 964 deserializer or

IMI OV10640 / TIDA AR140 with 960 deserializer

Output : HDMI 1080P (TDA2x/TDA2Ex/TDA3x) , HDMI XGA TDM mode (TDA3x ONLY)

##### Preconditions:

In case of TDA2x/TDA2Ex:

Ensure TDA2x folder present in SD card with CHARTPOS.BIN,LENS\_2D.BIN & LENS.BIN

Run SRV calibration UC to generate PERSMAT.BIN

In case of TDA3x:

Ensure TDA3x folder present in SD card with CHARTPOS.BIN & LENS.BIN

Run SRV calibration UC to generate LUT.BIN

Verify whether display shows a smooth stitching of all 4 cameras.

All running at 30fps, Also check performance stats match with datasheet

| #: | Step actions:  | Expected Results:  | Execution Status: |
|----|--|--|-------------------|
| 1  | Go to System Settings<br><br>Select Capture Source as OV10635 Sensor 720P30 or<br><br>OV10635 Sensor for Mosaic Display - SAT0088/OV10635 (TDA2EX ONLY) or<br><br>OV10640 Sensor for SV - IMI (TDA3x ONLY) or<br><br>AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)<br><br>depending upon the hardware connected<br><br>& Display Output as HDMI 1080P (TDA2x/TDA2Ex/TDA3x), HDMI XGA TDM mode (TDA3x ONLY) | Capture Source should be<br><br>OV10635 Sensor 720P30 or<br><br>OV10635 Sensor for Mosaic Display - SAT0088/OV10635 (TDA2EX ONLY) or<br><br>OV10640 Sensor for SV - IMI (TDA3x ONLY) or<br><br>AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)<br><br>depending upon the hardware connected<br><br>& Display device as HDMI 1080P (TDA2x/TDA2Ex/TDA3x), HDMI XGA TDM mode (TDA3x ONLY) |                   |
| 2  | Run "SRV Calibration" UC   | Display must come up with mosaic view of all 4 cameras<br><br>8 Red color rectangle boxes (2 in each quadrant) should be visible<br><br>and no buffer drops should be observed   |                   |
| 3  | Select Auto Calibration  | On selecting Auto calibration<br><br>It will detect corners for all 4 cameras & generate   |                   |

|  |   |                                       |  |
|--|---|---------------------------------------|--|
|  |   | PERSMAT.BIN (in case of TDA2x/TDA2ex) |  |
|  |   | LUT.BIN (in case of TDA3x)            |  |
| 4                                      | Run any SRV UC & verify the output  | SRV Output should be proper           |  |
| <u>Execution type:</u>                 | Manual  |                                       |  |
| <u>Estimated exec. duration (sec):</u> |   |                                       |  |
| <u>Priority:</u>                       | Medium  |                                       |  |
| <u>Keywords:</u>                       | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm<br>tda3xx_rvp<br>c_qualification |                                       |  |
| <b>Execution Details</b>               |   |                                       |  |
| Build                                  | REL_3_3   |                                       |  |
| Tester                                 | x0246581  |                                       |  |
| <u>Execution Result:</u>               | <b>Passed</b>   |                                       |  |
| <u>Execution Mode:</u>                 | <b>Manual</b>   |                                       |  |
| <u>Execution duration (sec):</u>       |   |                                       |  |

**Test Case VISIONSDK-138: SRV\_Calibration\_UC\_manual\_calibration**Summary:

SRV Calibration UC supported on TDA2x/TDA2ex/TDA3x

Input : OV10635 with 913/914 deserializer or

Imx290 with 913/914 deserializer or

OV10635 with 964 deserializer or

IMI OV10640 / TIDA AR140 with 960 deserializer

Output : HDMI 1080P (TDA2x/TDA2Ex/TDA3x) , HDMI XGA TDM mode (TDA3x ONLY)

Preconditions:

In case of TDA2x/TDA2Ex:

Ensure TDA2x folder present in SD card with CHARTPOS.BIN,LENS\_2D.BIN & LENS.BIN

Run SRV calibration UC to generate PERSMAT.BIN

In case of TDA3x:

Ensure TDA3x folder present in SD card with CHARTPOS.BIN & LENS.BIN

Run SRV calibration UC to generate LUT.BIN

Verify whether display shows a smooth stitching of all 4 cameras.

All running at 30fps, Also check performance stats match with datasheet

| <u>#:</u> | <u>Step actions:</u>   | <u>Expected Results:</u>   | <u>Execution Status:</u> |
|-----------|--|--|--------------------------|
| 1         | Go to System Settings<br><br>Select Capture Source as OV10635 Sensor 720P30 or<br><br>OV10635 Sensor for Mosaic Display - SAT0088/OV10635 (TDA2EX ONLY) or<br><br>OV10640 Sensor for SV - IMI (TDA3x ONLY) or<br><br>AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)<br><br>depending upon the hardware connected<br><br>& Display Output as HDMI 1080P (TDA2x/TDA2Ex/TDA3x), HDMI XGA TDM mode (TDA3x ONLY) | Capture Source should be<br><br>OV10635 Sensor 720P30 or<br><br>OV10635 Sensor for Mosaic Display - SAT0088/OV10635 (TDA2EX ONLY) or<br><br>OV10640 Sensor for SV - IMI (TDA3x ONLY) or<br><br>AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY) |                          |

|  |   |   |  |
|--|---|---|--|
|  |   | depending upon the hardware connected   |  |
|  |   | & Display device as HDMI 1080P (TDA2x/TDA2Ex/TDA3x), HDMI XGA TDM mode (TDA3x ONLY)                 |  |
| 2                                      | Run "SRV Calibration" UC  | Display must come up with mosaic view of all 4 cameras<br><br>and no buffer drops should be observe |  |
| 3                                      | Select Manual Calibration & generate CALMAT   | should be able to generate CALMAT.BIN   |  |
| 4                                      | Remove the card & refer "VisionSDK_UserGuide_3D_SurroundView_Manual_CalibTool.pdf" useguide<br><br>to generate PERSMAT.BIN (in case of TDA2x/TDA2ex) & LUT.BIN (in case of TDA3x) | Should be able to generate PERSMAT.BIN (in case of TDA2x/TDA2ex) & LUT.BIN (in case of TDA3x)       |  |
| 5                                      | Copy the PERSMAT.BIN (in case of TDA2x/TDA2ex) & LUT.BIN (in case of TDA3x)<br><br>to MMC/SD card & insert into EVM<br><br>& Run any SRV UC                                       | SRV output should be proper   |  |
| <u>Execution type:</u>                 |   | Manual  |  |
| <u>Estimated exec. duration (sec):</u> |   |   |  |
| <u>Priority:</u>                       |   | Medium  |  |
| <u>Keywords:</u>                       |   | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm<br>tda3xx_rvp                  |  |
| <b>Execution Details</b>               |   |   |  |
| Build                                  |   | REL_3_3   |  |
| Tester                                 |   | x0246581  |  |
| <u>Execution Result:</u>               |   | <b>Passed</b>   |  |
| <u>Execution Mode:</u>                 |   | <b>Manual</b>   |  |
| <u>Execution duration (sec):</u>       |   |   |  |

**Test Case VISIONSDK-139: SRV\_Calibration\_UC\_default\_calibration**Summary:

SRV Calibration UC supported on TDA2x/TDA2ex/TDA3x

Input : OV10635 with 913/914 deserializer or

Imx290 with 913/914 deserializer or

OV10635 with 964 deserializer or

IMI OV10640 / TIDA AR140 with 960 deserializer

Output : HDMI 1080P (TDA2x/TDA2Ex/TDA3x) , HDMI XGA TDM mode (TDA3x ONLY)

Preconditions:

In case of TDA2x/TDA2Ex:

Ensure TDA2x folder present in SD card with CHARTPOS.BIN,LENS\_2D.BIN & LENS.BIN

Run SRV calibration UC to generate PERSMAT.BIN

In case of TDA3x:

Ensure TDA3x folder present in SD card with CHARTPOS.BIN & LENS.BIN

Run SRV calibration UC to generate LUT.BIN

Verify whether display shows a smooth stitching of all 4 cameras.

All running at 30fps, Also check performance stats match with datasheet

| #:                                     | Step actions:  | Expected Results:  | Execution Status: |
|--|--|--|-------------------|
| 1                                      | Go to System Settings<br><br>Select Capture Source as OV10635 Sensor 720P30 or<br><br>OV10635 Sensor for Mosaic Display - SAT0088/OV10635 (TDA2EX ONLY) or<br><br>OV10640 Sensor for SV - IMI (TDA3x ONLY) or<br><br>AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)<br><br>depending upon the hardware connected<br><br>& Display Output as HDMI 1080P (TDA2x/TDA2Ex/TDA3x), HDMI XGA TDM mode (TDA3x ONLY) | Capture Source should be<br><br>OV10635 Sensor 720P30 or<br><br>OV10635 Sensor for Mosaic Display - SAT0088/OV10635 (TDA2EX ONLY) or<br><br>OV10640 Sensor for SV - IMI (TDA3x ONLY) or<br><br>AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)<br><br>depending upon the hardware connected<br><br>& Display device as HDMI 1080P (TDA2x/TDA2Ex/TDA3x), HDMI XGA TDM mode (TDA3x ONLY) |                   |
| 2                                      | Run "SRV Calibration" UC   | Display must come up with mosaic view of all 4 cameras<br><br>and no buffer drops should be observed   |                   |
| 3                                      | Select Default Calibration   | On selecting Default calibration<br><br>It will generate<br><br>PERSMAT.BIN (in case of TDA2x/TDA2ex)<br><br>LUT.BIN (in case of TDA3x)  |                   |
| 4                                      | Run any SRV UC & verify the output   | SRV Output should be proper  |                   |
| <u>Execution type:</u>                 |  | Manual   |                   |
| <u>Estimated exec. duration (sec):</u> |  |  |                   |
| <u>Priority:</u>                       |  | Medium   |                   |
| <u>Keywords:</u>                       |  | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm<br>tda3xx_rvp   |                   |
| <b>Execution Details</b>               |  |  |                   |
| Build                                  | REL_3_3  |  |                   |
| Tester                                 | x0246581   |  |                   |
| <u>Execution Result:</u>               | <b>Passed</b>  |  |                   |
| <u>Execution Mode:</u>                 | <b>Manual</b>  |  |                   |
| <u>Execution duration (sec):</u>       |  |  |                   |

#### Test Case VISIONSDK-140: SRV\_Calibration\_UC\_auto\_calibration\_Dump\_Frame

##### Summary:

SRV Calibration UC supported on TDA2x/TDA2ex/TDA3x

Input : OV10635 with 913/914 deserializer or

Imx290 with 913/914 deserializer or

OV10635 with 964 deserializer or

IMI OV10640 / TIDA AR140 with 960 deserializer

Output : HDMI 1080P (TDA2x/TDA2Ex/TDA3x) , HDMI XGA TDM mode (TDA3x ONLY)

Preconditions:

In case of TDA2x/TDA2Ex:

Ensure TDA2x folder present in SD card with CHARTPOS.BIN,LENS\_2D.BIN & LENS.BIN

Run SRV calibration UC to generate PERSMAT.BIN

In case of TDA3x:

Ensure TDA3x folder present in SD card with CHARTPOS.BIN & LENS.BIN

Run SRV calibration UC to generate LUT.BIN

Verify whether display shows a smooth stitching of all 4 cameras.

All running at 30fps, Also check performance stats match with datasheet

| #:                                     | Step actions:  | Expected Results:  | Execution Status: |
|--|--|--|-------------------|
| 1                                      | Go to System Settings<br><br>Select Capture Source as OV10635 Sensor 720P30 or<br><br>OV10635 Sensor for Mosaic Display - SAT0088/OV10635 (TDA2EX ONLY) or<br><br>OV10640 Sensor for SV - IMI (TDA3x ONLY) or<br><br>AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)<br><br>depending upon the hardware connected<br><br>& Display Output as HDMI 1080P (TDA2x/TDA2Ex/TDA3x), HDMI XGA TDM mode (TDA3x ONLY) | Capture Source should be<br><br>OV10635 Sensor 720P30 or<br><br>OV10635 Sensor for Mosaic Display - SAT0088/OV10635 (TDA2EX ONLY) or<br><br>OV10640 Sensor for SV - IMI (TDA3x ONLY) or<br><br>AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)<br><br>depending upon the hardware connected<br><br>& Display device as HDMI 1080P (TDA2x/TDA2Ex/TDA3x), HDMI XGA TDM mode (TDA3x ONLY) |                   |
| 2                                      | Run "SRV Calibration" UC   | Display must come up with mosaic view of all 4 cameras<br><br>and no buffer drops should be observed   |                   |
| 3                                      | Select Auto Calibration  | On selecting Auto calibration<br><br>It will detect corners for all 4 cameras & generate<br><br>PERSMAT.BIN (in case of TDA2x/TDA2ex)<br><br>LUT.BIN (in case of TDA3x)  |                   |
| 4                                      | Select "d" to Save Display Frame to MMC/SD card  | On selecting "d"<br><br>Display Frame should be saved to MMC/SD card   |                   |
| <u>Execution type:</u>                 |  | Manual   |                   |
| <u>Estimated exec. duration (sec):</u> |  |  |                   |
| <u>Priority:</u>                       |  | Medium   |                   |
| <u>Keywords:</u>                       |  | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm<br>tda3xx_rvp   |                   |
| <b>Execution Details</b>               |  |  |                   |
| Build                                  | REL_3_3  |  |                   |
| Tester                                 | x0246581   |  |                   |
| <u>Execution Result:</u>               | <b>Passed</b>  |  |                   |



|                                  |        |
|----------------------------------|--------|
| <u>Execution Mode:</u>           | Manual |
| <u>Execution duration (sec):</u> |        |

**Test Case VISIONSDK-141: SRV\_Calibration\_UC\_auto\_calibration\_update\_2D\_PERSMAT**Summary:

SRV Calibration UC supported on TDA2x/TDA2Ex/TDA3x

Input : OV10635 with 913/914 deserializer or

Imx290 with 913/914 deserializer or

OV10635 with 964 deserializer or

IMI OV10640 / TIDA AR140 with 960 deserializer

Output : HDMI 1080P (TDA2x/TDA2Ex/TDA3x) , HDMI XGA TDM mode (TDA3x ONLY)

Preconditions:

In case of TDA2x/TDA2Ex:

Ensure TDA2x folder present in SD card with CHARTPOS.BIN,LENS\_2D.BIN & LENS.BIN

Run SRV calibration UC to generate PERSMAT.BIN

In case of TDA3x:

Ensure TDA3x folder present in SD card with CHARTPOS.BIN & LENS.BIN

Run SRV calibration UC to generate LUT.BIN

Verify whether display shows a smooth stitching of all 4 cameras.

All running at 30fps, Also check performance stats match with datasheet

| <u>#:</u>                       | <u>Step actions:</u>   | <u>Expected Results:</u>   | <u>Execution Status:</u> |
|---------------------------------|--|--|--------------------------|
| 1                               | Go to System Settings<br><br>Select Capture Source as OV10635 Sensor 720P30 or<br><br>OV10635 Sensor for Mosaic Display - SAT0088/OV10635 (TDA2EX ONLY) or<br><br>OV10640 Sensor for SV - IMI (TDA3x ONLY) or<br><br>AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)<br><br>depending upon the hardware connected<br><br>& Display Output as HDMI 1080P (TDA2x/TDA2Ex/TDA3x), HDMI XGA TDM mode (TDA3x ONLY) | Capture Source should be<br><br>OV10635 Sensor 720P30 or<br><br>OV10635 Sensor for Mosaic Display - SAT0088/OV10635 (TDA2EX ONLY) or<br><br>OV10640 Sensor for SV - IMI (TDA3x ONLY) or<br><br>AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)<br><br>depending upon the hardware connected<br><br>& Display device as HDMI 1080P (TDA2x/TDA2Ex/TDA3x), HDMI XGA TDM mode (TDA3x ONLY) |                          |
| 2                               | Run "SRV Calibration" UC   | Display must come up with mosaic view of all 4 cameras<br><br>and no buffer drops should be observe  |                          |
| 3                               | Select Auto Calibration  | On selecting Auto calibration<br><br>It will detect corners for all 4 cameras & generate<br><br>PERSMAT.BIN (in case of TDA2x/TDA2ex)<br><br>LUT.BIN (in case of TDA3x)  |                          |
| 4                               | Select "7" to Update 2D Pers Mat (after auto/manual calibration if required)   | On selecting "7"<br><br>2D Pers Mat should be updated  |                          |
| <u>Execution type:</u>          |  | Manual   |                          |
| <u>Estimated exec. duration</u> |  |  |                          |

|                                  |  |
|----------------------------------|--|
| <u>(sec):</u>                    |  |
| <u>Priority:</u>                 | Medium   |
| <u>Keywords:</u>                 | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm<br>tda3xx_rvp |
| <b>Execution Details</b>         |  |
| Build                            | REL_3_3  |
| Tester                           | x0246581   |
| <u>Execution Result:</u>         | <b>Passed</b>  |
| <u>Execution Mode:</u>           | <b>Manual</b>  |
| <u>Execution duration (sec):</u> |  |

#### Test Case VISIONSDK-142: SRV\_Calibration\_UC\_auto\_calibration\_without\_MMC\_SD

##### Summary:

SRV Calibration UC supported on TDA2x/TDA2ex/TDA3x

Input : OV10635 with 913/914 deserializer or

OV10635 with 964 deserializer or

IMI OV10640 / TIDA AR140 with 960 deserializer

Output : HDMI 1080P (TDA2x/TDA2Ex/TDA3x) , HDMI XGA TDM mode (TDA3x ONLY)

##### Preconditions:

Boot from QSPI

No MMC/SD card present

| <u>#:</u> | <u>Step actions:</u>   | <u>Expected Results:</u>   | <u>Execution Status:</u> |
|-----------|--|--|--------------------------|
| 1         | Go to System Settings<br><br>Select Capture Source as OV10635 Sensor 720P30 or<br><br>OV10635 Sensor for Mosaic Display - SAT0088/OV10635 (TDA2EX ONLY) or<br><br>OV10640 Sensor for SV - IMI (TDA3x ONLY) or<br><br>AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)<br><br>depending upon the hardware connected<br><br>& Display Output as HDMI 1080P (TDA2x/TDA2Ex/TDA3x), HDMI XGA TDM mode (TDA3x ONLY) | Capture Source should be<br><br>OV10635 Sensor 720P30 or<br><br>OV10635 Sensor for Mosaic Display - SAT0088/OV10635 (TDA2EX ONLY) or<br><br>OV10640 Sensor for SV - IMI (TDA3x ONLY) or<br><br>AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)<br><br>depending upon the hardware connected<br><br>& Display device as HDMI 1080P (TDA2x/TDA2Ex/TDA3x), HDMI XGA TDM mode (TDA3x ONLY) |                          |
| 2         | Run "SRV Calibration" UC   | It throws error  |                          |

|  |  |
|--|--|
| <u>Execution type:</u>                 | Manual   |
| <u>Estimated exec. duration (sec):</u> |  |
| <u>Priority:</u>                       | Medium   |
| <u>Keywords:</u>                       | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm<br>tda3xx_rvp |
| <b>Execution Details</b>               |  |
| Build                                  | REL_3_3  |

|                           |               |
|---------------------------|---------------|
| Tester                    | x0246581      |
| Execution Result:         | <b>Passed</b> |
| Execution Mode:           | <b>Manual</b> |
| Execution duration (sec): |               |

### Test Case VISIONSDK-143: SRV\_Calibration\_UC\_auto\_calibration\_without\_TDAXX\_Folder

#### Summary:

SRV Calibration UC supported on TDA2x/TDA2Ex/TDA3x

Input : OV10635 with 913/914 deserializer or

Imx290 with 913/914 deserializer or

OV10635 with 964 deserializer or

IMI OV10640 / TIDA AR140 with 960 deserializer

Output : HDMI 1080P (TDA2x/TDA2Ex/TDA3x) , HDMI XGA TDM mode (TDA3x ONLY)

#### Preconditions:

In case of TDA2x/TDA2Ex:

Ensure TDA2x folder not present in SD card

Run SRV calibration UC to generate PERSMAT.BIN

In case of TDA3x:

Ensure TDA3x folder not present in SD card

Run SRV calibration UC to generate LUT.BIN

Verify whether display shows a smooth stitching of all 4 cameras.

All running at 30fps, Also check performance stats match with datasheet

| #:                              | Step actions:  | Expected Results:  | Execution Status: |
|---------------------------------|--|--|-------------------|
| 1                               | Go to System Settings<br><br>Select Capture Source as OV10635 Sensor 720P30 or<br><br>OV10635 Sensor for Mosaic Display - SAT0088/OV10635 (TDA2EX ONLY) or<br><br>OV10640 Sensor for SV - IMI (TDA3x ONLY) or<br><br>AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)<br><br>depending upon the hardware connected<br><br>& Display Output as HDMI 1080P (TDA2x/TDA2Ex/TDA3x), HDMI XGA TDM mode (TDA3x ONLY) | Capture Source should be<br><br>OV10635 Sensor 720P30 or<br><br>OV10635 Sensor for Mosaic Display - SAT0088/OV10635 (TDA2EX ONLY) or<br><br>OV10640 Sensor for SV - IMI (TDA3x ONLY) or<br><br>AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)<br><br>depending upon the hardware connected<br><br>& Display device as HDMI 1080P (TDA2x/TDA2Ex/TDA3x), HDMI XGA TDM mode (TDA3x ONLY) |                   |
| 2                               | Run "SRV Calibration" UC   | It throws error  |                   |
| Execution type:                 | Manual   |  |                   |
| Estimated exec. duration (sec): |  |  |                   |
| Priority:                       | Medium   |  |                   |
| Keywords:                       | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm<br>tda3xx_rvp   |  |                   |
| Execution Details               |  |  |                   |

|                           |               |
|---------------------------|---------------|
| Build                     | REL_3_3       |
| Tester                    | x0246581      |
| Execution Result:         | <b>Passed</b> |
| Execution Mode:           | <b>Manual</b> |
| Execution duration (sec): |               |

### 1.3.4.Test Suite : FastBoot\_SRV

|   |  |  |                          |
|---|--|--|--------------------------|
| <b>Test Case VISIONSDK-255: FastBoot_ISS_3D_SRV_960/964deser</b>        |  |  |                          |
| <u>Summary:</u>   |  |  |                          |
| ISS 3D SRV UC   |  |  |                          |
| Input : IMI OV10640 with 960/964 deserializer                           |  |  |                          |
| Output : HDMI 1080P   |  |  |                          |
| Binaries: 512MB   |  |  |                          |
| <u>Preconditions:</u>   |  |  |                          |
| Build binaries with SRV_FAST_BOOT_INCLUDE=yes                           |  |  |                          |
| Ensure TDA3x folder present in SD card with CHARTPOS.BIN & LENS.BIN     |  |  |                          |
| Run SRV calibration UC if required to generate LUT.BIN                  |  |  |                          |
| Verify whether display shows a smooth stitching of all 4 cameras.       |  |  |                          |
| All running at 30fps, Also check performance stats match with datasheet |  |  |                          |
| <u>#:</u>   | <u>Step actions:</u>   | <u>Expected Results:</u>   | <u>Execution Status:</u> |
| 1   | Boot EVM with Fastboot SRV binaries                            | EVM should boot with Fastboot SRV binaries & Display should come up no buffer drops should observe |                          |
| 2   | Check Boot time  | Boot time should match with release numbers  |                          |
| <u>Execution type:</u>  | Manual   |  |                          |
| <u>Estimated exec. duration (sec):</u>                                  |  |  |                          |
| <u>Priority:</u>  | Medium   |  |                          |
| <u>Keywords:</u>  | tda3xx-evm<br>tda3xx_rvp                                       |  |                          |
| <b>Execution Details</b>  |  |  |                          |
| Build   | REL_3_3  |  |                          |
| Tester  | x0246581   |  |                          |
| <u>Execution Result:</u>  | <b>Passed</b>  |  |                          |
| <u>Execution Mode:</u>  | <b>Manual</b>  |  |                          |
| <u>Execution duration (sec):</u>  |  |  |                          |
| Execution notes   | sensor config time increased by 100ms compared to last release |  |                          |

## 1.4.Test Suite : Mono\_Cam

---

## 1.4.1.Test Suite : VIP

### 1.4.1.1.Test Suite : VIP\_SingleCam\_Capture\_Display

#### Test Case VISIONSDK-1: VIP\_Capture\_Display\_Input\_OV10635\_Output\_7inch\_LCD

##### Summary:

Capture Display UC

Input : OV10635

Output : 7" LCD

##### Preconditions:

Verify that Capture is running on IPU1-0 at 30fps and display running on IPU1-0 at 60fps

| #:                              | Step actions:  | Expected Results:   | Execution Status: |
|---------------------------------|--|---|-------------------|
| 1                               | Go to System Settings<br><br>Select Capture Source as OV10635 Sensor<br><br>& Display Output as 7" LCD | Capture Source should be OV10635 Sensor<br><br>& Display device as 7" LCD |                   |
| 2                               | Run 1 Ch VIP capture + Display UC  | Display must come up and no buffer drops should be observed               |                   |
| Execution type:                 | Automated  |   |                   |
| Estimated exec. duration (sec): | 60.00  |   |                   |
| Priority:                       | Medium   |   |                   |
| Keywords:                       | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm<br>m_capture<br>m_display         |   |                   |
| Execution Details               |  |   |                   |
| Build                           | REL_3_3  |   |                   |
| Tester                          | x0246581   |   |                   |
| Execution Result:               | Passed   |   |                   |
| Execution Mode:                 | Automated  |   |                   |
| Execution duration (sec):       |  |   |                   |
| Execution notes                 | TestLogPath<br><br>]]>   |   |                   |

#### Test Case VISIONSDK-2: VIP\_Capture\_Display\_Input\_OV10635\_Output\_HDMI\_720P

##### Summary:

Capture Display UC

Input : OV10635

Output : HDMI 720P

##### Preconditions:

Verify that Capture is running on IPU1-0 at 30fps and display running on IPU1-0 at 60fps

| <u>#:</u> | <u>Step actions:</u> | <u>Expected Results:</u> | <u>Execution Status:</u> |
|-----------|----------------------|--------------------------|--------------------------|
|-----------|----------------------|--------------------------|--------------------------|

|  |   |  |  |
|--|---|--|--|
| 1                                      | Go to System Settings<br>Select Capture Source as OV10635 Sensor<br>& Display Output as HDMI 720P | Capture Source should be OV10635 Sensor<br>& Display device as HDMI 720P |  |
| 2                                      | Run 1 Ch VIP capture + Display UC   | Display must come up and no buffer drops should be observed              |  |
| <u>Execution type:</u>                 | Automated   |  |  |
| <u>Estimated exec. duration (sec):</u> | 60.00   |  |  |
| <u>Priority:</u>                       | Medium  |  |  |
| <u>Keywords:</u>                       | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm                              |  |  |
| <b>Execution Details</b>               |   |  |  |
| Build                                  | REL_3_3   |  |  |
| Tester                                 | x0246581  |  |  |
| <u>Execution Result:</u>               | <b>Passed</b>   |  |  |
| <u>Execution Mode:</u>                 | <b>Automated</b>  |  |  |
| <u>Execution duration (sec):</u>       |   |  |  |
| Execution notes                        | TestLogPath<br><br>]]>  |  |  |

**Test Case VISIONSDK-5: VIP\_Capture\_Display\_Input\_OV10635\_Output\_HDMI\_1080P**Summary:

Capture Display UC

supported on all platforms

Input : OV10635/OV10640

Output : HDMI 1080P

Preconditions:

Verify that Capture is running on IPU1-0 at 30fps and display running on IPU1-0 at 60fps

should not change Capture output dynamically

| <u>#:</u>                              | <u>Step actions:</u>  | <u>Expected Results:</u>   | <u>Execution Status:</u> |
|--|---|--|--------------------------|
| 1                                      | Go to System Settings<br>Select Capture Source as OV10635<br>& Display Output as HDMI 1080P | Capture Source should be OV10635<br>& Display device as HDMI 1080P   |                          |
| 2                                      | Run 1 Ch VIP capture + Display UC   | Display must come up and no buffer drops should be observed  |                          |
| 3                                      | Check for graphics elements displayed on screen   | TI logo should be on left top corner<br>All load bars should be on left bottom corner  |                          |
| 4                                      | Press "P"   | Check performance stats<br>Should print CPU Load of all cores,<br>Capture & Display FPS numbers<br>DDR, Heap memory, OCMC, SR1, remote log buffer memory usage |                          |
| <u>Execution type:</u>                 | Automated   |  |                          |
| <u>Estimated exec. duration (sec):</u> | 60.00   |  |                          |
| <u>Priority:</u>                       | Medium  |  |                          |
| <u>Keywords:</u>                       | tda2xx-evm  |  |                          |



|                                  |   |
|----------------------------------|---|
|                                  | tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm<br>c_stress<br>c_performance<br>c_qualification<br>c_stability |
| <b>Execution Details</b>         |   |
| Build                            | REL_3_3   |
| Tester                           | x0246581  |
| <u>Execution Result:</u>         | <b>Passed</b>   |
| <u>Execution Mode:</u>           | <b>Automated</b>  |
| <u>Execution duration (sec):</u> |   |
| Execution notes                  | TestLogPath<br><br>]]>  |

**Test Case VISIONSDK-112: VIP\_Capture\_Display\_Input\_OV10635\_Output\_10inch\_LCD**Summary:

Capture Display UC

Input : OV10635

Output : 10" LCD

Preconditions:

Verify that Capture is running on IPU1-0 at 30fps and display running on IPU1-0 at 60fps

| <u>#:</u>                              | <u>Step actions:</u>  | <u>Expected Results:</u>   | <u>Execution Status:</u> |
|--|---|--|--------------------------|
| 1                                      | Go to System Settings<br><br>Select Capture Source as OV10635 Sensor<br><br>& Display Output as 10" LCD | Capture Source should be OV10635 Sensor<br><br>& Display device as 10" LCD |                          |
| 2                                      | Run 1 Ch VIP capture + Display UC   | Display must come up and no buffer drops should be observe                 |                          |
| <u>Execution type:</u>                 | Automated   |  |                          |
| <u>Estimated exec. duration (sec):</u> | 60.00   |  |                          |
| <u>Priority:</u>                       | Medium  |  |                          |
| <u>Keywords:</u>                       | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm<br>c_regression<br>c_integration   |  |                          |
| <b>Execution Details</b>               |   |  |                          |
| Build                                  | REL_3_3   |  |                          |
| Tester                                 | x0246581  |  |                          |
| <u>Execution Result:</u>               | <b>Passed</b>   |  |                          |
| <u>Execution Mode:</u>                 | <b>Automated</b>  |  |                          |
| <u>Execution duration (sec):</u>       |   |  |                          |
| Execution notes                        | TestLogPath<br><br>]]>  |  |                          |

**Test Case VISIONSDK-113: VIP\_Capture\_Display\_Input\_OV10635\_Output\_10inch\_OSD\_LCD**Summary:

Capture Display UC

Input : OV10635

Output : 10" OSD LCD

Preconditions:

Verify that Capture is running on IPU1-0 at 30fps and display running on IPU1-0 at 60fps

| #:                                     | Step actions:   | Expected Results:  | Execution Status: |
|--|---|--|-------------------|
| 1                                      | Go to System Settings<br><br>Select Capture Source as OV10635 Sensor<br><br>& Display Output as 10" OSD LCD | Capture Source should be OV10635 Sensor<br><br>& Display device as 10" OSD LCD |                   |
| 2                                      | Run 1 Ch VIP capture + Display UC   | Display must come up and no buffer drops should be observe                     |                   |
| <u>Execution type:</u>                 | Automated   |  |                   |
| <u>Estimated exec. duration (sec):</u> | 60.00   |  |                   |
| <u>Priority:</u>                       | Medium  |  |                   |
| <u>Keywords:</u>                       | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm  |  |                   |
| <b>Execution Details</b>               |   |  |                   |
| Build                                  | REL_3_3   |  |                   |
| Tester                                 | x0246581  |  |                   |
| <u>Execution Result:</u>               | <b>Passed</b>   |  |                   |
| <u>Execution Mode:</u>                 | <b>Manual</b>   |  |                   |
| <u>Execution duration (sec):</u>       |   |  |                   |

**Test Case VISIONSDK-114: VIP\_Capture\_Display\_Input\_OV10635\_Output\_SD\_PAL**Summary:

Capture Display UC

Input : OV10635

Output : SD PAL

Preconditions:

Verify that Capture is running on IPU1-0 at 30fps and display running on IPU1-0 at 60fps

| #:                                     | Step actions:  | Expected Results:   | Execution Status: |
|--|--|---|-------------------|
| 1                                      | Go to System Settings<br><br>Select Capture Source as OV10635 Sensor<br><br>& Display Output as SD PAL | Capture Source should be OV10635 Sensor<br><br>& Display device as SD PAL |                   |
| 2                                      | Run 1 Ch VIP capture + Display UC  | Display must come up and no buffer drops should be observe                |                   |
| <u>Execution type:</u>                 | Automated  |   |                   |
| <u>Estimated exec. duration (sec):</u> | 60.00  |   |                   |
| <u>Priority:</u>                       | Medium   |   |                   |
| <u>Keywords:</u>                       | tda3xx-evm   |   |                   |
| <b>Execution Details</b>               |  |   |                   |
| Build                                  | REL_3_3  |   |                   |
| Tester                                 | x0246581   |   |                   |
| <u>Execution Result:</u>               | <b>Passed</b>  |   |                   |
| <u>Execution Mode:</u>                 | <b>Automated</b>   |   |                   |

|                                  |                    |
|----------------------------------|--------------------|
| <u>Execution duration (sec):</u> |                    |
| Execution notes                  | TestLogPath<br>]]> |

**Test Case VISIONSDK-115: VIP\_Capture\_Display\_Input\_OV10635\_Output\_SD\_NTSC**Summary:

Capture Display UC

Input : OV10635

Output : SD NTSC

Preconditions:

Verify that Capture is running on IPU1-0 at 30fps and display running on IPU1-0 at 60fps

| <u>#:</u> | <u>Step actions:</u>  | <u>Expected Results:</u>   | <u>Execution Status:</u> |
|-----------|---|--|--------------------------|
| 1         | Go to System Settings<br><br>Select Capture Source as OV10635 Sensor<br><br>& Display Output as SD NTSC | Capture Source should be OV10635 Sensor<br><br>& Display device as SD NTSC |                          |
| 2         | Run 1 Ch VIP capture + Display UC   | Display must come up and no buffer drops should be observe                 |                          |

Execution type: AutomatedEstimated exec. duration (sec): 60.00Priority: MediumKeywords: tda3xx-evm**Execution Details**

Build REL\_3\_3

Tester x0246581

Execution Result: **Passed**Execution Mode: **Automated**Execution duration (sec):Execution notes TestLogPath  
]]>**Test Case VISIONSDK-296: VIP\_Capture\_Display\_without\_Sensor**Summary:

Capture Display UC without sensor connected

supported on all platforms

Input : No Sensor connected

Output : HDMI 1080P

Preconditions:

Verify that Capture is running on IPU1-0 at 30fps and display running on IPU1-0 at 60fps

None of the sensors are connected

| <u>#:</u>                       | <u>Step actions:</u>  | <u>Expected Results:</u>   | <u>Execution Status:</u> |
|---------------------------------|---|--|--------------------------|
| 1                               | Go to System Settings<br><br>Select Capture Source as OV10635<br><br>& Display Output as HDMI 1080P | Capture Source should be OV10635<br><br>& Display device as HDMI 1080P |                          |
| 2                               | Run 1 Ch VIP capture + Display UC   | Assert with sensor initialization fails                                |                          |
| <u>Execution type:</u>          | Manual  |  |                          |
| <u>Estimated exec. duration</u> |   |  |                          |

|                                  |  |
|----------------------------------|--|
| <u>(sec):</u>                    |  |
| <u>Priority:</u>                 | Medium   |
| <u>Keywords:</u>                 | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm |
| <b>Execution Details</b>         |  |
| Build                            | REL_3_3  |
| Tester                           | x0246581   |
| <u>Execution Result:</u>         | <b>Passed</b>  |
| <u>Execution Mode:</u>           | <b>Manual</b>  |
| <u>Execution duration (sec):</u> |  |

#### 1.4.1.2.Test Suite : VIP\_Capture\_FrameCopy\_Display

|   |  |  |                          |
|---|--|--|--------------------------|
| <b>Test Case VISIONSDK-7: VIP_Capture_FrameCopy_DSP1_Display</b>  |  |  |                          |
| <u>Summary:</u><br>Capture FrameCopy Display UC on DSP1<br><br>Input : OV10635<br><br>Output : HDMI 1080P             |  |  |                          |
| <u>Preconditions:</u><br><br>Verify that Capture is running on IPU1-0 at 30fps and display running on IPU1-0 at 60fps |  |  |                          |
| <u>#:</u>   | <u>Step actions:</u>   | <u>Expected Results:</u>   | <u>Execution Status:</u> |
| 1   | Go to System Settings<br><br>Select Capture Source as OV10635<br><br>& Display Output as HDMI 1080P                    | Capture Source should be OV10635<br><br>& Display device as HDMI 1080P |                          |
| 2   | Run 1 Ch VIP capture + FrameCopy (DSP1)<br>+ Display UC  | Display must come up and no buffer drops<br>should be observe          |                          |
| <u>Execution type:</u>  | Automated  |  |                          |
| <u>Estimated exec. duration (sec):</u>  | 60.00  |  |                          |
| <u>Priority:</u>  | Medium   |  |                          |
| <u>Keywords:</u>  | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm<br>c_regression<br>c_qualification<br>m_algorithm |  |                          |
| <b>Execution Details</b>  |  |  |                          |
| Build   | REL_3_3  |  |                          |
| Tester  | x0246581   |  |                          |
| <u>Execution Result:</u>  | <b>Passed</b>  |  |                          |
| <u>Execution Mode:</u>  | <b>Automated</b>   |  |                          |
| <u>Execution duration (sec):</u>  |  |  |                          |
| Execution notes   | TestLogPath<br><br>]]>   |  |                          |

|  |  |  |  |
|--|--|--|--|
| <b>Test Case VISIONSDK-8: VIP_Capture_FrameCopy_EVE1_Display</b>               |  |  |  |
| <u>Summary:</u><br>Capture FrameCopy Display UC on EVE1<br><br>Input : OV10635 |  |  |  |

Output : HDMI 1080P

Preconditions:

Verify that Capture is running on IPU1-0 at 30fps and display running on IPU1-0 at 60fps

| #:                                     | Step actions:   | Expected Results:   | Execution Status: |
|--|---|---|-------------------|
| 1                                      | Go to System Settings<br>Select Capture Source as OV10635<br>& Display Output as HDMI 1080P | Capture Source shuld be OV10635<br>& Display device as HDMI 1080P |                   |
| 2                                      | Run 1 Ch VIP capture + FrameCopy (EVE1) + Display UC  | Display must come up and no buffer drops should be observe        |                   |
| <u>Execution type:</u>                 | Automated   |   |                   |
| <u>Estimated exec. duration (sec):</u> | 60.00   |   |                   |
| <u>Priority:</u>                       | Medium  |   |                   |
| <u>Keywords:</u>                       | tda2xx-evm<br>tda3xx-evm<br>tda2px-evm  |   |                   |
| <b>Execution Details</b>               |   |   |                   |
| Build                                  | REL_3_3   |   |                   |
| Tester                                 | x0246581  |   |                   |
| <u>Execution Result:</u>               | <b>Passed</b>   |   |                   |
| <u>Execution Mode:</u>                 | <b>Automated</b>  |   |                   |
| <u>Execution duration (sec):</u>       |   |   |                   |
| Execution notes                        | TestLogPath<br>]]>  |   |                   |

**1.4.1.3.Test Suite : VIP\_Capture\_SubFrameCopy\_Display****Test Case VISIONSDK-168: VIP\_Capture\_SubFrameCopy\_EVE1\_Display**Summary:

Capture Sub Frame Copy Display UC with EVE1

Input : OV10635

Output : HDMI 1080P

Preconditions:

Verify that Capture is running on IPU1-0 at 30fps and display running on IPU1-0 at 60fps

| #:                                     | Step actions:   | Expected Results:   | Execution Status: |
|--|---|---|-------------------|
| 1                                      | Go to System Settings<br>Select Capture Source as OV10635<br>& Display Output as HDMI 1080P | Capture Source shuld be OV10635<br>& Display device as HDMI 1080P |                   |
| 2                                      | Run 1 Ch VIP capture + SubFrameCopy (EVE1) + Display UC                                     | Display must come up and no buffer drops should be observe        |                   |
| <u>Execution type:</u>                 | Automated   |   |                   |
| <u>Estimated exec. duration (sec):</u> | 60.00   |   |                   |
| <u>Priority:</u>                       | Medium  |   |                   |
| <u>Keywords:</u>                       | tda2xx-evm<br>tda3xx-evm<br>tda2px-evm  |   |                   |
| <b>Execution Details</b>               |   |   |                   |
| Build                                  | REL_3_3   |   |                   |
| Tester                                 | x0246581  |   |                   |
| <u>Execution Result:</u>               | <b>Passed</b>   |   |                   |
| <u>Execution Mode:</u>                 | <b>Automated</b>  |   |                   |

|                                  |                    |
|----------------------------------|--------------------|
| <u>Execution duration (sec):</u> |                    |
| Execution notes                  | TestLogPath<br>]]> |

#### 1.4.1.4.Test Suite : VIP\_Capture\_IPC\_Display

Test Case VISIONSDK-230: VIP\_Capture\_IPC\_Display\_Single\_core

Summary:

Capture IPC Display UC with Single core

supported on TDA2x/TDA2Ex/TDA3x

Input : OV10635 Sensor

Output : HDMI 1080P

Scenrios:

IPU1\_0 -> DSP1 -> IPU1\_0

IPU1\_0 -> DSP2 -> IPU1\_0

IPU1\_0 -> EVE1 -> IPU1\_0

IPU1\_0 -> EVE2 -> IPU1\_0

IPU1\_0 -> EVE3 -> IPU1\_0

IPU1\_0 -> EVE4 -> IPU1\_0

IPU1\_0 -> IPU1\_1 -> IPU1\_0

IPU1\_0 -> A15 -> IPU1\_0

Preconditions:

Verify that Capture is running on IPU1-0 at 30fps and display running on IPU1-0 at 60fps

| #:                              | Step actions:   | Expected Results:  | Execution Status: |
|---------------------------------|---|--|-------------------|
| 1                               | Run Testsuite   | Check Logs of Capture IPC Display UC<br>Capture should be running on IPU1-0 at 30fps and<br>Display should be running on IPU1-0 at 60fps |                   |
| Execution type:                 | Manual  |  |                   |
| Estimated exec. duration (sec): |   |  |                   |
| Priority:                       | Medium  |  |                   |
| Keywords:                       | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm<br>m_ipc |  |                   |
| Execution Details               |   |  |                   |
| Build                           | REL_3_3   |  |                   |
| Tester                          | x0246581  |  |                   |
| Execution Result:               | Passed  |  |                   |
| Execution Mode:                 | Manual  |  |                   |
| Execution duration (sec):       |   |  |                   |

|  |  |  |  |
|--|--|--|--|
| <b>Test Case VISIONSDK-231: VIP_Capture_IPC_Display_Multi_core</b>   |  |  |  |
| <u>Summary:</u><br>Capture IPC Display UC with Multi core<br>supported on TDA2x/TDA2Ex/TDA3x<br>Input : OV10635 Sensor |  |  |  |

Output : HDMI 1080P

Scenarios:

IPU1\_0 -> DSP1 -> IPU1\_1 -> DSP2 -> IPU1\_0

IPU1\_0 -> EVE1 -> DSP1 -> A15\_0 -> DSP1 -> IPU1\_0

IPU1\_0 -> EVE1 -> DSP1 -> A15\_0 -> IPU1\_0

IPU1\_0 -> A15\_0 -> DSP1 -> DSP2 -> IPU1\_1 -> EVE1 -> IPU1\_0

IPU1\_0 -> EVE1 -> DSP1 -> EVE2 -> DSP2 -> EVE3 -> A15\_0 -> IPU1\_1 -> EVE4 (Repeated twice) -> IPU1\_0

Preconditions:

Verify that Capture is running on IPU1-0 at 30fps and display running on IPU1-0 at 60fps

| #:                              | Step actions:  | Expected Results:  | Execution Status: |
|---------------------------------|--|--|-------------------|
| 1                               | Run Testsuite  | Check Logs of Capture IPC Display UC<br><br>Capture should be running on IPU1-0 at 30fps and<br><br>Display should be running on IPU1-0 at 60fps |                   |
| Execution type:                 | Manual   |  |                   |
| Estimated exec. duration (sec): |  |  |                   |
| Priority:                       | Medium   |  |                   |
| Keywords:                       | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm |  |                   |
| Execution Details               |  |  |                   |
| Build                           | REL_3_3  |  |                   |
| Tester                          | x0246581   |  |                   |
| Execution Result:               | Passed   |  |                   |
| Execution Mode:                 | Manual   |  |                   |
| Execution duration (sec):       |  |  |                   |

#### 1.4.1.5.Test Suite : VIP\_Capture\_Color\_To\_Gray\_Display

##### Test Case VISIONSDK-167: VIP\_Capture\_Color\_To\_Gray\_Display

Summary:

Single Cam Capture Color to Gray Display UC

supported on TDA2x/TDA2Ex/TDA3x

Input : OV10635 Sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture is running on IPU1-0 at 30fps and display running on IPU1-0 at 60fps

| #:                              | Step actions:  | Expected Results:   | Execution Status: |
|---------------------------------|--|---|-------------------|
| 1                               | Run Testsuite  | Check Logs of Capture Color to Gray Display UC<br>Capture should be running on IPU1-0 at 30fps and display should be running on IPU1-0 at 60fps |                   |
| Execution type:                 | Manual   |   |                   |
| Estimated exec. duration (sec): |  |   |                   |
| Priority:                       | Medium   |   |                   |
| Keywords:                       | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm |   |                   |
| Execution Details               |  |   |                   |

|                                  |               |
|----------------------------------|---------------|
| Build                            | REL_3_3       |
| Tester                           | x0246581      |
| <u>Execution Result:</u>         | <b>Passed</b> |
| <u>Execution Mode:</u>           | <b>Manual</b> |
| <u>Execution duration (sec):</u> |               |

#### 1.4.1.6.Test Suite : VIP\_Capture\_DSSWB\_Display

Test Case VISIONSDK-179: VIP\_Capture\_DSSWB\_CRC\_Display

Summary:

Single Cam Capture DSSWB CRC Display UC

supported on TDA3x

Input : OV10635 Sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture is running on IPU1-0 at 30fps and display running on IPU1-0 at 60fps

| #:                              | Step actions:   | Expected Results:   | Execution Status: |
|---------------------------------|---|---|-------------------|
| 1                               | Go to System Settings<br><br>Select Capture Source as OV10635<br><br>& Display Output as HDMI 1080P | Capture Source should be OV10635<br><br>& Display device as HDMI 1080P  |                   |
| 2                               | Run "1CH VIP capture + DSSWB + CRC + Display (Supported only on TDA3x)" UC                          | Display must come up & no buffer drop should be observed  |                   |
| 3                               | Pause the video<br><br>Play the video   | After pause, frame freeze event detect should be displayed<br>On resume, frame freeze event detect display should be erased |                   |
| Execution type:                 | Automated   |   |                   |
| Estimated exec. duration (sec): | 60.00   |   |                   |
| Priority:                       | Medium  |   |                   |
| Keywords:                       | tda3xx-evm<br>c_qualification   |   |                   |
| Execution Details               |   |   |                   |
| Build                           | REL_3_3   |   |                   |
| Tester                          | x0246581  |   |                   |
| Execution Result:               | Passed  |   |                   |
| Execution Mode:                 | Manual  |   |                   |
| Execution duration (sec):       |   |   |                   |

|  |   |  |                          |
|--|---|--|--------------------------|
| <b>Test Case VISIONSDK-180: VIP_Capture_DisplayMultipipe_DSSWB_Metadata</b>              |   |  |                          |
| <u>Summary:</u>  |   |  |                          |
| Single Cam Capture Display Multipipe DSSWB Metadata UC                                   |   |  |                          |
| supported on TDA3x   |   |  |                          |
| Input : OV10635 Sensor   |   |  |                          |
| Output : HDMI 1080P  |   |  |                          |
| <u>Preconditions:</u>  |   |  |                          |
| Verify that Capture is running on IPU1-0 at 30fps and display running on IPU1-0 at 60fps |   |  |                          |
| <u>#:</u>  | <u>Step actions:</u>                                      | <u>Expected Results:</u>   | <u>Execution Status:</u> |
| 1  | Go to System Settings<br>Select Capture Source as OV10635 | Capture Source should be OV10635<br>& Display device as HDMI 1080P |                          |



|  |  |  |  |
|--|--|--|--|
|  | & Display Output as HDMI 1080P                                 |  |  |
| 2                                      | Run "1CH VIP capture + DisplayMultiPipe + DSSWb + Metadata" UC | Display must come up & no buffer drop should be observed |  |
| <u>Execution type:</u>                 | Automated  |  |  |
| <u>Estimated exec. duration (sec):</u> | 60.00  |  |  |
| <u>Priority:</u>                       | Medium   |  |  |
| <u>Keywords:</u>                       | tda3xx-evm   |  |  |
| <b>Execution Details</b>               |  |  |  |
| Build                                  | REL_3_3  |  |  |
| Tester                                 | x0246581   |  |  |
| <u>Execution Result:</u>               | <b>Passed</b>  |  |  |
| <u>Execution Mode:</u>                 | <b>Manual</b>  |  |  |
| <u>Execution duration (sec):</u>       |  |  |  |

#### 1.4.1.7.Test Suite : VIP\_Capture\_VPE\_Display

|  |   |   |                          |
|--|---|---|--------------------------|
| <b>Test Case VISIONSDK-189: VIP_Capture_VPE_Display</b>                                  |   |   |                          |
| <u>Summary:</u>  |   |   |                          |
| Single Cam Capture VPE Display UC  |   |   |                          |
| supported on TDA2x/TDA2Ex/TDA3x  |   |   |                          |
| Input : OV10635 Sensor   |   |   |                          |
| Output : HDMI 1080P  |   |   |                          |
| <u>Preconditions:</u>  |   |   |                          |
| Verify that Capture is running on IPU1-0 at 30fps and display running on IPU1-0 at 60fps |   |   |                          |
| <u>#:</u>  | <u>Step actions:</u>  | <u>Expected Results:</u>  | <u>Execution Status:</u> |
| 1  | Run Testsuite   | Check Logs of Capture VPE Display UC<br>Capture should be running on IPU1-0 at 30fps and display should be running on IPU1-0 at 60fps |                          |
| <u>Execution type:</u>   | Manual  |   |                          |
| <u>Estimated exec. duration (sec):</u>   |   |   |                          |
| <u>Priority:</u>   | Medium  |   |                          |
| <u>Keywords:</u>   | tda2xx-evm<br>tda2ex-evm<br>tda2ex-entry<br>tda2px-evm<br>m_vpe |   |                          |
| <b>Execution Details</b>   |   |   |                          |
| Build  | REL_3_3   |   |                          |
| Tester   | x0246581  |   |                          |
| <u>Execution Result:</u>   | <b>Passed</b>   |   |                          |
| <u>Execution Mode:</u>   | <b>Manual</b>   |   |                          |
| <u>Execution duration (sec):</u>   |   |   |                          |

#### 1.4.1.8.Test Suite : VIP\_SingleCam\_Capture\_Analytics\_Display

|   |  |  |  |
|---|--|--|--|
| <b>Test Case VISIONSDK-9: VIP_Capture_Edge_detect_Display</b> |  |  |  |
| <u>Summary:</u>   |  |  |  |
| VIP Capture Edge Detect Display UC with EVE1                  |  |  |  |
| Input : OV10635   |  |  |  |
| Output : HDMI 1080P   |  |  |  |
| <u>Preconditions:</u>   |  |  |  |

Verify that Capture is running on IPU1-0 at 30fps and display running on IPU1-0 at 60fps

| #:                                     | Step actions:   | Expected Results:  | Execution Status: |
|--|---|--|-------------------|
| 1                                      | Go to System Settings<br>Select Capture Source as OV10635<br>& Display Output as HDMI 1080P | Capture Source should be OV10635<br>& Display device as HDMI 1080P |                   |
| 2                                      | Run 1 Ch VIP capture + Edge Detect (EVE1) + Display UC                                      | Display must come up and no buffer drops should be observe         |                   |
| <u>Execution type:</u>                 | Automated   |  |                   |
| <u>Estimated exec. duration (sec):</u> | 60.00   |  |                   |
| <u>Priority:</u>                       | Medium  |  |                   |
| <u>Keywords:</u>                       | tda2xx-evm<br>tda3xx-evm<br>tda2px-evm  |  |                   |
| <b>Execution Details</b>               |   |  |                   |
| Build                                  | REL_3_3   |  |                   |
| Tester                                 | x0246581  |  |                   |
| <u>Execution Result:</u>               | <b>Passed</b>   |  |                   |
| <u>Execution Mode:</u>                 | <b>Automated</b>  |  |                   |
| <u>Execution duration (sec):</u>       |   |  |                   |
| Execution notes                        | TestLogPath<br>]]>  |  |                   |

**Test Case VISIONSDK-10: VIP\_Capture\_DOF\_1Pyramid\_Display**Summary:

VIP Capture DOF Display UC with 1 Pyramid

Input : OV10635

Output : HDMI 1080P

Preconditions:

Verify that Capture is running on IPU1-0 at 30fps and display running on IPU1-0 at 60fps

| #:                                     | Step actions:   | Expected Results:  | Execution Status: |
|--|---|--|-------------------|
| 1                                      | Go to System Settings<br>Select Capture Source as OV10635<br>& Display Output as HDMI 1080P | Capture Source should be OV10635<br>& Display device as HDMI 1080P |                   |
| 2                                      | Run 1 Ch VIP capture + Dense Optical Flow (EVE1) + Display UC with 1 Pyramid                | Display must come up and no buffer drops should be observe         |                   |
| <u>Execution type:</u>                 | Automated   |  |                   |
| <u>Estimated exec. duration (sec):</u> | 60.00   |  |                   |
| <u>Priority:</u>                       | Medium  |  |                   |
| <u>Keywords:</u>                       | tda2xx-evm<br>tda3xx-evm<br>tda2px-evm  |  |                   |
| <b>Execution Details</b>               |   |  |                   |
| Build                                  | REL_3_3   |  |                   |
| Tester                                 | x0246581  |  |                   |
| <u>Execution Result:</u>               | <b>Passed</b>   |  |                   |
| <u>Execution Mode:</u>                 | <b>Automated</b>  |  |                   |
| <u>Execution duration (sec):</u>       |   |  |                   |
| Execution notes                        | TestLogPath<br>]]>  |  |                   |

**Test Case VISIONSDK-11: VIP\_Capture\_DOF\_2Pyramid\_Display**Summary:

VIP Capture DOF Display UC with 2 Pyramid

Input : OV10635

Output : HDMI 1080P

Preconditions:

Verify that Capture is running on IPU1-0 at 30fps and display running on IPU1-0 at 60fps

| <u>#:</u>                              | <u>Step actions:</u>  | <u>Expected Results:</u>   | <u>Execution Status:</u> |
|--|---|--|--------------------------|
| 1                                      | Go to System Settings<br>Select Capture Source as OV10635<br>& Display Output as HDMI 1080P | Capture Source should be OV10635<br>& Display device as HDMI 1080P |                          |
| 2                                      | Run 1 Ch VIP capture + Dense Optical Flow (EVE) + Display UC with 2 Pyramid                 | Display must come up and no buffer drops should be observe         |                          |
| <u>Execution type:</u>                 | Automated   |  |                          |
| <u>Estimated exec. duration (sec):</u> | 60.00   |  |                          |
| <u>Priority:</u>                       | Medium  |  |                          |
| <u>Keywords:</u>                       | tda2xx-evm<br>tda3xx-evm<br>tda2px-evm  |  |                          |
| <b>Execution Details</b>               |   |  |                          |
| Build                                  | REL_3_3   |  |                          |
| Tester                                 | x0246581  |  |                          |
| <u>Execution Result:</u>               | <b>Passed</b>   |  |                          |
| <u>Execution Mode:</u>                 | <b>Automated</b>  |  |                          |
| <u>Execution duration (sec):</u>       |   |  |                          |
| Execution notes                        | TestLogPath<br>]]>  |  |                          |

## 1.4.2.Test Suite : HDMI

### 1.4.2.1.Test Suite : HDMI\_Capture\_Display

#### Test Case VISIONSDK-3: HDMI\_Capture\_Display\_Input\_HDMI\_Output\_LCD

##### Summary:

Capture Display UC

Input : HDMI

Output : LCD

##### Preconditions:

Verify that Capture is running on IPU1-0 at 30fps and display running on IPU1-0 at 60fps

| #:                              | Step actions:  | Expected Results:  | Execution Status: |
|---------------------------------|--|--|-------------------|
| 1                               | Go to System Settings<br><br>Select Capture Source as HDMI<br>& Display Output as LCD                          | Capture Source should be HDMI<br>& Display device as LCD   |                   |
| 2                               | Run 1 Ch VIP capture + Display UC  | Display must come up and no buffer drops should be observe |                   |
| Execution type:                 | Automated  |  |                   |
| Estimated exec. duration (sec): | 60.00  |  |                   |
| Priority:                       | Medium   |  |                   |
| Keywords:                       | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm<br>c_regression<br>m_capture<br>m_display |  |                   |
| Execution Details               |  |  |                   |
| Build                           | REL_3_3  |  |                   |
| Tester                          | x0246581   |  |                   |
| Execution Result:               | Passed   |  |                   |
| Execution Mode:                 | Manual   |  |                   |
| Execution duration (sec):       |  |  |                   |

#### Test Case VISIONSDK-4: HDMI\_Capture\_Display\_Input\_HDMI\_Output\_HDMI

##### Summary:

Capture Display UC

Input : HDMI

Output : HDMI

##### Preconditions:

Verify that Capture is running on IPU1-0 at 30fps and display running on IPU1-0 at 60fps

| <u>#:</u> | <u>Step actions:</u>                                   | <u>Expected Results:</u>                                  | <u>Execution Status:</u> |
|-----------|--|---|--------------------------|
| 1         | Go to System Settings<br>Select Capture Source as HDMI | Capture Source should be HDMI<br>& Display device as HDMI |                          |

|  |  |  |  |
|--|--|--|--|
|  | & Display Output as HDMI   |  |  |
| 2                                      | Run 1 Ch VIP capture + Display UC  | Display must come up and no buffer drops should be observe |  |
| <u>Execution type:</u>                 | Automated  |  |  |
| <u>Estimated exec. duration (sec):</u> | 60.00  |  |  |
| <u>Priority:</u>                       | Medium   |  |  |
| <u>Keywords:</u>                       | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm<br>c_qualification<br>c_integration |  |  |
| <b>Execution Details</b>               |  |  |  |
| Build                                  | REL_3_3  |  |  |
| Tester                                 | x0246581   |  |  |
| <u>Execution Result:</u>               | <b>Passed</b>  |  |  |
| <u>Execution Mode:</u>                 | <b>Automated</b>   |  |  |
| <u>Execution duration (sec):</u>       |  |  |  |
| Execution notes                        | TestLogPath<br><br>]]>   |  |  |

#### 1.4.2.2.Test Suite : HDMI\_Capture\_Analytics\_Display

Test Case VISIONSDK-14: HDMI\_Capture\_SOF\_Display

Summary:

HDMI Capture SOF Display UC

Input : HDMI

Output : HDMI

Preconditions:

Verify whether display shows flow vectors of the captured input  
Also check performance stats match with datasheet

| #: | Step actions:  | Expected Results:  | Execution Status: |
|----|--|--|-------------------|
| 1  | Go to System Settings<br>Select Capture Source as HDMI<br>& Display Output as HDMI 1080P | Capture Source should be HDMI<br>& Display device as HDMI 1080P  |                   |
| 2  | Run 1CH VIP capture (HDMI) + Sparse Optical Flow (EVE1) + Display UC                     | Display must come up and no buffer drops should be observe<br><br>Flow vectors of the captured input should be displayed |                   |

Execution type:

Automated

Estimated exec. duration (sec):

60.00

Priority:

Medium

Keywords:

tda2xx-evm  
tda3xx-evm  
tda2px-evm

Execution Details

Build

REL\_3\_3

Tester

x0246581

Execution Result:

Passed

Execution Mode:

Manual

Execution duration (sec):

**Test Case VISIONSDK-15: HDMI\_Capture\_LD\_Display**Summary:

HDMI Capture Lane Detect Display UC

Input : HDMI

Output : HDMI 1080P

Preconditions:

Verify whether display shows a smooth stitching of the single cam views Lane detection  
All running at 30fps, Also check performance stats match with datasheet

| #:                              | Step actions:  | Expected Results:  | Execution Status: |
|---------------------------------|--|--|-------------------|
| 1                               | Go to System Settings<br><br>Select Capture Source as HDMI<br><br>& Display Output as HDMI 1080P | Capture Source shuld be HDMI<br><br>& Display device as HDMI 1080P |                   |
| 2                               | Run 1CH VIP capture (HDMI) + Lane Detect (DSP1 + EVE1) + Display UC                              | Display must come up and no buffer drops should be observe         |                   |
| Execution type:                 | Automated  |  |                   |
| Estimated exec. duration (sec): | 60.00  |  |                   |
| Priority:                       | Medium   |  |                   |
| Keywords:                       | tda2xx-evm<br>tda3xx-evm<br>tda2px-evm   |  |                   |
| Execution Details               |  |  |                   |
| Build                           | REL_3_3  |  |                   |
| Tester                          | x0246581   |  |                   |
| Execution Result:               | Passed   |  |                   |
| Execution Mode:                 | Manual   |  |                   |
| Execution duration (sec):       |  |  |                   |

**Test Case VISIONSDK-16: HDMI\_Capture\_TLR\_Display**Summary:

HDMI Capture Traffic Light Display UC

Input : HDMI

Output : HDMI 1080P

Preconditions:

Verify whether display shows a smooth stitching of the single cam views Traffic Light detection  
All running at 30fps, Also check performance stats match with datasheet

| #:                              | Step actions:  | Expected Results:   | Execution Status: |
|---------------------------------|--|---|-------------------|
| 1                               | Go to System Settings<br><br>Select Capture Source as HDMI<br><br>& Display Output as HDMI 1080P | Capture Source should be HDMI<br><br>& Display device as HDMI 1080P |                   |
| 2                               | Run 1CH VIP capture (HDMI) + Traffic Light Recognition (TLR) (DSP1) + Display UC                 | Display must come up and no buffer drops should be observe          |                   |
| Execution type:                 | Automated  |   |                   |
| Estimated exec. duration (sec): | 60.00  |   |                   |
| Priority:                       | Medium   |   |                   |
| Keywords:                       | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm                             |   |                   |
| Execution Details               |  |   |                   |
| Build                           | REL_3_3  |   |                   |

|                           |               |
|---------------------------|---------------|
| Tester                    | x0246581      |
| Execution Result:         | <b>Passed</b> |
| Execution Mode:           | <b>Manual</b> |
| Execution duration (sec): |               |

**Test Case VISIONSDK-17: HDMI\_Capture\_PD\_Display**Summary:

HDMI Capture Pedestrian Detect Display UC

Input : HDMI

Output : HDMI 1080P

Preconditions:

Verify whether display shows a smooth stitching of the single cam views Pedestrian detection  
All running at 30fps, Also check performance stats match with datasheet

| #:                              | Step actions:  | Expected Results:   | Execution Status: |
|---------------------------------|--|---|-------------------|
| 1                               | Go to System Settings<br><br>Select Capture Source as HDMI<br><br>& Display Output as HDMI 1080P | Capture Source should be HDMI<br><br>& Display device as HDMI 1080P |                   |
| 2                               | Run 1CH VIP capture (HDMI) + PD + Display UC   | Display must come up and no buffer drops should be observed         |                   |
| Execution type:                 | Automated  |   |                   |
| Estimated exec. duration (sec): | 60.00  |   |                   |
| Priority:                       | Medium   |   |                   |
| Keywords:                       | tda2xx-evm<br>tda3xx-evm<br>tda2px-evm   |   |                   |
| Execution Details               |  |   |                   |
| Build                           | REL_3_3  |   |                   |
| Tester                          | x0246581   |   |                   |
| Execution Result:               | Passed   |   |                   |
| Execution Mode:                 | Manual   |   |                   |
| Execution duration (sec):       |  |   |                   |

**Test Case VISIONSDK-18: HDMI\_Capture\_TSR\_Display**Summary:

HDMI Capture Traffic Sign Detect Display UC

Input : HDMI

Output : HDMI 1080P

Preconditions:

Verify whether display shows a smooth stitching of the single cam views Traffic Sign detection  
All running at 30fps, Also check performance stats match with datasheet

| #:                                     | Step actions:  | Expected Results:   | Execution Status: |
|--|--|---|-------------------|
| 1                                      | Go to System Settings<br>Select Capture Source as HDMI<br>& Display Output as HDMI 1080P | Capture Source should be HDMI<br>& Display device as HDMI 1080P |                   |
| 2                                      | Run 1CH VIP capture (HDMI) + TSR + Display UC  | Display must come up and no buffer drops should be observe      |                   |
| <u>Execution type:</u>                 | Automated  |   |                   |
| <u>Estimated exec. duration (sec):</u> | 60.00  |   |                   |
| <u>Priority:</u>                       | Medium   |   |                   |

|                                  |  |
|----------------------------------|--|
| <u>Keywords:</u>                 | tda2xx-evm<br>tda3xx-evm<br>tda2px-evm |
| <b>Execution Details</b>         |  |
| Build                            | REL_3_3                                |
| Tester                           | x0246581                               |
| <u>Execution Result:</u>         | <b>Passed</b>                          |
| <u>Execution Mode:</u>           | <b>Manual</b>                          |
| <u>Execution duration (sec):</u> |  |

**Test Case VISIONSDK-19: HDMI\_Capture\_VD\_Display**Summary:

HDMI Capture Vehicle Detect Display UC

Input : HDMI

Output : HDMI 1080P

Preconditions:

Verify whether display shows a smooth stitching of the single cam views Vehicle detection  
All running at 30fps, Also check performance stats match with datasheet

| <u>#:</u>                              | <u>Step actions:</u>   | <u>Expected Results:</u>  | <u>Execution Status:</u> |
|--|--|---|--------------------------|
| 1                                      | Go to System Settings<br><br>Select Capture Source as HDMI<br><br>& Display Output as HDMI 1080P | Capture Source should be HDMI<br><br>& Display device as HDMI 1080P |                          |
| 2                                      | Run 1CH VIP capture (HDMI) + VD + Display UC   | Display must come up and no buffer drops should be observe          |                          |
| <u>Execution type:</u>                 | Automated  |   |                          |
| <u>Estimated exec. duration (sec):</u> | 60.00  |   |                          |
| <u>Priority:</u>                       | Medium   |   |                          |
| <u>Keywords:</u>                       | tda2xx-evm<br>tda3xx-evm<br>tda2px-evm   |   |                          |
| <b>Execution Details</b>               |  |   |                          |
| Build                                  | REL_3_3  |   |                          |
| Tester                                 | x0246581   |   |                          |
| <u>Execution Result:</u>               | <b>Passed</b>  |   |                          |
| <u>Execution Mode:</u>                 | <b>Manual</b>  |   |                          |
| <u>Execution duration (sec):</u>       |  |   |                          |

**Test Case VISIONSDK-20: HDMI\_Capture\_PD\_TSR\_VD\_Display**Summary:

HDMI Capture Pedestrian, Traffic Sign, Vehicle Detect Display UC

Input : HDMI

Output : HDMI 1080P

Preconditions:

Verify whether display shows a smooth stitching of the single cam views Pedestrian, Traffic Sign, Vehicle Detect  
All running at 30fps, Also check performance stats match with datasheet

| <u>#:</u> | <u>Step actions:</u>   | <u>Expected Results:</u>  | <u>Execution Status:</u> |
|-----------|--|---|--------------------------|
| 1         | Go to System Settings<br><br>Select Capture Source as HDMI<br><br>& Display Output as HDMI 1080P | Capture Source should be HDMI<br><br>& Display device as HDMI 1080P |                          |
| 2         | Run 1CH VIP capture (HDMI) +   | Display must come up and no buffer drops                            |                          |



|  |   |                   |  |
|--|---|-------------------|--|
|  | PD+TSR+VD + Display UC                                | should be observe |  |
| <u>Execution type:</u>                 | Automated   |                   |  |
| <u>Estimated exec. duration (sec):</u> | 60.00   |                   |  |
| <u>Priority:</u>                       | Medium  |                   |  |
| <u>Keywords:</u>                       | tda2xx-evm<br>tda3xx-evm<br>tda2px-evm<br>m_algorithm |                   |  |
| <b>Execution Details</b>               |   |                   |  |
| Build                                  | REL_3_3   |                   |  |
| Tester                                 | x0246581  |                   |  |
| <u>Execution Result:</u>               | <b>Passed</b>   |                   |  |
| <u>Execution Mode:</u>                 | <b>Manual</b>   |                   |  |
| <u>Execution duration (sec):</u>       |   |                   |  |

**Test Case VISIONSDK-21: HDMI\_Capture\_FrontCam\_Analytics\_Display**Summary:

HDMI Capture FrontCam Analytics Display UC

Input : HDMI

Output : HDMI 1080P

Preconditions:

Verify whether display shows a smooth stitching of the single cam views PD+TSR+VD+LD+TLR+SFM  
All running at 15fps, Also check performance stats match with datasheet

| <u>#:</u>                              | <u>Step actions:</u>  | <u>Expected Results:</u>  | <u>Execution Status:</u> |
|--|---|---|--------------------------|
| 1                                      | Go to System Settings<br>Select Capture Source as HDMI<br>& Display Output as HDMI 1080P              | Capture Source should be HDMI<br>& Display device as HDMI 1080P |                          |
| 2                                      | Run 1CH VIP capture (HDMI) + FrontCam Analytics 2<br>(PD+TSR+VD+LD+TLR+SFM) (DSPx, EVEx) + Display UC | Display must come up and no<br>buffer drops should be observe   |                          |
| <u>Execution type:</u>                 | Automated   |   |                          |
| <u>Estimated exec. duration (sec):</u> | 60.00   |   |                          |
| <u>Priority:</u>                       | Medium  |   |                          |
| <u>Keywords:</u>                       | tda2xx-evm<br>tda3xx-evm<br>tda2px-evm<br>c_stress<br>c_stability<br>m_algorithm                      |   |                          |
| <b>Execution Details</b>               |   |   |                          |
| Build                                  | REL_3_3   |   |                          |
| Tester                                 | x0246581  |   |                          |
| <u>Execution Result:</u>               | <b>Passed</b>   |   |                          |
| <u>Execution Mode:</u>                 | <b>Manual</b>   |   |                          |
| <u>Execution duration (sec):</u>       |   |   |                          |

### 1.4.3.Test Suite : ISS

#### 1.4.3.1.Test Suite : ISS\_SingleCam\_Capture\_Display\_AR140

##### Test Case VISIONSDK-24: ISS\_Capture\_AR140\_LM

###### Summary:

Linear mode - basic ISS functionality test

ISS Single channle Capture UC with AR140

Input : AR140 sensor

Output : HDMI 1080P

###### Preconditions:

Verify that Capture/Display is running on IPU1-0 at 30fps

| #:                              | Step actions:   | Expected Results:   | Execution Status: |
|---------------------------------|---|---|-------------------|
| 1                               | Go to System Settings<br><br>Select Capture Source as AR140<br><br>& Display Output as HDMI 1080P | Capture Source shuld be AR140<br><br>& Display device as HDMI 1080P   |                   |
| 2                               | Run "1CH ISS capture + ISS ISP + ISS LDC+VTNF + Display" UC                                       | Display must come up and no buffer drops should be observed<br>Exposure and colors should look correct.<br>Most important - white/grey objects should not have any color cast |                   |
| Execution type:                 | Automated   |   |                   |
| Estimated exec. duration (sec): | 60.00   |   |                   |
| Priority:                       | Medium  |   |                   |
| Keywords:                       | tda3xx-evm<br>c_qualification<br>c_integration  |   |                   |
| Execution Details               |   |   |                   |
| Build                           | REL_3_3   |   |                   |
| Tester                          | x0246581  |   |                   |
| Execution Result:               | Passed  |   |                   |
| Execution Mode:                 | Manual  |   |                   |
| Execution duration (sec):       |   |   |                   |

##### Test Case VISIONSDK-25: ISS\_Capture\_AR140\_LM\_Performance

###### Summary:

Linear mode - basic ISS, performance test

ISS Single channle Capture UC with AR140

Input : AR140 sensor

Output : HDMI 1080P

###### Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| #: | Step actions:         | Expected Results:             | Execution Status: |
|----|-----------------------|-------------------------------|-------------------|
| 1  | Go to System Settings | Capture Source shuld be AR140 |                   |

|  |  |   |  |
|--|--|---|--|
|  | Select Capture Source as AR140<br>& Display Output as HDMI 1080P | & Display device as HDMI 1080P                              |  |
| 2                                      | Run 1CH ISS capture + ISS + Display UC                           | Display must come up and no buffer drops should be observed |  |
| 3                                      | Press "P" & check for FPS  | FPS should be in the range 29.5 - 30.5                      |  |
| <u>Execution type:</u>                 | Automated  |   |  |
| <u>Estimated exec. duration (sec):</u> | 60.00  |   |  |
| <u>Priority:</u>                       | Medium   |   |  |
| <u>Keywords:</u>                       | tda3xx-evm<br>c_regression<br>c_performance<br>m_iss             |   |  |
| <b>Execution Details</b>               |  |   |  |
| Build                                  | REL_3_3  |   |  |
| Tester                                 | x0246581   |   |  |
| <u>Execution Result:</u>               | <b>Passed</b>  |   |  |
| <u>Execution Mode:</u>                 | <b>Manual</b>  |   |  |
| <u>Execution duration (sec):</u>       |  |   |  |

**Test Case VISIONSDK-26: ISS\_Capture\_AR140\_LM\_Dyanmic\_Range**Summary:

Linear mode - dynamic range test

ISS Single channle Capture UC with AR140

Input : AR140 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| <u>#:</u>                              | <u>Step actions:</u>  | <u>Expected Results:</u>   | <u>Execution Status:</u> |
|--|---|--|--------------------------|
| 1                                      | Go to System Settings<br><br>Select Capture Source as AR140<br><br>& Display Output as HDMI 1080P | Capture Source shuld be AR140<br><br>& Display device as HDMI 1080P  |                          |
| 2                                      | Run 1CH ISS capture + ISS + Display UC  | Display must come up and no buffer drops should be observed.<br>AE should adjust such that lowlights are visible and highlights are overexposed. |                          |
| <u>Execution type:</u>                 | Manual  |  |                          |
| <u>Estimated exec. duration (sec):</u> |   |  |                          |
| <u>Priority:</u>                       | Medium  |  |                          |
| <u>Keywords:</u>                       | tda3xx-evm  |  |                          |
| <b>Execution Details</b>               |   |  |                          |
| Build                                  | REL_3_3   |  |                          |
| Tester                                 | x0246581  |  |                          |
| <u>Execution Result:</u>               | <b>Passed</b>   |  |                          |
| <u>Execution Mode:</u>                 | <b>Manual</b>   |  |                          |
| <u>Execution duration (sec):</u>       |   |  |                          |

**Test Case VISIONSDK-27: ISS\_Capture\_AR140\_1PASS\_WDR**Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with AR140

Input : AR140 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| #:                                     | Step actions:   | Expected Results:  | Execution Status: |
|--|---|--|-------------------|
| 1                                      | Go to System Settings<br>Select Capture Source as AR140<br>& Display Output as HDMI 1080P | Capture Source shuld be AR140<br>& Display device as HDMI 1080P  |                   |
| 2                                      | Go to ISS setting<br>Select LDC = OFF, VTNF = OFF, WDR = 1 PASS WDR                       | Selected ISS settings will be saved  |                   |
| 3                                      | Run 1CH ISS capture + ISS + Display UC  | Display must come up and no buffer drops should be observed.<br>Exposure and colors should look correct. |                   |
| <u>Execution type:</u>                 | Automated   |  |                   |
| <u>Estimated exec. duration (sec):</u> | 60.00   |  |                   |
| <u>Priority:</u>                       | Medium  |  |                   |
| <u>Keywords:</u>                       | tda3xx-evm  |  |                   |
| <b>Execution Details</b>               |   |  |                   |
| Build                                  | REL_3_3   |  |                   |
| Tester                                 | x0246581  |  |                   |
| <u>Execution Result:</u>               | <b>Passed</b>   |  |                   |
| <u>Execution Mode:</u>                 | <b>Manual</b>   |  |                   |
| <u>Execution duration (sec):</u>       |   |  |                   |

**Test Case VISIONSDK-29: ISS\_Capture\_AR140\_2PASS\_WDR**Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with AR140

Input : AR140 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| #:                                     | Step actions:   | Expected Results:  | Execution Status: |
|--|---|--|-------------------|
| 1                                      | Go to System Settings<br>Select Capture Source as AR140<br>& Display Output as HDMI 1080P | Capture Source shuld be AR140<br>& Display device as HDMI 1080P  |                   |
| 2                                      | Go to ISS setting<br>Select LDC = OFF, VTNF = OFF, WDR = 2 PASS WDR                       | Selected ISS settings will be saved  |                   |
| 3                                      | Run 1CH ISS capture + ISS + Display UC  | Display must come up and no buffer drops should be observed.<br>Exposure and colors should look correct. |                   |
| <u>Execution type:</u>                 | Automated   |  |                   |
| <u>Estimated exec. duration (sec):</u> | 60.00   |  |                   |
| <u>Priority:</u>                       | Medium  |  |                   |
| <u>Keywords:</u>                       | tda3xx-evm<br>c_stress<br>c_stability   |  |                   |

|                                  |               |
|----------------------------------|---------------|
| <b>Execution Details</b>         |               |
| Build                            | REL_3_3       |
| Tester                           | x0246581      |
| <u>Execution Result:</u>         | <b>Passed</b> |
| <u>Execution Mode:</u>           | <b>Manual</b> |
| <u>Execution duration (sec):</u> |               |

**Test Case VISIONSDK-31: ISS\_Capture\_AR140\_2PASS\_WDR\_Performance**
Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with AR140

Input : AR140 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| <u>#:</u> | <u>Step actions:</u>  | <u>Expected Results:</u>  | <u>Execution Status:</u> |
|-----------|---|---|--------------------------|
| 1         | Go to System Settings<br>Select Capture Source as AR140<br>& Display Output as HDMI 1080P | Capture Source shuld be AR140<br>& Display device as HDMI 1080P |                          |
| 2         | Go to ISS setting<br>Select LDC = OFF, VTNF = OFF, WDR = 2<br>PASS WDR                    | Selected ISS settings will be saved                             |                          |
| 3         | Run 1CH ISS capture + ISS + Display UC  | Display must come up and no buffer drops<br>should be observed  |                          |
| 4         | Press "P" & check for FPS   | FPS should be in the range 29.5 - 30.5                          |                          |

Execution type: Automated

Estimated exec. duration (sec): 60.00

Priority: Medium

Keywords: tda3xx-evm

|                                  |               |
|----------------------------------|---------------|
| <b>Execution Details</b>         |               |
| Build                            | REL_3_3       |
| Tester                           | x0246581      |
| <u>Execution Result:</u>         | <b>Passed</b> |
| <u>Execution Mode:</u>           | <b>Manual</b> |
| <u>Execution duration (sec):</u> |               |

**Test Case VISIONSDK-32: ISS\_Capture\_AR140\_2PASS\_WDR\_Dynamic\_Range**
Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with AR140

Input : AR140 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| <u>#:</u> | <u>Step actions:</u>                                    | <u>Expected Results:</u>  | <u>Execution Status:</u> |
|-----------|---|---|--------------------------|
| 1         | Go to System Settings<br>Select Capture Source as AR140 | Capture Source shuld be AR140<br>& Display device as HDMI 1080P |                          |

|  |  |  |  |
|--|--|--|--|
|  | & Display Output as HDMI 1080P   |  |  |
| 2                                      | Go to ISS setting<br>Select LDC = OFF, VTNF = OFF,<br>WDR = 2 PASS WDR | Selected ISS settings will be saved  |  |
| 3                                      | Run 1CH ISS capture + ISS + Display UC                                 | Display must come up and no buffer drops should be observed.<br>Exposure and colors should look correct in dark as well as bright regions.<br>Dark regions maybe noisier than bright regions but NSF effect should be visible. |  |
| <u>Execution type:</u>                 |  | Manual   |  |
| <u>Estimated exec. duration (sec):</u> |  |  |  |
| <u>Priority:</u>                       |  | Medium   |  |
| <u>Keywords:</u>                       |  | tda3xx-evm   |  |
| <b>Execution Details</b>               |  |  |  |
| Build                                  |  | REL_3_3  |  |
| Tester                                 |  | x0246581   |  |
| <u>Execution Result:</u>               |  | <b>Passed</b>  |  |
| <u>Execution Mode:</u>                 |  | <b>Manual</b>  |  |
| <u>Execution duration (sec):</u>       |  |  |  |

**Test Case VISIONSDK-33: ISS\_Capture\_AR140\_2PASS\_WDR\_AE**Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with AR140

Input : AR140 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| <u>#:</u>                              | <u>Step actions:</u>  | <u>Expected Results:</u>  | <u>Execution Status:</u> |
|--|---|---|--------------------------|
| 1                                      | Go to System Settings<br>Select Capture Source as AR140<br>& Display Output as HDMI 1080P | Capture Source shuld be AR140<br>& Display device as HDMI 1080P   |                          |
| 2                                      | Go to ISS setting<br>Select LDC = OFF, VTNF = OFF,<br>WDR = 2 PASS WDR                    | Selected ISS settings will be saved   |                          |
| 3                                      | Run 1CH ISS capture + ISS + Display UC  | Display must come up and no buffer drops should be observed<br>All the details in the scene should be visible. Noise levels should be very low.<br>Moving to dark scene should cause AE adjustment and increase in noise level. |                          |
| <u>Execution type:</u>                 |   | Manual  |                          |
| <u>Estimated exec. duration (sec):</u> |   |   |                          |
| <u>Priority:</u>                       |   | Medium  |                          |
| <u>Keywords:</u>                       |   | tda3xx-evm  |                          |
| <b>Execution Details</b>               |   |   |                          |
| Build                                  |   | REL_3_3   |                          |
| Tester                                 |   | x0246581  |                          |
| <u>Execution Result:</u>               |   | <b>Passed</b>   |                          |
| <u>Execution Mode:</u>                 |   | <b>Manual</b>   |                          |
| <u>Execution duration (sec):</u>       |   |   |                          |

**Test Case VISIONSDK-34: ISS\_Capture\_AR140\_2PASS\_WDR\_VTNF**Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with AR140

Input : AR140 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| #: | Step actions:   | Expected Results:  | Execution Status: |
|----|---|--|-------------------|
| 1  | Go to System Settings<br>Select Capture Source as AR140<br>& Display Output as HDMI 1080P | Capture Source shuld be AR140<br>& Display device as HDMI 1080P  |                   |
| 2  | Go to ISS setting<br>Select LDC = OFF, VTNF = ON, WDR = 2 PASS WDR                        | Selected ISS settings will be saved  |                   |
| 3  | Run 1CH ISS capture + ISS + Display UC  | Display must come up and no buffer drops should be observed<br>All the details in the scene should be visible. Preview maybe noisy.<br>Toggling between VTNF (0/1) should have visible impact on temporal noise. |                   |

Execution type: AutomatedEstimated exec. duration (sec): 60.00Priority: MediumKeywords: tda3xx-evm**Execution Details**

Build REL\_3\_3

Tester x0246581

Execution Result: **Passed**Execution Mode: **Manual**Execution duration (sec):**Test Case VISIONSDK-36: ISS\_Capture\_AR140\_2PASS\_WDR\_LDC**Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with AR140

Input : AR140 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| #: | Step actions:   | Expected Results:   | Execution Status: |
|----|---|---|-------------------|
| 1  | Go to System Settings<br>Select Capture Source as AR140<br>& Display Output as HDMI 1080P | Capture Source shuld be AR140<br>& Display device as HDMI 1080P |                   |
| 2  | Go to ISS setting<br>Select LDC = ON, VTNF = OFF, WDR = 2 PASS WDR                        | Selected ISS settings will be saved                             |                   |
| 3  | Run 1CH ISS capture + ISS + Display UC  | Display must come up and no buffer drops                        |                   |

|  |               |   |  |
|--|---------------|---|--|
|  |               | should be observed<br>Preview must look undistorted |  |
| <u>Execution type:</u>                 | Automated     |   |  |
| <u>Estimated exec. duration (sec):</u> | 60.00         |   |  |
| <u>Priority:</u>                       | Medium        |   |  |
| <u>Keywords:</u>                       | tda3xx-evm    |   |  |
| <b>Execution Details</b>               |               |   |  |
| Build                                  | REL_3_3       |   |  |
| Tester                                 | x0246581      |   |  |
| <u>Execution Result:</u>               | <b>Passed</b> |   |  |
| <u>Execution Mode:</u>                 | <b>Manual</b> |   |  |
| <u>Execution duration (sec):</u>       |               |   |  |

**Test Case VISIONSDK-37: ISS\_Capture\_AR140\_2PASS\_WDR\_LDC\_VTNF**Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with AR140

Input : AR140 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| <u>#:</u>                              | <u>Step actions:</u>  | <u>Expected Results:</u>   | <u>Execution Status:</u> |
|--|---|--|--------------------------|
| 1                                      | Go to System Settings<br><br>Select Capture Source as AR140<br><br>& Display Output as HDMI 1080P | Capture Source shuld be AR140<br><br>& Display device as HDMI 1080P  |                          |
| 2                                      | Go to ISS setting<br><br>Select LDC = ON, VTNF = ON, WDR = 2 PASS WDR                             | Selected ISS settings will be saved  |                          |
| 3                                      | Run 1CH ISS capture + ISS + Display UC  | Display must come up and no buffer drops should be observed<br>LDC effect should be visible.<br><br>If LDC has not been tuned for the lens used, it is OK if correction is not perfect but there should be no crash or corruption. |                          |
| <u>Execution type:</u>                 | Automated   |  |                          |
| <u>Estimated exec. duration (sec):</u> | 60.00   |  |                          |
| <u>Priority:</u>                       | Medium  |  |                          |
| <u>Keywords:</u>                       | tda3xx-evm  |  |                          |
| <b>Execution Details</b>               |   |  |                          |
| Build                                  | REL_3_3   |  |                          |
| Tester                                 | x0246581  |  |                          |
| <u>Execution Result:</u>               | <b>Passed</b>   |  |                          |
| <u>Execution Mode:</u>                 | <b>Manual</b>   |  |                          |
| <u>Execution duration (sec):</u>       |   |  |                          |

**Test Case VISIONSDK-38: ISS\_Capture\_AR140\_2PASS\_WDR\_Color\_Fidelity**Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with AR140



Input : AR140 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| <u>#:</u>                              | <u>Step actions:</u>  | <u>Expected Results:</u>   | <u>Execution Status:</u> |
|--|---|--|--------------------------|
| 1                                      | Go to System Settings<br>Select Capture Source as AR140<br>& Display Output as HDMI 1080P | Capture Source should be AR140<br>& Display device as HDMI 1080P   |                          |
| 2                                      | Go to ISS setting<br>Select LDC = OFF, VTNF = OFF,<br>WDR = 2 PASS WDR                    | Selected ISS settings will be saved  |                          |
| 3                                      | Run 1CH ISS capture + ISS + Display UC  | Display must come up and no buffer drops should be observed<br><br>All the details in the scene should be visible.<br><br>Noise levels should be very low.<br><br>Sharpness should be good.<br>No color cast should be visible on lightbox walls and gray row of colorchecker.<br><br>Colored patches should have the right hue. |                          |
| <u>Execution type:</u>                 | Manual  |  |                          |
| <u>Estimated exec. duration (sec):</u> |   |  |                          |
| <u>Priority:</u>                       | Medium  |  |                          |
| <u>Keywords:</u>                       | tda3xx-evm  |  |                          |
| <b>Execution Details</b>               |   |  |                          |
| Build                                  | REL_3_3   |  |                          |
| Tester                                 | x0246581  |  |                          |
| <u>Execution Result:</u>               | <b>Passed</b>   |  |                          |
| <u>Execution Mode:</u>                 | <b>Manual</b>   |  |                          |
| <u>Execution duration (sec):</u>       |   |  |                          |

**Test Case VISIONSDK-39: ISS\_Capture\_AR140\_2PASS\_WDR\_Noise\_Filter**Summary:

WDR mode - basic ISS functionality test

ISS Single channel Capture UC with AR140

Input : AR140 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| <u>#:</u> | <u>Step actions:</u>   | <u>Expected Results:</u>   | <u>Execution Status:</u> |
|-----------|--|--|--------------------------|
| 1         | Go to System Settings<br>Select Capture Source as AR140<br>& Display Output as HDMI 1080P              | Capture Source should be AR140<br>& Display device as HDMI 1080P   |                          |
| 2         | Go to ISS setting<br>Select LDC = ON, VTNF = OFF, WDR = 2<br>PASS WDR                                  | Selected ISS settings will be saved  |                          |
| 3         | Run 1CH ISS capture + ISS + Display UC<br><br>Adjust lens to right focal length. Ensure dark lighting. | Display must come up and no buffer drops should be observed<br><br>All the details in the scene should be visible. |                          |

|  |  |  |
|--|--|--|
|  | Noise levels should be very low. Sharpness should be good. |  |
| <u>Execution type:</u>                 | Manual   |  |
| <u>Estimated exec. duration (sec):</u> |  |  |
| <u>Priority:</u>                       | Medium   |  |
| <u>Keywords:</u>                       | tda3xx-evm   |  |
| <b>Execution Details</b>               |  |  |
| Build                                  | REL_3_3  |  |
| Tester                                 | x0246581   |  |
| <u>Execution Result:</u>               | <b>Passed</b>  |  |
| <u>Execution Mode:</u>                 | <b>Manual</b>  |  |
| <u>Execution duration (sec):</u>       |  |  |

#### Test Case VISIONSDK-40: ISS\_Capture\_AR140\_2PASS\_WDR\_DUMP\_RAW\_FRAMES

##### Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with AR140

Input : AR140 sensor

Output : HDMI 1080P

##### Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| <u>#:</u>                              | <u>Step actions:</u>  | <u>Expected Results:</u>  | <u>Execution Status:</u> |
|--|---|---|--------------------------|
| 1                                      | Go to System Settings<br>Select Capture Source as AR140<br>& Display Output as HDMI 1080P | Capture Source should be AR140<br>& Display device as HDMI 1080P  |                          |
| 2                                      | Go to ISS setting<br>Select LDC = ON, VTNF = OFF, WDR = 2<br>PASS WDR                     | Selected ISS settings will be saved   |                          |
| 3                                      | Run 1CH ISS capture + ISS + Display UC<br>Capture RAW images using n/w tool               | Display must come up and no buffer drops should be observed<br>Captured images must be free of artifacts. |                          |
| <u>Execution type:</u>                 | Manual  |   |                          |
| <u>Estimated exec. duration (sec):</u> |   |   |                          |
| <u>Priority:</u>                       | Medium  |   |                          |
| <u>Keywords:</u>                       | tda3xx-evm  |   |                          |
| <b>Execution Details</b>               |   |   |                          |
| Build                                  | REL_3_3   |   |                          |
| Tester                                 | x0246581  |   |                          |
| <u>Execution Result:</u>               | <b>Passed</b>   |   |                          |
| <u>Execution Mode:</u>                 | <b>Manual</b>   |   |                          |
| <u>Execution duration (sec):</u>       |   |   |                          |

#### Test Case VISIONSDK-41: ISS\_Capture\_AR140\_2PASS\_WDR\_DUMP\_YUV\_FRAMES

##### Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with AR140

Input : AR140 sensor

Output : HDMI 1080P

##### Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| #:                              | Step actions:   | Expected Results:  | Execution Status: |
|---------------------------------|---|--|-------------------|
| 1                               | Go to System Settings<br><br>Select Capture Source as AR140<br>& Display Output as HDMI 1080P | Capture Source shuld be AR140<br><br>& Display device as HDMI 1080P  |                   |
| 2                               | Go to ISS setting<br><br>Select LDC = ON, VTNF = OFF, WDR = 2<br>PASS WDR                     | Selected ISS settings will be saved  |                   |
| 3                               | Run 1CH ISS capture + ISS + Display UC<br><br>Capture YUV images using n/w tool               | Display must come up and no buffer drops should be observed<br>Captured images must be free of artifacts.<br><br>YUV frame must match the display. |                   |
| Execution type:                 | Manual  |  |                   |
| Estimated exec. duration (sec): |   |  |                   |
| Priority:                       | Medium  |  |                   |
| Keywords:                       | tda3xx-evm  |  |                   |
| Execution Details               |   |  |                   |
| Build                           | REL_3_3   |  |                   |
| Tester                          | x0246581  |  |                   |
| Execution Result:               | Passed  |  |                   |
| Execution Mode:                 | Manual  |  |                   |
| Execution duration (sec):       |   |  |                   |

**Test Case VISIONSDK-42: ISS\_Capture\_AR140\_2PASS\_WDR\_Read\_Sensor\_Reg**Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with AR140

Input : AR140 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| #:                                     | Step actions:  | Expected Results:   | Execution Status: |
|--|--|---|-------------------|
| 1                                      | Go to System Settings<br>Select Capture Source as AR140<br>& Display Output as HDMI 1080P  | Capture Source should be AR140<br>& Display device as HDMI 1080P  |                   |
| 2                                      | Go to ISS setting<br>Select LDC = OFF, VTNF = OFF, WDR = 2<br>PASS WDR   | Selected ISS settings will be saved   |                   |
| 3                                      | Run 1CH ISS capture + ISS + Display UC   | Display must come up and no buffer drops<br>should be observed.<br>Exposure and colors should look correct. |                   |
| 4                                      | Open Command Prompt on Host machine<br>Use the command iss_read_sensor_reg to read<br>chip ID (0x3000)<br>and exposure register (0x3082) | Chip ID and exposure value must be read<br>correctly  |                   |
| <u>Execution type:</u>                 |  | Manual  |                   |
| <u>Estimated exec. duration (sec):</u> |  |   |                   |
| <u>Priority:</u>                       |  | Medium  |                   |

|                                  |               |
|----------------------------------|---------------|
| <u>Keywords:</u>                 | tda3xx-evm    |
| <b>Execution Details</b>         |               |
| Build                            | REL_3_3       |
| Tester                           | x0246581      |
| <u>Execution Result:</u>         | <b>Passed</b> |
| <u>Execution Mode:</u>           | <b>Manual</b> |
| <u>Execution duration (sec):</u> |               |

#### Test Case VISIONSDK-43: ISS\_Capture\_AR140\_2PASS\_WDR\_Write\_Sensor\_Reg

##### Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with AR140

Input : AR140 sensor

Output : HDMI 1080P

##### Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| <u>#:</u> | <u>Step actions:</u>  | <u>Expected Results:</u>  | <u>Execution Status:</u> |
|-----------|---|---|--------------------------|
| 1         | Go to System Settings<br>Select Capture Source as AR140<br>& Display Output as HDMI 1080P   | Capture Source should be AR140<br>& Display device as HDMI 1080P                                      |                          |
| 2         | Go to ISS setting<br>Select LDC = OFF, VTNF = OFF, WDR = 2 PASS WDR   | Selected ISS settings will be saved   |                          |
| 3         | Run 1CH ISS capture + ISS + Display UC  | Display must come up and no buffer drops should be observed. Exposure and colors should look correct. |                          |
| 4         | Open Command Prompt on Host machine<br>Use the command iss_write_sensor_reg to write 0, 4, 8 and c one by one to the exposure register (0x3082) | Change of exposure value must be clearly visible on the display                                       |                          |

|  |               |
|--|---------------|
| <u>Execution type:</u>                 | Manual        |
| <u>Estimated exec. duration (sec):</u> |               |
| <u>Priority:</u>                       | Medium        |
| <u>Keywords:</u>                       | tda3xx-evm    |
| <b>Execution Details</b>               |               |
| Build                                  | REL_3_3       |
| Tester                                 | x0246581      |
| <u>Execution Result:</u>               | <b>Passed</b> |
| <u>Execution Mode:</u>                 | <b>Manual</b> |
| <u>Execution duration (sec):</u>       |               |

#### Test Case VISIONSDK-44: ISS\_Capture\_AR140\_2PASS\_WDR\_Save\_DCC\_Profile

##### Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with AR140

Input : AR140 sensor

Output : HDMI 1080P

##### Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| <u>#:</u> | <u>Step actions:</u> | <u>Expected Results:</u> | <u>Execution</u> |
|-----------|----------------------|--------------------------|------------------|
|-----------|----------------------|--------------------------|------------------|

|  |   |  | <u>Status:</u> |
|--|---|--|----------------|
| 1                                      | Go to System Settings<br>Select Capture Source as AR140<br>& Display Output as HDMI 1080P   | Capture Source should be AR140<br>& Display device as HDMI 1080P   |                |
| 2                                      | Go to ISS setting<br>Select LDC = OFF, VTNF = OFF, WDR = 2 PASS WDR   | Selected ISS settings will be saved  |                |
| 3                                      | Run 1CH ISS capture + ISS + Display UC  | Display must come up and no buffer drops should be observed.<br>Exposure and colors should look correct. |                |
| 4                                      | Open Command Prompt on Host machine<br>Get the sensor.bin file from driver<br>and save it using iss_save_dcc_file network command | There should not be any error/assertion in saving dcc file   |                |
| <u>Execution type:</u>                 |   |  | Manual         |
| <u>Estimated exec. duration (sec):</u> |   |  |                |
| <u>Priority:</u>                       |   |  | Medium         |
| <u>Keywords:</u>                       |   |  | tda3xx-evm     |
| <b>Execution Details</b>               |   |  |                |
| Build                                  |   |  | REL_3_3        |
| Tester                                 |   |  | x0246581       |
| <u>Execution Result:</u>               |   |  | <b>Passed</b>  |
| <u>Execution Mode:</u>                 |   |  | <b>Manual</b>  |
| <u>Execution duration (sec):</u>       |   |  |                |

**Test Case VISIONSDK-45: ISS\_Capture\_AR140\_2PASS\_WDR\_Send\_DCC\_Profile**Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with AR140

Input : AR140 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| <u>#:</u>                              | <u>Step actions:</u>   | <u>Expected Results:</u>  | <u>Execution Status:</u> |
|--|--|---|--------------------------|
| 1                                      | Go to System Settings<br>Select Capture Source as AR140<br>& Display Output as HDMI 1080P                      | Capture Source should be AR140<br>& Display device as HDMI 1080P  |                          |
| 2                                      | Go to ISS setting<br>Select LDC = OFF, VTNF = OFF, WDR = 2 PASS WDR  | Selected ISS settings will be saved   |                          |
| 3                                      | Run 1CH ISS capture + ISS + Display UC   | Display must come up and no buffer drops should be observed.<br>Exposure and colors should look correct.    |                          |
| 4                                      | Open Command Prompt on Host machine<br>and send new sensor.bin file using<br>iss_send_dcc_file network command | New DCC profile must be used from the QSPI memory<br><br>There should be a print on console indicating that |                          |
| <u>Execution type:</u>                 |  |   | Manual                   |
| <u>Estimated exec. duration (sec):</u> |  |   |                          |
| <u>Priority:</u>                       |  |   | Medium                   |
| <u>Keywords:</u>                       |  |   | tda3xx-evm               |

| Execution Details         |               |
|---------------------------|---------------|
| Build                     | REL_3_3       |
| Tester                    | x0246581      |
| Execution Result:         | <b>Passed</b> |
| Execution Mode:           | <b>Manual</b> |
| Execution duration (sec): |               |

#### Test Case VISIONSDK-46: ISS\_Capture\_AR140\_2PASS\_WDR\_Clear\_DCC\_Profile

##### Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with AR140

Input : AR140 sensor

Output : HDMI 1080P

##### Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| #: | Step actions:  | Expected Results:  | Execution Status: |
|----|--|--|-------------------|
| 1  | Go to System Settings<br>Select Capture Source as AR140<br>& Display Output as HDMI 1080P                              | Capture Source shuld be AR140<br>& Display device as HDMI 1080P  |                   |
| 2  | Go to ISS setting<br>Select LDC = OFF, VTNF = OFF, WDR = 2 PASS WDR  | Selected ISS settings will be saved  |                   |
| 3  | Run 1CH ISS capture + ISS + Display UC   | Display must come up and no buffer drops should be observed.<br>Exposure and colors should look correct. |                   |
| 4  | Open Command Prompt on Host machine<br>and clear DCC profile from QSPI using<br>iss_clear_dcc_qspi_mem network command | There should not be any error/assertion in<br>cleaning dcc profile in qspi                               |                   |

| Execution type:                 | Manual        |
|---------------------------------|---------------|
| Estimated exec. duration (sec): |               |
| Priority:                       | Medium        |
| Keywords:                       | tda3xx-evm    |
| Execution Details               |               |
| Build                           | REL_3_3       |
| Tester                          | x0246581      |
| Execution Result:               | <b>Passed</b> |
| Execution Mode:                 | <b>Manual</b> |
| Execution duration (sec):       |               |

#### 1.4.3.2.Test Suite : ISS\_SingleCam\_Capture\_Display\_OV10640

#### Test Case VISIONSDK-56: ISS\_Capture\_OV10640\_LM\_Performance

##### Summary:

Linear mode - basic ISS, performance test

ISS Single channle Capture UC with OV10640

Input : OV10640 sensor

Output : HDMI 1080P

##### Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| #:                                     | Step actions:   | Expected Results:  | Execution Status: |
|--|---|--|-------------------|
| 1                                      | Go to System Settings<br>Select Capture Source as OV10640<br>& Display Output as HDMI 1080P | Capture Source should be OV10640<br>& Display device as HDMI 1080P |                   |
| 2                                      | Run "1CH ISS capture + ISS ISP + ISS LDC+VTNF + Display" UC                                 | Display must come up and no buffer drops should be observed        |                   |
| 3                                      | Press "P" & check for FPS   | FPS should be in the range 29.5 - 30.5                             |                   |
| <u>Execution type:</u>                 | Automated   |  |                   |
| <u>Estimated exec. duration (sec):</u> | 60.00   |  |                   |
| <u>Priority:</u>                       | Medium  |  |                   |
| <u>Keywords:</u>                       | tda3xx-evm<br>tda2px-evm<br>c_regression<br>c_performance<br>m_iss                          |  |                   |
| <b>Execution Details</b>               |   |  |                   |
| Build                                  | REL_3_3   |  |                   |
| Tester                                 | x0246581  |  |                   |
| <u>Execution Result:</u>               | <b>Passed</b>   |  |                   |
| <u>Execution Mode:</u>                 | <b>Manual</b>   |  |                   |
| <u>Execution duration (sec):</u>       |   |  |                   |

**Test Case VISIONSDK-57: ISS\_Capture\_OV10640\_LM\_Dyanmic\_Range**Summary:

Linear mode - dynamic range test

ISS Single channel Capture UC with OV10640

Input : OV10640 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| #:                                     | Step actions:   | Expected Results:  | Execution Status: |
|--|---|--|-------------------|
| 1                                      | Go to System Settings<br>Select Capture Source as OV10640<br>& Display Output as HDMI 1080P | Capture Source should be OV10640<br>& Display device as HDMI 1080P   |                   |
| 2                                      | Run 1CH ISS capture + ISS + Display UC  | Display must come up and no buffer drops should be observed.<br>AE should adjust such that lowlights are visible and highlights are overexposed. |                   |
| <u>Execution type:</u>                 | Manual  |  |                   |
| <u>Estimated exec. duration (sec):</u> |   |  |                   |
| <u>Priority:</u>                       | Medium  |  |                   |
| <u>Keywords:</u>                       | tda3xx-evm  |  |                   |
| <b>Execution Details</b>               |   |  |                   |
| Build                                  | REL_3_3   |  |                   |
| Tester                                 | x0246581  |  |                   |
| <u>Execution Result:</u>               | <b>Passed</b>   |  |                   |
| <u>Execution Mode:</u>                 | <b>Manual</b>   |  |                   |
| <u>Execution duration (sec):</u>       |   |  |                   |

**Test Case VISIONSDK-59: ISS\_Capture\_OV10640\_2PASS\_WDR**Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with OV10640

Input : OV10640 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| #:                              | Step actions:   | Expected Results:  | Execution Status: |
|---------------------------------|---|--|-------------------|
| 1                               | Go to System Settings<br><br>Select Capture Source as OV10640<br>& Display Output as HDMI 1080P | Capture Source shuld be OV10640<br>& Display device as HDMI 1080P  |                   |
| 2                               | Go to ISS setting<br><br>Select LDC = OFF, VTNF = OFF, WDR = 2 PASS WDR                         | Selected ISS settings will be saved  |                   |
| 3                               | Run 1CH ISS capture + ISS + Display UC  | Display must come up and no buffer drops should be observed.<br>Exposure and colors should look correct. |                   |
| Execution type:                 | Automated   |  |                   |
| Estimated exec. duration (sec): | 60.00   |  |                   |
| Priority:                       | Medium  |  |                   |
| Keywords:                       | tda3xx-evm<br>c_stress<br>c_stability   |  |                   |
| Execution Details               |   |  |                   |
| Build                           | REL_3_3   |  |                   |
| Tester                          | x0246581  |  |                   |
| Execution Result:               | Passed  |  |                   |
| Execution Mode:                 | Manual  |  |                   |
| Execution duration (sec):       |   |  |                   |

**Test Case VISIONSDK-60: ISS\_Capture\_OV10640\_2PASS\_WDR\_Performance**Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with OV10640

Input : OV10640 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| #:                     | Step actions:   | Expected Results:   | Execution Status: |
|------------------------|---|---|-------------------|
| 1                      | Go to System Settings<br>Select Capture Source as OV10640<br>& Display Output as HDMI 1080P | Capture Source shuld be OV10640<br>& Display device as HDMI 1080P |                   |
| 2                      | Go to ISS setting<br>Select LDC = OFF, VTNF = OFF, WDR = 2 PASS WDR                         | Selected ISS settings will be saved                               |                   |
| 3                      | Run 1CH ISS capture + ISS + Display UC  | Display must come up and no buffer drops should be observed       |                   |
| 4                      | Press "P" & check for FPS   | FPS should be in the range 29.5 - 30.5                            |                   |
| <u>Execution type:</u> |   | Automated   |                   |



|  |               |
|--|---------------|
| <u>Estimated exec. duration (sec):</u> | 60.00         |
| <u>Priority:</u>                       | Medium        |
| <u>Keywords:</u>                       | tda3xx-evm    |
| <b>Execution Details</b>               |               |
| Build                                  | REL_3_3       |
| Tester                                 | x0246581      |
| <u>Execution Result:</u>               | <b>Passed</b> |
| <u>Execution Mode:</u>                 | <b>Manual</b> |
| <u>Execution duration (sec):</u>       |               |

**Test Case VISIONSDK-61: ISS\_Capture\_OV10640\_2PASS\_WDR\_Dynamic\_Range**
Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with OV10640

Input : OV10640 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| <u>#:</u> | <u>Step actions:</u>  | <u>Expected Results:</u>   | <u>Execution Status:</u> |
|-----------|---|--|--------------------------|
| 1         | Go to System Settings<br>Select Capture Source as OV10640<br>& Display Output as HDMI 1080P | Capture Source shuld be OV10640<br>& Display device as HDMI 1080P  |                          |
| 2         | Go to ISS setting<br>Select LDC = OFF, VTNF = OFF,<br>WDR = 2 PASS WDR                      | Selected ISS settings will be saved  |                          |
| 3         | Run 1CH ISS capture + ISS + Display UC  | Display must come up and no buffer drops should be observed.<br>Exposure and colors should look correct in dark as well as bright regions.<br>Dark regions maybe noisier than bright regions but NSF effect should be visible. |                          |

|  |               |
|--|---------------|
| <u>Execution type:</u>                 | Manual        |
| <u>Estimated exec. duration (sec):</u> |               |
| <u>Priority:</u>                       | Medium        |
| <u>Keywords:</u>                       | tda3xx-evm    |
| <b>Execution Details</b>               |               |
| Build                                  | REL_3_3       |
| Tester                                 | x0246581      |
| <u>Execution Result:</u>               | <b>Passed</b> |
| <u>Execution Mode:</u>                 | <b>Manual</b> |
| <u>Execution duration (sec):</u>       |               |

**Test Case VISIONSDK-62: ISS\_Capture\_OV10640\_2PASS\_WDR\_AE**
Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with OV10640

Input : OV10640 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| #:                              | Step actions:   | Expected Results:   | Execution Status: |
|---------------------------------|---|---|-------------------|
| 1                               | Go to System Settings<br><br>Select Capture Source as OV10640<br><br>& Display Output as HDMI 1080P | Capture Source should be OV10640<br><br>& Display device as HDMI 1080P  |                   |
| 2                               | Go to ISS setting<br><br>Select LDC = OFF, VTNF = OFF,<br>WDR = 2 PASS WDR                          | Selected ISS settings will be saved   |                   |
| 3                               | Run 1CH ISS capture + ISS + Display UC  | Display must come up and no buffer drops should be observed<br>All the details in the scene should be visible. Noise levels should be very low.<br>Moving to dark scene should cause AE adjustment and increase in noise level. |                   |
| Execution type:                 | Manual  |   |                   |
| Estimated exec. duration (sec): |   |   |                   |
| Priority:                       | Medium  |   |                   |
| Keywords:                       | tda3xx-evm  |   |                   |
| Execution Details               |   |   |                   |
| Build                           | REL_3_3   |   |                   |
| Tester                          | x0246581  |   |                   |
| Execution Result:               | Passed  |   |                   |
| Execution Mode:                 | Manual  |   |                   |
| Execution duration (sec):       |   |   |                   |

**Test Case VISIONSDK-63: ISS\_Capture\_OV10640\_2PASS\_WDR\_VTNF**Summary:

WDR mode - basic ISS functionality test

ISS Single channel Capture UC with OV10640

Input : OV10640 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| #:                              | Step actions:   | Expected Results:  | Execution Status: |
|---------------------------------|---|--|-------------------|
| 1                               | Go to System Settings<br><br>Select Capture Source as OV10640<br>& Display Output as HDMI 1080P | Capture Source should be OV10640<br><br>& Display device as HDMI 1080P   |                   |
| 2                               | Go to ISS setting<br><br>Select LDC = OFF, VTNF = ON, WDR = 2 PASS WDR                          | Selected ISS settings will be saved  |                   |
| 3                               | Run 1CH ISS capture + ISS + Display UC  | Display must come up and no buffer drops should be observed<br>All the details in the scene should be visible. Preview maybe noisy.<br>Toggling between VTNF (0/1) should have visible impact on temporal noise. |                   |
| Execution type:                 | Automated   |  |                   |
| Estimated exec. duration (sec): | 60.00   |  |                   |
| Priority:                       | Medium  |  |                   |
| Keywords:                       | tda3xx-evm  |  |                   |
| Execution Details               |   |  |                   |
| Build                           | REL_3_3   |  |                   |

|                           |               |
|---------------------------|---------------|
| Tester                    | x0246581      |
| Execution Result:         | <b>Passed</b> |
| Execution Mode:           | <b>Manual</b> |
| Execution duration (sec): |               |

**Test Case VISIONSDK-64: ISS\_Capture\_OV10640\_2PASS\_WDR\_LDC**Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with OV10640

Input : OV10640 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| #: | Step actions:   | Expected Results:   | Execution Status: |
|----|---|---|-------------------|
| 1  | Go to System Settings<br>Select Capture Source as OV10640<br>& Display Output as HDMI 1080P | Capture Source should be OV10640<br>& Display device as HDMI 1080P                              |                   |
| 2  | Go to ISS setting<br>Select LDC = ON, VTNF = OFF, WDR = 2<br>PASS WDR                       | Selected ISS settings will be saved   |                   |
| 3  | Run 1CH ISS capture + ISS + Display UC  | Display must come up and no buffer drops<br>should be observed<br>Preview must look undistorted |                   |

Execution type: AutomatedEstimated exec. duration (sec): 60.00Priority: MediumKeywords: tda3xx-evm**Execution Details**

Build REL\_3\_3

Tester x0246581

Execution Result: **Passed**Execution Mode: **Manual**

Execution duration (sec):

**Test Case VISIONSDK-65: ISS\_Capture\_OV10640\_2PASS\_WDR\_LDC\_VTNF**Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with OV10640

Input : OV10640 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| #: | Step actions:   | Expected Results:  | Execution Status: |
|----|---|--|-------------------|
| 1  | Go to System Settings<br>Select Capture Source as OV10640<br>& Display Output as HDMI 1080P | Capture Source should be OV10640<br>& Display device as HDMI 1080P |                   |

|  |   |  |  |
|--|---|--|--|
| 2                                      | Go to ISS setting<br><br>Select LDC = ON, VTNF = ON, WDR = 2 PASS WDR | Selected ISS settings will be saved  |  |
| 3                                      | Run 1CH ISS capture + ISS + Display UC                                | Display must come up and no buffer drops should be observed<br>LDC effect should be visible.<br><br>If LDC has not been tuned for the lens used, it is OK if correction is not perfect but there should be no crash or corruption. |  |
| <u>Execution type:</u>                 |   | Automated  |  |
| <u>Estimated exec. duration (sec):</u> |   | 60.00  |  |
| <u>Priority:</u>                       |   | Medium   |  |
| <u>Keywords:</u>                       |   | tda3xx-evm   |  |
| <b>Execution Details</b>               |   |  |  |
| Build                                  | REL_3_3   |  |  |
| Tester                                 | x0246581  |  |  |
| <u>Execution Result:</u>               | <b>Passed</b>   |  |  |
| <u>Execution Mode:</u>                 | <b>Manual</b>   |  |  |
| <u>Execution duration (sec):</u>       |   |  |  |

**Test Case VISIONSDK-66: ISS\_Capture\_OV10640\_2PASS\_WDR\_Color\_Fidelity**Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with OV10640

Input : OV10640 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| #:                              | Step actions:   | Expected Results:  | Execution Status: |
|---------------------------------|---|--|-------------------|
| 1                               | Go to System Settings<br><br>Select Capture Source as OV10640<br><br>& Display Output as HDMI 1080P | Capture Source shuld be OV10640<br><br>& Display device as HDMI 1080P  |                   |
| 2                               | Go to ISS setting<br><br>Select LDC = OFF, VTNF = OFF,<br>WDR = 2 PASS WDR                          | Selected ISS settings will be saved  |                   |
| 3                               | Run 1CH ISS capture + ISS + Display UC  | Display must come up and no buffer drops should be observed<br><br>All the details in the scene should be visible.<br><br>Noise levels should be very low.<br><br>Sharpness should be good.<br>No color cast should be visible on lightbox walls and gray row of colorchecker.<br><br>Colored patches should have the right hue. |                   |
| Execution type:                 | Manual  |  |                   |
| Estimated exec. duration (sec): |   |  |                   |
| Priority:                       | Medium  |  |                   |
| Keywords:                       | tda3xx-evm  |  |                   |
| Execution Details               |   |  |                   |
| Build                           | REL_3_3   |  |                   |
| Tester                          | x0246581  |  |                   |
| Execution Result:               | Passed  |  |                   |
| Execution Mode:                 | Manual  |  |                   |

Execution duration (sec):

### Test Case VISIONSDK-67: ISS\_Capture\_OV10640\_2PASS\_WDR\_Noise\_Filter

#### Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with OV10640

Input : OV10640 sensor

Output : HDMI 1080P

#### Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| <u>#:</u>                              | <u>Step actions:</u>  | <u>Expected Results:</u>   | <u>Execution Status:</u> |
|--|---|--|--------------------------|
| 1                                      | Go to System Settings<br>Select Capture Source as OV10640<br>& Display Output as HDMI 1080P           | Capture Source shuld be OV10640<br>& Display device as HDMI 1080P  |                          |
| 2                                      | Go to ISS setting<br>Select LDC = ON, VTNF = OFF, WDR = 2<br>PASS WDR                                 | Selected ISS settings will be saved  |                          |
| 3                                      | Run 1CH ISS capture + ISS + Display UC<br>Adjust lens to right focal length. Ensure<br>dark lighting. | Display must come up and no buffer drops<br>should be observed<br><br>All the details in the scene should be visible.<br><br>Noise levels should be very low. Sharpness<br>should be good. |                          |
| <u>Execution type:</u>                 | Manual  |  |                          |
| <u>Estimated exec. duration (sec):</u> |   |  |                          |
| <u>Priority:</u>                       | Medium  |  |                          |
| <u>Keywords:</u>                       | tda3xx-evm  |  |                          |
| <b>Execution Details</b>               |   |  |                          |
| Build                                  | REL_3_3   |  |                          |
| Tester                                 | x0246581  |  |                          |
| <u>Execution Result:</u>               | <b>Passed</b>   |  |                          |
| <u>Execution Mode:</u>                 | <b>Manual</b>   |  |                          |
| <u>Execution duration (sec):</u>       |   |  |                          |

### Test Case VISIONSDK-68: ISS\_Capture\_OV10640\_2PASS\_WDR\_DUMP\_RAW\_FRAMES

#### Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with OV10640

Input : OV10640 sensor

Output : HDMI 1080P

#### Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| <u>#:</u> | <u>Step actions:</u>  | <u>Expected Results:</u>  | <u>Execution Status:</u> |
|-----------|---|---|--------------------------|
| 1         | Go to System Settings<br>Select Capture Source as OV10640<br>& Display Output as HDMI 1080P | Capture Source shuld be OV10640<br>& Display device as HDMI 1080P |                          |
| 2         | Go to ISS setting   | Selected ISS settings will be saved                               |                          |

|  |   |   |  |
|--|---|---|--|
|  | Select LDC = ON, VTNF = OFF, WDR = 2<br>PASS WDR                            |   |  |
| 3                                      | Run 1CH ISS capture + ISS + Display UC<br>Capture RAW images using n/w tool | Display must come up and no buffer drops<br>should be observed<br>Captured images must be free of artifacts |  |
| <u>Execution type:</u>                 | Manual  |   |  |
| <u>Estimated exec. duration (sec):</u> |   |   |  |
| <u>Priority:</u>                       | Medium  |   |  |
| <u>Keywords:</u>                       | tda3xx-evm  |   |  |
| <b>Execution Details</b>               |   |   |  |
| Build                                  | REL_3_3   |   |  |
| Tester                                 | x0246581  |   |  |
| <u>Execution Result:</u>               | <b>Passed</b>   |   |  |
| <u>Execution Mode:</u>                 | <b>Manual</b>   |   |  |
| <u>Execution duration (sec):</u>       |   |   |  |

**Test Case VISIONSDK-69: ISS\_Capture\_OV10640\_2PASS\_WDR\_DUMP\_YUV\_FRAMES**Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with OV10640

Input : OV10640 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| <u>#:</u>                              | <u>Step actions:</u>  | <u>Expected Results:</u>   | <u>Execution Status:</u> |
|--|---|--|--------------------------|
| 1                                      | Go to System Settings<br>Select Capture Source as OV10640<br>& Display Output as HDMI 1080P | Capture Source shuld be OV10640<br>& Display device as HDMI 1080P  |                          |
| 2                                      | Go to ISS setting<br>Select LDC = ON, VTNF = OFF, WDR = 2<br>PASS WDR                       | Selected ISS settings will be saved  |                          |
| 3                                      | Run 1CH ISS capture + ISS + Display UC<br>Capture YUV images using n/w tool                 | Display must come up and no buffer drops<br>should be observed<br>Captured images must be free of artifacts<br>YUV frame must match the display. |                          |
| <u>Execution type:</u>                 | Manual  |  |                          |
| <u>Estimated exec. duration (sec):</u> |   |  |                          |
| <u>Priority:</u>                       | Medium  |  |                          |
| <u>Keywords:</u>                       | tda3xx-evm  |  |                          |
| <b>Execution Details</b>               |   |  |                          |
| Build                                  | REL_3_3   |  |                          |
| Tester                                 | x0246581  |  |                          |
| <u>Execution Result:</u>               | <b>Passed</b>   |  |                          |
| <u>Execution Mode:</u>                 | <b>Manual</b>   |  |                          |
| <u>Execution duration (sec):</u>       |   |  |                          |

**Test Case VISIONSDK-70: ISS\_Capture\_OV10640\_2PASS\_WDR\_Read\_Sensor\_Reg**Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with OV10640

Input : OV10640 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| #: | Step actions:  | Expected Results:  | Execution Status: |
|----|--|--|-------------------|
| 1  | Go to System Settings<br>Select Capture Source as OV10640<br>& Display Output as HDMI 1080P  | Capture Source shuld be OV10640<br>& Display device as HDMI 1080P  |                   |
| 2  | Go to ISS setting<br>Select LDC = OFF, VTNF = OFF, WDR = 2 PASS WDR  | Selected ISS settings will be saved  |                   |
| 3  | Run 1CH ISS capture + ISS + Display UC   | Display must come up and no buffer drops should be observed.<br>Exposure and colors should look correct. |                   |
| 4  | Open Command Prompt on Host machine<br>Use the command iss_read_sensor_reg to read<br>chip ID (0x3000)<br>and exposure register (0x3082) | Chip ID and exposure value must be read correctly  |                   |

Execution type: ManualEstimated exec. duration (sec):Priority: MediumKeywords: tda3xx-evm**Execution Details**

Build REL\_3\_3

Tester x0246581

Execution Result: **Passed**Execution Mode: **Manual**Execution duration (sec):**Test Case VISIONSDK-71: ISS\_Capture\_OV10640\_2PASS\_WDR\_Write\_Sensor\_Reg**Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with OV10640

Input : OV10640 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| #: | Step actions:   | Expected Results:  | Execution Status: |
|----|---|--|-------------------|
| 1  | Go to System Settings<br>Select Capture Source as OV10640<br>& Display Output as HDMI 1080P | Capture Source shuld be OV10640<br>& Display device as HDMI 1080P  |                   |
| 2  | Go to ISS setting<br>Select LDC = OFF, VTNF = OFF, WDR = 2 PASS WDR                         | Selected ISS settings will be saved  |                   |
| 3  | Run 1CH ISS capture + ISS + Display UC  | Display must come up and no buffer drops should be observed.<br>Exposure and colors should look correct. |                   |

|  |   |   |
|--|---|---|
| 4                                      | Open Command Prompt on Host machine<br><br>Use the command iss_write_sensor_reg to write 0, 4, 8 and c one by one to the exposure register (0x3082) | Change of exposure value must be clearly visible on the display |
| <u>Execution type:</u>                 | Manual  |   |
| <u>Estimated exec. duration (sec):</u> |   |   |
| <u>Priority:</u>                       | Medium  |   |
| <u>Keywords:</u>                       | tda3xx-evm  |   |
| <b>Execution Details</b>               |   |   |
| Build                                  | REL_3_3   |   |
| Tester                                 | x0246581  |   |
| <u>Execution Result:</u>               | <b>Passed</b>   |   |
| <u>Execution Mode:</u>                 | <b>Manual</b>   |   |
| <u>Execution duration (sec):</u>       |   |   |

**Test Case VISIONSDK-72: ISS\_Capture\_OV10640\_2PASS\_WDR\_Save\_DCC\_Profile**Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with OV10640

Input : OV10640 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| <u>#:</u>                              | <u>Step actions:</u>  | <u>Expected Results:</u>   | <u>Execution Status:</u> |
|--|---|--|--------------------------|
| 1                                      | Go to System Settings<br><br>Select Capture Source as OV10640<br>& Display Output as HDMI 1080P   | Capture Source shuld be OV10640<br>& Display device as HDMI 1080P  |                          |
| 2                                      | Go to ISS setting<br><br>Select LDC = OFF, VTNF = OFF, WDR = 2 PASS WDR   | Selected ISS settings will be saved  |                          |
| 3                                      | Run 1CH ISS capture + ISS + Display UC  | Display must come up and no buffer drops should be observed.<br>Exposure and colors should look correct. |                          |
| 4                                      | Open Command Prompt on Host machine<br><br>Get the sensor.bin file from driver<br><br>and save it using iss_save_dcc_file network command | There should not be any error/assertion in saving dcc file   |                          |
| <u>Execution type:</u>                 | Manual  |  |                          |
| <u>Estimated exec. duration (sec):</u> |   |  |                          |
| <u>Priority:</u>                       | Medium  |  |                          |
| <u>Keywords:</u>                       | tda3xx-evm  |  |                          |
| <b>Execution Details</b>               |   |  |                          |
| Build                                  | REL_3_3   |  |                          |
| Tester                                 | x0246581  |  |                          |
| <u>Execution Result:</u>               | <b>Passed</b>   |  |                          |
| <u>Execution Mode:</u>                 | <b>Manual</b>   |  |                          |
| <u>Execution duration (sec):</u>       |   |  |                          |

**Test Case VISIONSDK-73: ISS\_Capture\_OV10640\_2PASS\_WDR\_Send\_DCC\_Profile**Summary:



WDR mode - basic ISS functionality test

ISS Single channle Capture UC with OV10640

Input : OV10640 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| #:                                     | Step actions:  | Expected Results:   | Execution Status: |
|--|--|---|-------------------|
| 1                                      | Go to System Settings<br>Select Capture Source as OV10640<br>& Display Output as HDMI 1080P                    | Capture Source shuld be OV10640<br>& Display device as HDMI 1080P   |                   |
| 2                                      | Go to ISS setting<br>Select LDC = OFF, VTNF = OFF, WDR = 2 PASS<br>WDR   | Selected ISS settings will be saved   |                   |
| 3                                      | Run 1CH ISS capture + ISS + Display UC   | Display must come up and no buffer drops<br>should be observed.<br>Exposure and colors should look correct.       |                   |
| 4                                      | Open Command Prompt on Host machine<br>and send new sensor.bin file using<br>iss_send_dcc_file network command | New DCC profile must be used from the<br>QSPI memory<br><br>There should be a print on console<br>indicating that |                   |
| <u>Execution type:</u>                 | Manual   |   |                   |
| <u>Estimated exec. duration (sec):</u> |  |   |                   |
| <u>Priority:</u>                       | Medium   |   |                   |
| <u>Keywords:</u>                       | tda3xx-evm   |   |                   |
| <b>Execution Details</b>               |  |   |                   |
| Build                                  | REL_3_3  |   |                   |
| Tester                                 | x0246581   |   |                   |
| <u>Execution Result:</u>               | <b>Passed</b>  |   |                   |
| <u>Execution Mode:</u>                 | <b>Manual</b>  |   |                   |
| <u>Execution duration (sec):</u>       |  |   |                   |

**Test Case VISIONSDK-74: ISS\_Capture\_OV10640\_2PASS\_WDR\_Clear\_DCC\_Profile**

Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with OV10640

Input : OV10640 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| #: | Step actions:   | Expected Results:   | Execution Status: |
|----|---|---|-------------------|
| 1  | Go to System Settings<br>Select Capture Source as OV10640<br>& Display Output as HDMI 1080P | Capture Source shuld be OV10640<br>& Display device as HDMI 1080P   |                   |
| 2  | Go to ISS setting<br>Select LDC = OFF, VTNF = OFF, WDR = 2 PASS<br>WDR                      | Selected ISS settings will be saved   |                   |
| 3  | Run 1CH ISS capture + ISS + Display UC  | Display must come up and no buffer drops<br>should be observed.<br>Exposure and colors should look correct. |                   |
| 4  | Open Command Prompt on Host machine   | There should not be any error/assertion in  |                   |

|  |   |                              |  |
|--|---|------------------------------|--|
|  | and clear DCC profile from QSPI using<br>iss_clear_dcc_qspi_mem network command | cleaning dcc profile in qspi |  |
| <u>Execution type:</u>                 | Manual  |                              |  |
| <u>Estimated exec. duration (sec):</u> |   |                              |  |
| <u>Priority:</u>                       | Medium  |                              |  |
| <u>Keywords:</u>                       | tda3xx-evm  |                              |  |
| <b>Execution Details</b>               |   |                              |  |
| Build                                  | REL_3_3   |                              |  |
| Tester                                 | x0246581  |                              |  |
| <u>Execution Result:</u>               | <b>Passed</b>   |                              |  |
| <u>Execution Mode:</u>                 | <b>Manual</b>   |                              |  |
| <u>Execution duration (sec):</u>       |   |                              |  |

**Test Case VISIONSDK-47: ISS\_Capture\_OV10640\_LM**Summary:

Linear mode - basic ISS functionality test

ISS Single channle Capture UC with OV10640

Input : OV10640 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/Display is running on IPU1-0 at 30fps

| <u>#:</u>                              | <u>Step actions:</u>  | <u>Expected Results:</u>  | <u>Execution Status:</u> |
|--|---|---|--------------------------|
| 1                                      | Go to System Settings<br><br>Select Capture Source as OV10640<br><br>& Display Output as HDMI 1080P | Capture Source should be OV10640<br><br>& Display device as HDMI 1080P  |                          |
| 2                                      | Run 1CH ISS capture + ISS + Display UC  | Display must come up and no buffer drops should be observed<br>Exposure and colors should look correct.<br>Most important - white/grey objects should not have any color cast |                          |
| <u>Execution type:</u>                 | Automated   |   |                          |
| <u>Estimated exec. duration (sec):</u> | 60.00   |   |                          |
| <u>Priority:</u>                       | Medium  |   |                          |
| <u>Keywords:</u>                       | tda3xx-evm<br>c_qualification<br>c_integration  |   |                          |
| <b>Execution Details</b>               |   |   |                          |
| Build                                  | REL_3_3   |   |                          |
| Tester                                 | x0246581  |   |                          |
| <u>Execution Result:</u>               | <b>Passed</b>   |   |                          |
| <u>Execution Mode:</u>                 | <b>Manual</b>   |   |                          |
| <u>Execution duration (sec):</u>       |   |   |                          |

**1.4.3.3.Test Suite : ISS\_SingleCam\_Capture\_Display\_IMX224****Test Case VISIONSDK-77: ISS\_Capture\_IMX224\_LM**Summary:

Linear mode - basic ISS functionality test

ISS Single channle Capture UC with IMX224

Input : IMX224 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/Display is running on IPU1-0 at 30fps

| #:                              | Step actions:  | Expected Results:   | Execution Status: |
|---------------------------------|--|---|-------------------|
| 1                               | Go to System Settings<br><br>Select Capture Source as IMX224<br><br>& Display Output as HDMI 1080P | Capture Source should be IMX224<br><br>& Display device as HDMI 1080P   |                   |
| 2                               | Run "1CH ISS capture + ISS ISP + ISS LDC+VTNF + Display" UC  | Display must come up and no buffer drops should be observed<br>Exposure and colors should look correct.<br>Most important - white/grey objects should not have any color cast |                   |
| Execution type:                 | Automated  |   |                   |
| Estimated exec. duration (sec): | 60.00  |   |                   |
| Priority:                       | Medium   |   |                   |
| Keywords:                       | tda3xx-evm<br>c_qualification  |   |                   |
| Execution Details               |  |   |                   |
| Build                           | REL_3_3  |   |                   |
| Tester                          | x0246581   |   |                   |
| Execution Result:               | Passed   |   |                   |
| Execution Mode:                 | Manual   |   |                   |
| Execution duration (sec):       |  |   |                   |

**Test Case VISIONSDK-78: ISS\_Capture\_IMX224\_LM\_Performance**Summary:

Linear mode - basic ISS, performance test

ISS Single channle Capture UC with IMX224

Input : IMX224 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| #:                              | Step actions:  | Expected Results:   | Execution Status: |
|---------------------------------|--|---|-------------------|
| 1                               | Go to System Settings<br>Select Capture Source as IMX224<br>& Display Output as HDMI 1080P | Capture Source should be IMX224<br>& Display device as HDMI 1080P |                   |
| 2                               | Run 1CH ISS capture + ISS + Display UC   | Display must come up and no buffer drops should be observed       |                   |
| 3                               | Press "P" & check for FPS  | FPS should be in the range 29.5 - 30.5                            |                   |
| Execution type:                 | Automated  |   |                   |
| Estimated exec. duration (sec): | 60.00  |   |                   |
| Priority:                       | Medium   |   |                   |
| Keywords:                       | tda3xx-evm<br>c_regression<br>c_performance<br>m_iss                                       |   |                   |
| Execution Details               |  |   |                   |
| Build                           | REL_3_3  |   |                   |
| Tester                          | x0246581   |   |                   |
| Execution Result:               | Passed   |   |                   |
| Execution Mode:                 | Manual   |   |                   |

Execution duration (sec):

### Test Case VISIONSDK-79: ISS\_Capture\_IMX224\_LM\_Dyanmic\_Range

#### Summary:

Linear mode - dynamic range test

ISS Single channle Capture UC with IMX224

Input : IMX224 sensor

Output : HDMI 1080P

#### Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| <u>#:</u> | <u>Step actions:</u>   | <u>Expected Results:</u>   | <u>Execution Status:</u> |
|-----------|--|--|--------------------------|
| 1         | Go to System Settings<br><br>Select Capture Source as IMX224<br><br>& Display Output as HDMI 1080P | Capture Source shuld be IMX224<br><br>& Display device as HDMI 1080P   |                          |
| 2         | Run 1CH ISS capture + ISS + Display UC   | Display must come up and no buffer drops should be observed.<br>AE should adjust such that lowlights are visible and highlights are overexposed. |                          |

Execution type: Manual

Estimated exec. duration (sec):

Priority: Medium

Keywords: tda3xx-evm

#### **Execution Details**

Build REL\_3\_3

Tester x0246581

Execution Result: **Passed**

Execution Mode: **Manual**

Execution duration (sec):

### Test Case VISIONSDK-80: ISS\_Capture\_IMX224\_2PASS\_WDR

#### Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with IMX224

Input : IMX224 sensor

Output : HDMI 1080P

#### Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| <u>#:</u> | <u>Step actions:</u>   | <u>Expected Results:</u>   | <u>Execution Status:</u> |
|-----------|--|--|--------------------------|
| 1         | Go to System Settings<br><br>Select Capture Source as IMX224<br><br>& Display Output as HDMI 1080P | Capture Source shuld be IMX224<br><br>& Display device as HDMI 1080P                                     |                          |
| 2         | Go to ISS setting<br><br>Select LDC = OFF, VTNF = OFF, WDR = 2 PASS<br>WDR Line Interleaved        | Selected ISS settings will be saved  |                          |
| 3         | Run 1CH ISS capture + ISS + Display UC   | Display must come up and no buffer drops should be observed.<br>Exposure and colors should look correct. |                          |

|  |                                       |
|--|---------------------------------------|
| <u>Execution type:</u>                 | Automated                             |
| <u>Estimated exec. duration (sec):</u> | 60.00                                 |
| <u>Priority:</u>                       | Medium                                |
| <u>Keywords:</u>                       | tda3xx-evm<br>c_stress<br>c_stability |
| <b>Execution Details</b>               |                                       |
| Build                                  | REL_3_3                               |
| Tester                                 | x0246581                              |
| <u>Execution Result:</u>               | <b>Passed</b>                         |
| <u>Execution Mode:</u>                 | <b>Manual</b>                         |
| <u>Execution duration (sec):</u>       |                                       |

#### Test Case VISIONSDK-81: ISS\_Capture\_IMX224\_2PASS\_WDR\_Performance

##### Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with IMX224

Input : IMX224 sensor

Output : HDMI 1080P

##### Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| <u>#:</u> | <u>Step actions:</u>   | <u>Expected Results:</u>   | <u>Execution Status:</u> |
|-----------|--|--|--------------------------|
| 1         | Go to System Settings<br>Select Capture Source as IMX224<br>& Display Output as HDMI 1080P | Capture Source shuld be IMX224<br>& Display device as HDMI 1080P |                          |
| 2         | Go to ISS setting<br>Select LDC = OFF, VTNF = OFF, WDR = 2 PASS<br>WDR Line Interleaved    | Selected ISS settings will be saved                              |                          |
| 3         | Run 1CH ISS capture + ISS + Display UC   | Display must come up and no buffer drops<br>should be observed   |                          |
| 4         | Press "P" & check for FPS  | FPS should be in the range 29.5 - 30.5                           |                          |

|  |               |
|--|---------------|
| <u>Execution type:</u>                 | Automated     |
| <u>Estimated exec. duration (sec):</u> | 60.00         |
| <u>Priority:</u>                       | Medium        |
| <u>Keywords:</u>                       | tda3xx-evm    |
| <b>Execution Details</b>               |               |
| Build                                  | REL_3_3       |
| Tester                                 | x0246581      |
| <u>Execution Result:</u>               | <b>Passed</b> |
| <u>Execution Mode:</u>                 | <b>Manual</b> |
| <u>Execution duration (sec):</u>       |               |

#### Test Case VISIONSDK-82: ISS\_Capture\_IMX224\_2PASS\_WDR\_Dynamic\_Range

##### Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with IMX224

Input : IMX224 sensor

Output : HDMI 1080P

##### Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| #:                              | Step actions:  | Expected Results:  | Execution Status: |
|---------------------------------|--|--|-------------------|
| 1                               | Go to System Settings<br><br>Select Capture Source as IMX224<br><br>& Display Output as HDMI 1080P | Capture Source should be IMX224<br><br>& Display device as HDMI 1080P  |                   |
| 2                               | Go to ISS setting<br><br>Select LDC = OFF, VTNF = OFF, WDR = 2<br>PASS WDR Line Interleaved        | Selected ISS settings will be saved  |                   |
| 3                               | Run 1CH ISS capture + ISS + Display UC   | Display must come up and no buffer drops should be observed.<br>Exposure and colors should look correct in dark as well as bright regions.<br>Dark regions maybe noisier than bright regions but NSF effect should be visible. |                   |
| Execution type:                 | Manual   |  |                   |
| Estimated exec. duration (sec): |  |  |                   |
| Priority:                       | Medium   |  |                   |
| Keywords:                       | tda3xx-evm   |  |                   |
| Execution Details               |  |  |                   |
| Build                           | REL_3_3  |  |                   |
| Tester                          | x0246581   |  |                   |
| Execution Result:               | Passed   |  |                   |
| Execution Mode:                 | Manual   |  |                   |
| Execution duration (sec):       |  |  |                   |

**Test Case VISIONSDK-83: ISS\_Capture\_IMX224\_2PASS\_WDR\_AE**Summary:

WDR mode - basic ISS functionality test

ISS Single channel Capture UC with IMX224

Input : IMX224 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| #:                              | Step actions:  | Expected Results:  | Execution Status: |
|---------------------------------|--|--|-------------------|
| 1                               | Go to System Settings<br><br>Select Capture Source as IMX224<br><br>& Display Output as HDMI 1080P | Capture Source should be IMX224<br><br>& Display device as HDMI 1080P  |                   |
| 2                               | Go to ISS setting<br><br>Select LDC = OFF, VTNF = OFF, WDR = 2<br>PASS WDR Line Interleaved        | Selected ISS settings will be saved  |                   |
| 3                               | Run 1CH ISS capture + ISS + Display UC   | Display must come up and no buffer drops should be observed<br>All the details in the scene should be visible.<br>Noise levels should be very low.<br>Moving to dark scene should cause AE adjustment and increase in noise level. |                   |
| Execution type:                 | Manual   |  |                   |
| Estimated exec. duration (sec): |  |  |                   |
| Priority:                       | Medium   |  |                   |
| Keywords:                       | tda3xx-evm   |  |                   |
| Execution Details               |  |  |                   |
| Build                           | REL_3_3  |  |                   |

|                           |               |
|---------------------------|---------------|
| Tester                    | x0246581      |
| Execution Result:         | <b>Passed</b> |
| Execution Mode:           | <b>Manual</b> |
| Execution duration (sec): |               |

**Test Case VISIONSDK-84: ISS\_Capture\_IMX224\_2PASS\_WDR\_VTNF**Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with IMX224

Input : IMX224 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| #: | Step actions:  | Expected Results:   | Execution Status: |
|----|--|---|-------------------|
| 1  | Go to System Settings<br>Select Capture Source as IMX224<br>& Display Output as HDMI 1080P | Capture Source should be IMX224<br>& Display device as HDMI 1080P   |                   |
| 2  | Go to ISS setting<br>Select LDC = OFF, VTNF = ON, WDR = 2<br>PASS WDR Line Interleaved     | Selected ISS settings will be saved   |                   |
| 3  | Run 1CH ISS capture + ISS + Display UC   | Display must come up and no buffer drops should be observed<br>All the details in the scene should be visible.<br>Preview maybe noisy.<br>Toggling between VTNF (0/1) should have visible impact on temporal noise. |                   |

Execution type: AutomatedEstimated exec. duration (sec): 60.00Priority: MediumKeywords: tda3xx-evm**Execution Details**

Build REL\_3\_3

Tester x0246581

Execution Result: **Passed**Execution Mode: **Manual**Execution duration (sec):**Test Case VISIONSDK-85: ISS\_Capture\_IMX224\_2PASS\_WDR\_LDC**Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with IMX224

Input : IMX224 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| #: | Step actions:  | Expected Results:   | Execution Status: |
|----|--|---|-------------------|
| 1  | Go to System Settings<br>Select Capture Source as IMX224 | Capture Source should be IMX224<br>& Display device as HDMI 1080P |                   |

|  |  |  |  |
|--|--|--|--|
|  | & Display Output as HDMI 1080P   |  |  |
| 2                                      | Go to ISS setting<br>Select LDC = ON, VTNF = OFF, WDR = 2 PASS<br>WDR Line Interleaved | Selected ISS settings will be saved  |  |
| 3                                      | Run 1CH ISS capture + ISS + Display UC   | Display must come up and no buffer drops should be observed<br>Preview must look undistorted |  |
| <u>Execution type:</u>                 | Automated  |  |  |
| <u>Estimated exec. duration (sec):</u> | 60.00  |  |  |
| <u>Priority:</u>                       | Medium   |  |  |
| <u>Keywords:</u>                       | tda3xx-evm   |  |  |
| <b>Execution Details</b>               |  |  |  |
| Build                                  | REL_3_3  |  |  |
| Tester                                 | x0246581   |  |  |
| <u>Execution Result:</u>               | <b>Passed</b>  |  |  |
| <u>Execution Mode:</u>                 | <b>Manual</b>  |  |  |
| <u>Execution duration (sec):</u>       |  |  |  |

**Test Case VISIONSDK-86: ISS\_Capture\_IMX224\_2PASS\_WDR\_LDC\_VTNF**Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with IMX224

Input : IMX224 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| <u>#:</u>                              | <u>Step actions:</u>   | <u>Expected Results:</u>   | <u>Execution Status:</u> |
|--|--|--|--------------------------|
| 1                                      | Go to System Settings<br>Select Capture Source as IMX224<br>& Display Output as HDMI 1080P | Capture Source should be IMX224<br>& Display device as HDMI 1080P  |                          |
| 2                                      | Go to ISS setting<br>Select LDC = ON, VTNF = ON,<br>WDR = 2 PASS WDR Line Interleaved      | Selected ISS settings will be saved  |                          |
| 3                                      | Run 1CH ISS capture + ISS + Display UC   | Display must come up and no buffer drops should be observed<br>LDC effect should be visible.<br><br>If LDC has not been tuned for the lens used, it is OK if correction is not perfect but there should be no crash or corruption. |                          |
| <u>Execution type:</u>                 | Automated  |  |                          |
| <u>Estimated exec. duration (sec):</u> | 60.00  |  |                          |
| <u>Priority:</u>                       | Medium   |  |                          |
| <u>Keywords:</u>                       | tda3xx-evm   |  |                          |
| <b>Execution Details</b>               |  |  |                          |
| Build                                  | REL_3_3  |  |                          |
| Tester                                 | x0246581   |  |                          |
| <u>Execution Result:</u>               | <b>Passed</b>  |  |                          |
| <u>Execution Mode:</u>                 | <b>Manual</b>  |  |                          |
| <u>Execution duration (sec):</u>       |  |  |                          |



**Test Case VISIONSDK-87: ISS\_Capture\_IMX224\_2PASS\_WDR\_Color\_Fidelity**Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with IMX224

Input : IMX224 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| <u>#:</u>                              | <u>Step actions:</u>   | <u>Expected Results:</u>   | <u>Execution Status:</u> |
|--|--|--|--------------------------|
| 1                                      | Go to System Settings<br>Select Capture Source as IMX224<br>& Display Output as HDMI 1080P | Capture Source shuld be IMX224<br>& Display device as HDMI 1080P   |                          |
| 2                                      | Go to ISS setting<br>Select LDC = OFF, VTNF = OFF, WDR = 2<br>PASS WDR Line Interleaved    | Selected ISS settings will be saved  |                          |
| 3                                      | Run 1CH ISS capture + ISS + Display UC   | Display must come up and no buffer drops<br>should be observed<br><br>All the details in the scene should be visible.<br><br>Noise levels should be very low.<br><br>Sharpness should be good.<br>No color cast should be visible on lightbox walls<br>and gray row of colorchecker.<br><br>Colored patches should have the right hue. |                          |
| <u>Execution type:</u>                 | Manual   |  |                          |
| <u>Estimated exec. duration (sec):</u> |  |  |                          |
| <u>Priority:</u>                       | Medium   |  |                          |
| <u>Keywords:</u>                       | tda3xx-evm   |  |                          |
| <b>Execution Details</b>               |  |  |                          |
| Build                                  | REL_3_3  |  |                          |
| Tester                                 | x0246581   |  |                          |
| <u>Execution Result:</u>               | <b>Passed</b>  |  |                          |
| <u>Execution Mode:</u>                 | <b>Manual</b>  |  |                          |
| <u>Execution duration (sec):</u>       |  |  |                          |

**Test Case VISIONSDK-88: ISS\_Capture\_IMX224\_2PASS\_WDR\_Noise\_Filter**Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with IMX224

Input : IMX224 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| <u>#:</u> | <u>Step actions:</u>   | <u>Expected Results:</u>   | <u>Execution Status:</u> |
|-----------|--|--|--------------------------|
| 1         | Go to System Settings<br>Select Capture Source as IMX224<br>& Display Output as HDMI 1080P | Capture Source shuld be IMX224<br>& Display device as HDMI 1080P |                          |
| 2         | Go to ISS setting  | Selected ISS settings will be saved                              |                          |

|  |  |  |  |
|--|--|--|--|
|  | Select LDC = ON, VTNF = OFF, WDR = 2 PASS<br>WDR Line Interleaved                                      |  |  |
| 3                                      | Run 1CH ISS capture + ISS + Display UC<br><br>Adjust lens to right focal length. Ensure dark lighting. | Display must come up and no buffer drops should be observed<br><br>All the details in the scene should be visible.<br><br>Noise levels should be very low. Sharpness should be good. |  |
| <u>Execution type:</u>                 | Manual   |  |  |
| <u>Estimated exec. duration (sec):</u> |  |  |  |
| <u>Priority:</u>                       | Medium   |  |  |
| <u>Keywords:</u>                       | tda3xx-evm   |  |  |
| <b>Execution Details</b>               |  |  |  |
| Build                                  | REL_3_3  |  |  |
| Tester                                 | x0246581   |  |  |
| <u>Execution Result:</u>               | <b>Passed</b>  |  |  |
| <u>Execution Mode:</u>                 | <b>Manual</b>  |  |  |
| <u>Execution duration (sec):</u>       |  |  |  |

**Test Case VISIONSDK-89: ISS\_Capture\_IMX224\_2PASS\_WDR\_DUMP\_RAW\_FRAMES**Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with IMX224

Input : IMX224 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| <u>#:</u>                              | <u>Step actions:</u>   | <u>Expected Results:</u>  | <u>Execution Status:</u> |
|--|--|---|--------------------------|
| 1                                      | Go to System Settings<br><br>Select Capture Source as IMX224<br><br>& Display Output as HDMI 1080P | Capture Source shuld be IMX224<br><br>& Display device as HDMI 1080P                                      |                          |
| 2                                      | Go to ISS setting<br><br>Select LDC = ON, VTNF = OFF, WDR = 2 PASS<br>WDR Line Interleaved         | Selected ISS settings will be saved   |                          |
| 3                                      | Run 1CH ISS capture + ISS + Display UC<br><br>Capture RAW images using n/w tool                    | Display must come up and no buffer drops should be observed<br>Captured images must be free of artifacts. |                          |
| <u>Execution type:</u>                 | Manual   |   |                          |
| <u>Estimated exec. duration (sec):</u> |  |   |                          |
| <u>Priority:</u>                       | Medium   |   |                          |
| <u>Keywords:</u>                       | tda3xx-evm   |   |                          |
| <b>Execution Details</b>               |  |   |                          |
| Build                                  | REL_3_3  |   |                          |
| Tester                                 | x0246581   |   |                          |
| <u>Execution Result:</u>               | <b>Passed</b>  |   |                          |
| <u>Execution Mode:</u>                 | <b>Manual</b>  |   |                          |
| <u>Execution duration (sec):</u>       |  |   |                          |

**Test Case VISIONSDK-90: ISS\_Capture\_IMX224\_2PASS\_WDR\_DUMP\_YUV\_FRAMES**Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with IMX224

Input : IMX224 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| #:                              | Step actions:  | Expected Results:   | Execution Status: |
|---------------------------------|--|---|-------------------|
| 1                               | Go to System Settings<br><br>Select Capture Source as IMX224<br><br>& Display Output as HDMI 1080P | Capture Source shuld be IMX224<br><br>& Display device as HDMI 1080P  |                   |
| 2                               | Go to ISS setting<br><br>Select LDC = ON, VTNF = OFF, WDR = 2 PASS<br>WDR Line Interleaved         | Selected ISS settings will be saved   |                   |
| 3                               | Run 1CH ISS capture + ISS + Display UC<br><br>Capture YUV images using n/w tool                    | Display must come up and no buffer drops should be observed<br>Captured images must be free of artifacts<br><br>YUV frame must match the display. |                   |
| Execution type:                 | Manual   |   |                   |
| Estimated exec. duration (sec): |  |   |                   |
| Priority:                       | Medium   |   |                   |
| Keywords:                       | tda3xx-evm   |   |                   |
| Execution Details               |  |   |                   |
| Build                           | REL_3_3  |   |                   |
| Tester                          | x0246581   |   |                   |
| Execution Result:               | Passed   |   |                   |
| Execution Mode:                 | Manual   |   |                   |
| Execution duration (sec):       |  |   |                   |

**Test Case VISIONSDK-91: ISS\_Capture\_IMX224\_2PASS\_WDR\_Read\_Sensor\_Reg**

Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with IMX224

Input : IMX224 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| #: | Step actions:  | Expected Results:   | Execution Status: |
|----|--|---|-------------------|
| 1  | Go to System Settings<br>Select Capture Source as IMX224<br>& Display Output as HDMI 1080P             | Capture Source shuld be IMX224<br>& Display device as HDMI 1080P  |                   |
| 2  | Go to ISS setting<br>Select LDC = OFF, VTNF = OFF, WDR = 2 PASS<br>WDR Line Interleaved                | Selected ISS settings will be saved   |                   |
| 3  | Run 1CH ISS capture + ISS + Display UC   | Display must come up and no buffer drops<br>should be observed.<br>Exposure and colors should look correct. |                   |
| 4  | Open Command Prompt on Host machine<br>Use the command iss_read_sensor_reg to read<br>chip ID (0x3000) | Chip ID and exposure value must be read<br>correctly  |                   |

|  |                                |  |  |
|--|--------------------------------|--|--|
|  | and exposure register (0x3082) |  |  |
| <u>Execution type:</u>                 | Manual                         |  |  |
| <u>Estimated exec. duration (sec):</u> |                                |  |  |
| <u>Priority:</u>                       | Medium                         |  |  |
| <u>Keywords:</u>                       | tda3xx-evm                     |  |  |
| <b>Execution Details</b>               |                                |  |  |
| Build                                  | REL_3_3                        |  |  |
| Tester                                 | x0246581                       |  |  |
| <u>Execution Result:</u>               | <b>Passed</b>                  |  |  |
| <u>Execution Mode:</u>                 | <b>Manual</b>                  |  |  |
| <u>Execution duration (sec):</u>       |                                |  |  |

#### Test Case VISIONSDK-92: ISS\_Capture\_IMX224\_2PASS\_WDR\_Write\_Sensor\_Reg

##### Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with IMX224

Input : IMX224 sensor

Output : HDMI 1080P

##### Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| <u>#:</u> | <u>Step actions:</u>   | <u>Expected Results:</u>   | <u>Execution Status:</u> |
|-----------|--|--|--------------------------|
| 1         | Go to System Settings<br>Select Capture Source as IMX224<br>& Display Output as HDMI 1080P   | Capture Source shuld be IMX224<br>& Display device as HDMI 1080P   |                          |
| 2         | Go to ISS setting<br>Select LDC = OFF, VTNF = OFF, WDR = 2 PASS WDR<br>Line Interleaved  | Selected ISS settings will be saved  |                          |
| 3         | Run 1CH ISS capture + ISS + Display UC   | Display must come up and no<br>buffer drops should be observed.<br>Exposure and colors should look<br>correct. |                          |
| 4         | Open Command Prompt on Host machine<br>Use the command iss_write_sensor_reg to write 0, 4, 8 and<br>c one by one to the exposure register (0x3082) | Change of exposure value must be<br>clearly visible on the display   |                          |

|  |               |  |  |
|--|---------------|--|--|
| <u>Execution type:</u>                 | Manual        |  |  |
| <u>Estimated exec. duration (sec):</u> |               |  |  |
| <u>Priority:</u>                       | Medium        |  |  |
| <u>Keywords:</u>                       | tda3xx-evm    |  |  |
| <b>Execution Details</b>               |               |  |  |
| Build                                  | REL_3_3       |  |  |
| Tester                                 | x0246581      |  |  |
| <u>Execution Result:</u>               | <b>Passed</b> |  |  |
| <u>Execution Mode:</u>                 | <b>Manual</b> |  |  |
| <u>Execution duration (sec):</u>       |               |  |  |

#### Test Case VISIONSDK-93: ISS\_Capture\_IMX224\_2PASS\_WDR\_Save\_DCC\_Profile

##### Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with IMX224

Input : IMX224 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| #:                                     | Step actions:   | Expected Results:  | Execution Status: |
|--|---|--|-------------------|
| 1                                      | Go to System Settings<br>Select Capture Source as IMX224<br>& Display Output as HDMI 1080P  | Capture Source should be IMX224<br>& Display device as HDMI 1080P  |                   |
| 2                                      | Go to ISS setting<br>Select LDC = OFF, VTNF = OFF, WDR = 2 PASS<br>WDR Line Interleaved   | Selected ISS settings will be saved  |                   |
| 3                                      | Run 1CH ISS capture + ISS + Display UC  | Display must come up and no buffer drops should be observed.<br>Exposure and colors should look correct. |                   |
| 4                                      | Open Command Prompt on Host machine<br>Get the sensor.bin file from driver<br>and save it using iss_save_dcc_file network command | There should not be any error/assertion in saving dcc file   |                   |
| <u>Execution type:</u>                 | Manual  |  |                   |
| <u>Estimated exec. duration (sec):</u> |   |  |                   |
| <u>Priority:</u>                       | Medium  |  |                   |
| <u>Keywords:</u>                       | tda3xx-evm  |  |                   |
| <b>Execution Details</b>               |   |  |                   |
| Build                                  | REL_3_3   |  |                   |
| Tester                                 | x0246581  |  |                   |
| <u>Execution Result:</u>               | <b>Passed</b>   |  |                   |
| <u>Execution Mode:</u>                 | <b>Manual</b>   |  |                   |
| <u>Execution duration (sec):</u>       |   |  |                   |

**Test Case VISIONSDK-94: ISS\_Capture\_IMX224\_2PASS\_WDR\_Send\_DCC\_Profile**Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with IMX224

Input : IMX224 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| #: | Step actions:  | Expected Results:  | Execution Status: |
|----|--|--|-------------------|
| 1  | Go to System Settings<br>Select Capture Source as IMX224<br>& Display Output as HDMI 1080P                     | Capture Source should be IMX224<br>& Display device as HDMI 1080P  |                   |
| 2  | Go to ISS setting<br>Select LDC = OFF, VTNF = OFF, WDR = 2 PASS<br>WDR Line Interleaved                        | Selected ISS settings will be saved  |                   |
| 3  | Run 1CH ISS capture + ISS + Display UC   | Display must come up and no buffer drops should be observed.<br>Exposure and colors should look correct. |                   |
| 4  | Open Command Prompt on Host machine<br>and send new sensor.bin file using<br>iss_send_dcc_file network command | New DCC profile must be used from the QSPI memory  |                   |

|  |               |  |  |
|--|---------------|--|--|
|  |               | There should be a print on console indicating that |  |
| <u>Execution type:</u>                 | Manual        |  |  |
| <u>Estimated exec. duration (sec):</u> |               |  |  |
| <u>Priority:</u>                       | Medium        |  |  |
| <u>Keywords:</u>                       | tda3xx-evm    |  |  |
| <b>Execution Details</b>               |               |  |  |
| Build                                  | REL_3_3       |  |  |
| Tester                                 | x0246581      |  |  |
| <u>Execution Result:</u>               | <b>Passed</b> |  |  |
| <u>Execution Mode:</u>                 | <b>Manual</b> |  |  |
| <u>Execution duration (sec):</u>       |               |  |  |

#### Test Case VISIONSDK-95: ISS\_Capture\_IMX224\_2PASS\_WDR\_Clear\_DCC\_Profile

##### Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with IMX224

Input : IMX224 sensor

Output : HDMI 1080P

##### Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| <u>#:</u> | <u>Step actions:</u>   | <u>Expected Results:</u>   | <u>Execution Status:</u> |
|-----------|--|--|--------------------------|
| 1         | Go to System Settings<br>Select Capture Source as IMX224<br>& Display Output as HDMI 1080P                             | Capture Source should be IMX224<br>& Display device as HDMI 1080P  |                          |
| 2         | Go to ISS setting<br>Select LDC = OFF, VTNF = OFF, WDR = 2 PASS<br>WDR Line Interleaved                                | Selected ISS settings will be saved  |                          |
| 3         | Run 1CH ISS capture + ISS + Display UC   | Display must come up and no buffer drops should be observed.<br>Exposure and colors should look correct. |                          |
| 4         | Open Command Prompt on Host machine<br>and clear DCC profile from QSPI using<br>iss_clear_dcc_qspi_mem network command | There should not be any error/assertion in<br>cleaning dcc profile in qspi                               |                          |

|  |               |  |  |
|--|---------------|--|--|
| <u>Execution type:</u>                 | Manual        |  |  |
| <u>Estimated exec. duration (sec):</u> |               |  |  |
| <u>Priority:</u>                       | Medium        |  |  |
| <u>Keywords:</u>                       | tda3xx-evm    |  |  |
| <b>Execution Details</b>               |               |  |  |
| Build                                  | REL_3_3       |  |  |
| Tester                                 | x0246581      |  |  |
| <u>Execution Result:</u>               | <b>Passed</b> |  |  |
| <u>Execution Mode:</u>                 | <b>Manual</b> |  |  |
| <u>Execution duration (sec):</u>       |               |  |  |

#### 1.4.3.4.Test Suite : ISS\_SingleCam\_Capture\_Display\_OV2775

#### Test Case VISIONSDK-248: ISS\_Capture\_OV2775\_LM

##### Summary:

Linear mode - basic ISS functionality test

ISS Single channle Capture UC with OV2775

Input : OV2775 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/Display is running on IPU1-0 at 30fps

| #: | Step actions:  | Expected Results:   | Execution Status: |
|----|--|---|-------------------|
| 1  | Go to System Settings<br>Select Capture Source as OV2775<br>& Display Output as HDMI 1080P | Capture Source shuld be OV2775<br>& Display device as HDMI 1080P  |                   |
| 2  | Run "1CH ISS capture + ISS ISP + ISS LDC+VTNF + Display" UC                                | Display must come up and no buffer drops should be observed<br>Exposure and colors should look correct.<br>Most important - white/grey objects should not have any color cast |                   |

Execution type: AutomatedEstimated exec. duration (sec): 60.00Priority: Medium

Keywords:

tda3xx-evm  
tda2px-evm  
c\_stress  
c\_qualification  
c\_stability

**Execution Details**

Build REL\_3\_3

Tester x0246581

Execution Result: **Passed**Execution Mode: **Manual**Execution duration (sec):**Test Case VISIONSDK-291: ISS\_Capture\_OV2775\_LM\_performance**Summary:

Linear mode - basic ISS functionality test

ISS Single channle Capture UC with OV2775

Input : OV2775 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/Display is running on IPU1-0 at 30fps

| #: | Step actions:  | Expected Results:   | Execution Status: |
|----|--|---|-------------------|
| 1  | Go to System Settings<br>Select Capture Source as OV2775<br>& Display Output as HDMI 1080P | Capture Source shuld be OV2775<br>& Display device as HDMI 1080P  |                   |
| 2  | Run "1CH ISS capture + ISS ISP + ISS LDC+VTNF + Display" UC                                | Display must come up and no buffer drops should be observed<br>Exposure and colors should look correct.<br>Most important - white/grey objects should not have any color cast |                   |
| 3  | Press "P" & check for FPS  | FPS should be in the range 29.5 - 30.5  |                   |

Execution type: AutomatedEstimated exec. duration (sec): 60.00Priority: Medium

Keywords:

tda3xx-evm  
tda2px-evm

|                                  |   |
|----------------------------------|---|
|                                  | c_regression<br>c_performance<br>c_qualification<br>m_iss |
| <b>Execution Details</b>         |   |
| Build                            | REL_3_3   |
| Tester                           | x0246581  |
| <u>Execution Result:</u>         | <b>Passed</b>   |
| <u>Execution Mode:</u>           | <b>Manual</b>   |
| <u>Execution duration (sec):</u> |   |

**Test Case VISIONSDK-315: ISS\_Capture\_OV2775\_LM\_LDC\_VTNF**Summary:

Linear mode - basic ISS functionality test

ISS Single channle Capture UC with OV2775

Input : OV2775 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/Display is running on IPU1-0 at 30fps

| <u>#:</u>                              | <u>Step actions:</u>   | <u>Expected Results:</u>  | <u>Execution Status:</u> |
|--|--|---|--------------------------|
| 1                                      | Go to System Settings<br>Select Capture Source as OV2775<br>& Display Output as HDMI 1080P | Capture Source shuld be OV2775<br>& Display device as HDMI 1080P  |                          |
| 2                                      | Go to ISS setting<br>Select LDC = ON, VTNF = ON, WDR = OFF                                 | Selected ISS settings will be saved   |                          |
| 3                                      | Run "1CH ISS capture + ISS ISP + ISS LDC+VTNF + Display" UC                                | Display must come up and no buffer drops should be observed<br>Exposure and colors should look correct.<br>Most important - white/grey objects should not have any color cast |                          |
| <u>Execution type:</u>                 | Automated  |   |                          |
| <u>Estimated exec. duration (sec):</u> | 60.00  |   |                          |
| <u>Priority:</u>                       | Medium   |   |                          |
| <u>Keywords:</u>                       | tda3xx-evm<br>tda2px-evm<br>c_stress<br>c_qualification<br>c_stability                     |   |                          |

|                                  |               |
|----------------------------------|---------------|
| <b>Execution Details</b>         |               |
| Build                            | REL_3_3       |
| Tester                           | x0246581      |
| <u>Execution Result:</u>         | <b>Passed</b> |
| <u>Execution Mode:</u>           | <b>Manual</b> |
| <u>Execution duration (sec):</u> |               |

**1.4.3.5.Test Suite : ISS\_SingleCam\_Capture\_Display\_AR0143****Test Case VISIONSDK-254: ISS\_Capture\_AR0143\_LM**Summary:

Linear mode - basic ISS functionality test

ISS Single channle Capture UC with AR0143

Input : AR0143 sensor



Output : HDMI 1080P

Preconditions:

Verify that Capture/Display is running on IPU1-0 at 30fps

| #:                              | Step actions:  | Expected Results:   | Execution Status: |
|---------------------------------|--|---|-------------------|
| 1                               | Go to System Settings<br><br>Select Capture Source as AR0143<br><br>& Display Output as HDMI 1080P | Capture Source should be AR0143<br><br>& Display device as HDMI 1080P   |                   |
| 2                               | Run "1CH ISS capture + ISS ISP + ISS LDC+VTNF + Display" UC  | Display must come up and no buffer drops should be observed<br>Exposure and colors should look correct.<br>Most important - white/grey objects should not have any color cast |                   |
| Execution type:                 | Manual   |   |                   |
| Estimated exec. duration (sec): | 60.00  |   |                   |
| Priority:                       | Medium   |   |                   |
| Keywords:                       | tda3xx-evm<br>c_stress<br>c_qualification<br>c_stability   |   |                   |
| Execution Details               |  |   |                   |
| Build                           | REL_3_3  |   |                   |
| Tester                          | x0246581   |   |                   |
| Execution Result:               | Passed   |   |                   |
| Execution Mode:                 | Manual   |   |                   |
| Execution duration (sec):       |  |   |                   |

**Test Case VISIONSDK-292: ISS\_Capture\_AR0143\_LM\_Performance**Summary:

Linear mode - basic ISS functionality test

ISS Single channle Capture UC with AR0143

Input : AR0143 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/Display is running on IPU1-0 at 30fps

| #:                              | Step actions:  | Expected Results:   | Execution Status: |
|---------------------------------|--|---|-------------------|
| 1                               | Go to System Settings<br><br>Select Capture Source as AR0143<br><br>& Display Output as HDMI 1080P | Capture Source should be AR0143<br><br>& Display device as HDMI 1080P   |                   |
| 2                               | Run "1CH ISS capture + ISS ISP + ISS LDC+VTNF + Display" UC  | Display must come up and no buffer drops should be observed<br>Exposure and colors should look correct.<br>Most important - white/grey objects should not have any color cast |                   |
| 3                               | Press "P" & check for FPS  | FPS should be in the range 29.5 - 30.5  |                   |
| Execution type:                 | Manual   |   |                   |
| Estimated exec. duration (sec): | 60.00  |   |                   |
| Priority:                       | Medium   |   |                   |
| Keywords:                       | tda3xx-evm<br>c_regression<br>c_performance<br>c_qualification<br>m_iss                            |   |                   |
| Execution Details               |  |   |                   |

|                           |               |
|---------------------------|---------------|
| Build                     | REL_3_3       |
| Tester                    | x0246581      |
| Execution Result:         | <b>Passed</b> |
| Execution Mode:           | <b>Manual</b> |
| Execution duration (sec): |               |

**Test Case VISIONSDK-334: ISS\_Capture\_AR143\_1PASS\_WDR**Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with AR143

Input : AR143 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| #:                              | Step actions:   | Expected Results:  | Execution Status: |
|---------------------------------|---|--|-------------------|
| 1                               | Go to System Settings<br>Select Capture Source as AR143<br>& Display Output as HDMI 1080P | Capture Source shuld be AR143<br>& Display device as HDMI 1080P  |                   |
| 2                               | Go to ISS setting<br>Select LDC = OFF, VTNF = OFF, WDR = 1 PASS WDR                       | Selected ISS settings will be saved  |                   |
| 3                               | Run 1CH ISS capture + ISS + Display UC  | Display must come up and no buffer drops should be observed.<br>Exposure and colors should look correct. |                   |
| Execution type:                 | Automated   |  |                   |
| Estimated exec. duration (sec): | 60.00   |  |                   |
| Priority:                       | Medium  |  |                   |
| Keywords:                       | tda3xx-evm  |  |                   |
| Execution Details               |   |  |                   |
| Build                           | REL_3_3   |  |                   |
| Tester                          | x0246581  |  |                   |
| Execution Result:               | Passed  |  |                   |
| Execution Mode:                 | Manual  |  |                   |
| Execution duration (sec):       |   |  |                   |

**Test Case VISIONSDK-335: ISS\_Capture\_AR143\_2PASS\_WDR**Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with AR143

Input : AR143 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| #: | Step actions:   | Expected Results:   | Execution Status: |
|----|---|---|-------------------|
| 1  | Go to System Settings<br>Select Capture Source as AR143 | Capture Source shuld be AR143<br>& Display device as HDMI 1080P |                   |

|  |  |  |  |
|--|--|--|--|
|  | & Display Output as HDMI 1080P   |  |  |
| 2                                      | Go to ISS setting<br>Select LDC = OFF, VTNF = OFF, WDR = 2 PASS WDR      | Selected ISS settings will be saved  |  |
| 3                                      | Run 1CH ISS capture + ISS + Display UC                                   | Display must come up and no buffer drops should be observed.<br>Exposure and colors should look correct. |  |
| <u>Execution type:</u>                 | Automated  |  |  |
| <u>Estimated exec. duration (sec):</u> | 60.00  |  |  |
| <u>Priority:</u>                       | Medium   |  |  |
| <u>Keywords:</u>                       | tda3xx-evm<br>c_stress<br>c_stability                                    |  |  |
| <b>Execution Details</b>               |  |  |  |
| Build                                  | REL_3_3  |  |  |
| Tester                                 | x0246581   |  |  |
| <u>Execution Result:</u>               | <b>Failed</b>  |  |  |
| <u>Execution Mode:</u>                 | <b>Manual</b>  |  |  |
| <u>Execution duration (sec):</u>       |  |  |  |
| Execution notes                        | ADASVISION-1848: [TDA3x/TDA2Px] Known Image Quality issue with 2A & AEWB |  |  |

**Test Case VISIONSDK-336: ISS\_Capture\_AR143\_2PASS\_WDR\_Performance**Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with AR143

Input : AR143 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| <u>#:</u>                              | <u>Step actions:</u>  | <u>Expected Results:</u>  | <u>Execution Status:</u> |
|--|---|---|--------------------------|
| 1                                      | Go to System Settings<br>Select Capture Source as AR143<br>& Display Output as HDMI 1080P | Capture Source shuld be AR143<br>& Display device as HDMI 1080P |                          |
| 2                                      | Go to ISS setting<br>Select LDC = OFF, VTNF = OFF, WDR = 2 PASS WDR                       | Selected ISS settings will be saved                             |                          |
| 3                                      | Run 1CH ISS capture + ISS + Display UC  | Display must come up and no buffer drops should be observed     |                          |
| 4                                      | Press "P" & check for FPS   | FPS should be in the range 29.5 - 30.5                          |                          |
| <u>Execution type:</u>                 | Automated   |   |                          |
| <u>Estimated exec. duration (sec):</u> | 60.00   |   |                          |
| <u>Priority:</u>                       | Medium  |   |                          |
| <u>Keywords:</u>                       | tda3xx-evm  |   |                          |
| <b>Execution Details</b>               |   |   |                          |
| Build                                  | REL_3_3   |   |                          |
| Tester                                 | x0246581  |   |                          |
| <u>Execution Result:</u>               | <b>Passed</b>   |   |                          |
| <u>Execution Mode:</u>                 | <b>Manual</b>   |   |                          |
| <u>Execution duration (sec):</u>       |   |   |                          |

**Test Case VISIONSDK-337: ISS\_Capture\_AR143\_2PASS\_WDR\_Dynamic\_Range**Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with AR143

Input : AR143 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| <u>#:</u>                              | <u>Step actions:</u>  | <u>Expected Results:</u>   | <u>Execution Status:</u> |
|--|---|--|--------------------------|
| 1                                      | Go to System Settings<br>Select Capture Source as AR143<br>& Display Output as HDMI 1080P | Capture Source shuld be AR143<br>& Display device as HDMI 1080P  |                          |
| 2                                      | Go to ISS setting<br>Select LDC = OFF, VTNF = OFF,<br>WDR = 2 PASS WDR                    | Selected ISS settings will be saved  |                          |
| 3                                      | Run 1CH ISS capture + ISS + Display UC  | Display must come up and no buffer drops should be observed.<br>Exposure and colors should look correct in dark as well as bright regions.<br>Dark regions maybe noisier than bright regions but NSF effect should be visible. |                          |
| <u>Execution type:</u>                 | Manual  |  |                          |
| <u>Estimated exec. duration (sec):</u> |   |  |                          |
| <u>Priority:</u>                       | Medium  |  |                          |
| <u>Keywords:</u>                       | tda3xx-evm  |  |                          |
| <b>Execution Details</b>               |   |  |                          |
| Build                                  | REL_3_3   |  |                          |
| Tester                                 | x0246581  |  |                          |
| <u>Execution Result:</u>               | <b>Failed</b>   |  |                          |
| <u>Execution Mode:</u>                 | <b>Manual</b>   |  |                          |
| <u>Execution duration (sec):</u>       |   |  |                          |
| Execution notes                        | ADASVISION-1848: [TDA3x/TDA2Px] Known Image Quality issue with 2A & AEWB                  |  |                          |

**Test Case VISIONSDK-338: ISS\_Capture\_AR143\_2PASS\_WDR\_AE**Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with AR143

Input : AR143 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| <u>#:</u> | <u>Step actions:</u>  | <u>Expected Results:</u>  | <u>Execution Status:</u> |
|-----------|---|---|--------------------------|
| 1         | Go to System Settings<br>Select Capture Source as AR143<br>& Display Output as HDMI 1080P | Capture Source shuld be AR143<br>& Display device as HDMI 1080P |                          |
| 2         | Go to ISS setting<br>Select LDC = OFF, VTNF = OFF,<br>WDR = 2 PASS WDR                    | Selected ISS settings will be saved                             |                          |

|  |  |   |
|--|--|---|
| 3                                      | Run 1CH ISS capture + ISS + Display UC | Display must come up and no buffer drops should be observed<br>All the details in the scene should be visible. Noise levels should be very low.<br>Moving to dark scene should cause AE adjustment and increase in noise level. |
| <u>Execution type:</u>                 | Manual                                 |   |
| <u>Estimated exec. duration (sec):</u> |  |   |
| <u>Priority:</u>                       | Medium                                 |   |
| <u>Keywords:</u>                       | tda3xx-evm                             |   |
| <b>Execution Details</b>               |  |   |
| Build                                  | REL_3_3                                |   |
| Tester                                 | x0246581                               |   |
| <u>Execution Result:</u>               | <b>Passed</b>                          |   |
| <u>Execution Mode:</u>                 | <b>Manual</b>                          |   |
| <u>Execution duration (sec):</u>       |  |   |

**Test Case VISIONSDK-339: ISS\_Capture\_AR143\_2PASS\_WDR\_VTNF**Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with AR143

Input : AR143 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| <u>#:</u>                              | <u>Step actions:</u>  | <u>Expected Results:</u>   | <u>Execution Status:</u> |
|--|---|--|--------------------------|
| 1                                      | Go to System Settings<br>Select Capture Source as AR143<br>& Display Output as HDMI 1080P | Capture Source shuld be AR143<br>& Display device as HDMI 1080P  |                          |
| 2                                      | Go to ISS setting<br>Select LDC = OFF, VTNF = ON, WDR = 2 PASS WDR                        | Selected ISS settings will be saved  |                          |
| 3                                      | Run 1CH ISS capture + ISS + Display UC  | Display must come up and no buffer drops should be observed<br>All the details in the scene should be visible. Preview maybe noisy.<br>Toggling between VTNF (0/1) should have visible impact on temporal noise. |                          |
| <u>Execution type:</u>                 | Automated   |  |                          |
| <u>Estimated exec. duration (sec):</u> | 60.00   |  |                          |
| <u>Priority:</u>                       | Medium  |  |                          |
| <u>Keywords:</u>                       | tda3xx-evm  |  |                          |
| <b>Execution Details</b>               |   |  |                          |
| Build                                  | REL_3_3   |  |                          |
| Tester                                 | x0246581  |  |                          |
| <u>Execution Result:</u>               | <b>Passed</b>   |  |                          |
| <u>Execution Mode:</u>                 | <b>Manual</b>   |  |                          |
| <u>Execution duration (sec):</u>       |   |  |                          |

**Test Case VISIONSDK-340: ISS\_Capture\_AR143\_2PASS\_WDR\_LDC**Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with AR143

Input : AR143 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| <u>#:</u>                              | <u>Step actions:</u>  | <u>Expected Results:</u>  | <u>Execution Status:</u> |
|--|---|---|--------------------------|
| 1                                      | Go to System Settings<br><br>Select Capture Source as AR143<br><br>& Display Output as HDMI 1080P | Capture Source shuld be AR143<br><br>& Display device as HDMI 1080P                             |                          |
| 2                                      | Go to ISS setting<br><br>Select LDC = ON, VTNF = OFF, WDR = 2<br>PASS WDR                         | Selected ISS settings will be saved   |                          |
| 3                                      | Run 1CH ISS capture + ISS + Display UC  | Display must come up and no buffer drops<br>should be observed<br>Preview must look undistorted |                          |
| <u>Execution type:</u>                 | Automated   |   |                          |
| <u>Estimated exec. duration (sec):</u> | 60.00   |   |                          |
| <u>Priority:</u>                       | Medium  |   |                          |
| <u>Keywords:</u>                       | tda3xx-evm  |   |                          |
| <b>Execution Details</b>               |   |   |                          |
| Build                                  | REL_3_3   |   |                          |
| Tester                                 | x0246581  |   |                          |
| <u>Execution Result:</u>               | <b>Passed</b>   |   |                          |
| <u>Execution Mode:</u>                 | <b>Manual</b>   |   |                          |
| <u>Execution duration (sec):</u>       |   |   |                          |

**Test Case VISIONSDK-341: ISS\_Capture\_AR143\_2PASS\_WDR\_LDC\_VTNF**Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with AR143

Input : AR143 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| #:                     | Step actions:   | Expected Results:  | Execution Status: |
|------------------------|---|--|-------------------|
| 1                      | Go to System Settings<br>Select Capture Source as AR143<br>& Display Output as HDMI 1080P | Capture Source shuld be AR143<br>& Display device as HDMI 1080P  |                   |
| 2                      | Go to ISS setting<br>Select LDC = ON, VTNF = ON, WDR = 2 PASS WDR                         | Selected ISS settings will be saved  |                   |
| 3                      | Run 1CH ISS capture + ISS + Display UC  | Display must come up and no buffer drops should be observed<br>LDC effect should be visible.<br>If LDC has not been tuned for the lens used, it is OK if correction is not perfect but there should be no crash or corruption. |                   |
| <u>Execution type:</u> |   | Automated  |                   |

|  |               |
|--|---------------|
| <u>Estimated exec. duration (sec):</u> | 60.00         |
| <u>Priority:</u>                       | Medium        |
| <u>Keywords:</u>                       | tda3xx-evm    |
| <b>Execution Details</b>               |               |
| Build                                  | REL_3_3       |
| Tester                                 | x0246581      |
| <u>Execution Result:</u>               | <b>Passed</b> |
| <u>Execution Mode:</u>                 | <b>Manual</b> |
| <u>Execution duration (sec):</u>       |               |

#### 1.4.3.6.Test Suite : ISS\_SingleCam\_Capture\_Display\_AR132

|   |   |   |                          |
|---|---|---|--------------------------|
| <b>Test Case VISIONSDK-263: ISS_Capture_AR132_LM</b>      |   |   |                          |
| <u>Summary:</u>   |   |   |                          |
| Linear mode - basic ISS functionality test                |   |   |                          |
| ISS Single channle Capture UC with AR132                  |   |   |                          |
| Input : AR132 sensor                                      |   |   |                          |
| Output : HDMI 1080P                                       |   |   |                          |
| <u>Preconditions:</u>                                     |   |   |                          |
| Verify that Capture/Display is running on IPU1-0 at 30fps |   |   |                          |
| <u>#:</u>   | <u>Step actions:</u>  | <u>Expected Results:</u>  | <u>Execution Status:</u> |
| 1   | Go to System Settings<br>Select Capture Source as AR132<br>& Display Output as HDMI 1080P | Capture Source shuld be AR132<br>& Display device as HDMI 1080P   |                          |
| 2   | Run "1CH ISS capture + ISS ISP + ISS LDC+VTNF + Display" UC                               | Display must come up and no buffer drops should be observed<br>Exposure and colors should look correct.<br>Most important - white/grey objects should not have any color cast |                          |
| <u>Execution type:</u>                                    | Automated   |   |                          |
| <u>Estimated exec. duration (sec):</u>                    | 60.00   |   |                          |
| <u>Priority:</u>  | Medium  |   |                          |
| <u>Keywords:</u>  | tda3xx-evm<br>c_stress<br>c_qualification<br>c_stability                                  |   |                          |
| <b>Execution Details</b>                                  |   |   |                          |
| Build   | REL_3_3   |   |                          |
| Tester  | x0246581  |   |                          |
| <u>Execution Result:</u>                                  | <b>Passed</b>   |   |                          |
| <u>Execution Mode:</u>                                    | <b>Manual</b>   |   |                          |
| <u>Execution duration (sec):</u>                          |   |   |                          |

|  |  |  |  |
|--|--|--|--|
| <b>Test Case VISIONSDK-264: ISS_Capture_AR132_LM_Performance</b> |  |  |  |
| <u>Summary:</u>  |  |  |  |
| Linear mode - basic ISS, performance test                        |  |  |  |
| ISS Single channle Capture UC with AR132                         |  |  |  |
| Input : AR132 sensor   |  |  |  |
| Output : HDMI 1080P  |  |  |  |
| <u>Preconditions:</u>  |  |  |  |

Verify that Capture/display is running on IPU1-0 at 30fps

| #:                              | Step actions:   | Expected Results:   | Execution Status: |
|---------------------------------|---|---|-------------------|
| 1                               | Go to System Settings<br><br>Select Capture Source as AR132<br><br>& Display Output as HDMI 1080P | Capture Source shuld be AR132<br><br>& Display device as HDMI 1080P |                   |
| 2                               | Run 1CH ISS capture + ISS + Display UC  | Display must come up and no buffer drops should be observed.        |                   |
| 3                               | Press "P" & check for FPS   | FPS should be in the range 29.5 - 30.5                              |                   |
| Execution type:                 | Automated   |   |                   |
| Estimated exec. duration (sec): | 60.00   |   |                   |
| Priority:                       | Medium  |   |                   |
| Keywords:                       | tda3xx-evm<br>c_regression<br>c_performance<br>m_iss  |   |                   |
| Execution Details               |   |   |                   |
| Build                           | REL_3_3   |   |                   |
| Tester                          | x0246581  |   |                   |
| Execution Result:               | Passed  |   |                   |
| Execution Mode:                 | Manual  |   |                   |
| Execution duration (sec):       |   |   |                   |

**Test Case VISIONSDK-265: ISS\_Capture\_AR132\_LM\_LDC\_VTNF**Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with AR132

Input : AR132 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| #:                                     | Step actions:   | Expected Results:  | Execution Status: |
|--|---|--|-------------------|
| 1                                      | Go to System Settings<br><br>Select Capture Source as AR132<br><br>& Display Output as HDMI 1080P | Capture Source should be AR132<br><br>& Display device as HDMI 1080P   |                   |
| 2                                      | Go to ISS setting<br><br>Select LDC = ON, VTNF = ON, WDR = OFF                                    | Selected ISS settings will be saved  |                   |
| 3                                      | Run 1CH ISS capture + ISS + Display UC  | Display must come up and no buffer drops should be observed<br>LDC effect should be visible.<br><br>If LDC has not been tuned for the lens used, it is OK if correction is not perfect but there should be no crash or corruption. |                   |
| <u>Execution type:</u>                 |   | Automated  |                   |
| <u>Estimated exec. duration (sec):</u> |   | 60.00  |                   |
| <u>Priority:</u>                       |   | Medium   |                   |
| <u>Keywords:</u>                       |   | tda3xx-evm   |                   |
| <b>Execution Details</b>               |   |  |                   |
| Build                                  | REL_3_3   |  |                   |
| Tester                                 | x0246581  |  |                   |



|                                  |               |
|----------------------------------|---------------|
| <u>Execution Result:</u>         | <b>Passed</b> |
| <u>Execution Mode:</u>           | <b>Manual</b> |
| <u>Execution duration (sec):</u> |               |

**Test Case VISIONSDK-266: ISS\_Capture\_AR132\_LM\_DUMP\_RAW\_FRAMES**Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with AR132

Input : AR132 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| <u>#:</u>                              | <u>Step actions:</u>  | <u>Expected Results:</u>  | <u>Execution Status:</u> |
|--|---|---|--------------------------|
| 1                                      | Go to System Settings<br><br>Select Capture Source as AR132<br><br>& Display Output as HDMI 1080P | Capture Source should be AR132<br><br>& Display device as HDMI 1080P  |                          |
| 2                                      | Go to ISS setting<br><br>Select LDC = ON, VTNF = OFF,<br>WDR = OFF                                | Selected ISS settings will be saved   |                          |
| 3                                      | Run 1CH ISS capture + ISS +<br>Display UC<br><br>Capture RAW images using n/w tool                | Display must come up and no buffer drops should<br>be observed<br>Captured images must be free of artifacts |                          |
| <u>Execution type:</u>                 | Manual  |   |                          |
| <u>Estimated exec. duration (sec):</u> | 60.00   |   |                          |
| <u>Priority:</u>                       | Medium  |   |                          |
| <u>Keywords:</u>                       | tda3xx-evm  |   |                          |
| <b>Execution Details</b>               |   |   |                          |
| Build                                  | REL_3_3   |   |                          |
| Tester                                 | x0246581  |   |                          |
| <u>Execution Result:</u>               | <b>Passed</b>   |   |                          |
| <u>Execution Mode:</u>                 | <b>Manual</b>   |   |                          |
| <u>Execution duration (sec):</u>       |   |   |                          |

**Test Case VISIONSDK-267: ISS\_Capture\_AR132\_LM\_DUMP\_YUV\_FRAMES**Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with AR132

Input : AR132 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| <u>#:</u> | <u>Step actions:</u>  | <u>Expected Results:</u>   | <u>Execution Status:</u> |
|-----------|---|--|--------------------------|
| 1         | Go to System Settings<br>Select Capture Source as AR132<br>& Display Output as HDMI 1080P | Capture Source should be AR132<br>& Display device as HDMI 1080P |                          |
| 2         | Go to ISS setting   | Selected ISS settings will be saved                              |                          |

|  |  |  |  |
|--|--|--|--|
|  | Select LDC = ON, VTNF = OFF,<br>WDR = OFF  |  |  |
| 3  | Run 1CH ISS capture + ISS +<br>Display UC<br><br>Capture YUV images using n/w tool | Display must come up and no buffer drops should<br>be observed<br>Captured images must be free of artifacts<br><br>YUV frame must match the display. |  |
| <u>Execution type:</u>                     | Manual   |  |  |
| <u>Estimated exec. duration<br/>(sec):</u> |  |  |  |
| <u>Priority:</u>                           | Medium   |  |  |
| <u>Keywords:</u>                           | tda3xx-evm   |  |  |
| <b>Execution Details</b>                   |  |  |  |
| Build                                      | REL_3_3  |  |  |
| Tester                                     | x0246581   |  |  |
| <u>Execution Result:</u>                   | <b>Passed</b>  |  |  |
| <u>Execution Mode:</u>                     | <b>Manual</b>  |  |  |
| <u>Execution duration (sec):</u>           |  |  |  |

**Test Case VISIONSDK-268: ISS\_Capture\_AR132\_LM\_Read\_Sensor\_Reg**Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with AR132

Input : AR132 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| <u>#:</u>                                  | <u>Step actions:</u>  | <u>Expected Results:</u>   | <u>Execution Status:</u> |
|--|---|--|--------------------------|
| 1  | Go to System Settings<br><br>Select Capture Source as AR132<br>& Display Output as HDMI 1080P   | Capture Source shuld be AR132<br>& Display device as HDMI 1080P  |                          |
| 2  | Go to ISS setting<br><br>Select LDC = OFF, VTNF = OFF, WDR = OFF  | Selected ISS settings will be saved  |                          |
| 3  | Run 1CH ISS capture + ISS + Display UC  | Display must come up and no buffer drops should be observed.<br>Exposure and colors should look correct. |                          |
| 4  | Open Command Prompt on Host machine<br><br>Use the command<br>iss_read_sensor_reg to read<br>chip ID (0x3000)<br>and exposure register (0x3082) | Chip ID and exposure value must be read correctly  |                          |
| <u>Execution type:</u>                     | Manual  |  |                          |
| <u>Estimated exec. duration<br/>(sec):</u> |   |  |                          |
| <u>Priority:</u>                           | Medium  |  |                          |
| <u>Keywords:</u>                           | tda3xx-evm  |  |                          |
| <b>Execution Details</b>                   |   |  |                          |
| Build                                      | REL_3_3   |  |                          |
| Tester                                     | x0246581  |  |                          |
| <u>Execution Result:</u>                   | <b>Passed</b>   |  |                          |
| <u>Execution Mode:</u>                     | <b>Manual</b>   |  |                          |
| <u>Execution duration (sec):</u>           |   |  |                          |

**Test Case VISIONSDK-269: ISS\_Capture\_AR132\_LM\_Write\_Sensor\_Reg**Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with AR132

Input : AR132 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| <u>#:</u> | <u>Step actions:</u>  | <u>Expected Results:</u>  | <u>Execution Status:</u> |
|-----------|---|---|--------------------------|
| 1         | Go to System Settings<br>Select Capture Source as AR132<br>& Display Output as HDMI 1080P   | Capture Source should be AR132<br>& Display device as HDMI 1080P                                      |                          |
| 2         | Go to ISS setting<br>Select LDC = OFF, VTNF = OFF, WDR = OFF  | Selected ISS settings will be saved   |                          |
| 3         | Run 1CH ISS capture + ISS + Display UC  | Display must come up and no buffer drops should be observed. Exposure and colors should look correct. |                          |
| 4         | Open Command Prompt on Host machine<br>Use the command iss_write_sensor_reg to write 0, 4, 8 and c one by one to the exposure register (0x3082) | Change of exposure value must be clearly visible on the display                                       |                          |

Execution type: ManualEstimated exec. duration (sec):Priority: MediumKeywords: tda3xx-evm**Execution Details**

Build REL\_3\_3

Tester x0246581

Execution Result: **Passed**Execution Mode: **Manual**Execution duration (sec):**Test Case VISIONSDK-270: ISS\_Capture\_AR132\_LM\_Save\_DCC\_Profile**Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with AR132

Input : AR132 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| <u>#:</u> | <u>Step actions:</u>  | <u>Expected Results:</u>   | <u>Execution Status:</u> |
|-----------|---|--|--------------------------|
| 1         | Go to System Settings<br>Select Capture Source as AR132<br>& Display Output as HDMI 1080P | Capture Source should be AR132<br>& Display device as HDMI 1080P |                          |
| 2         | Go to ISS setting<br>Select LDC = OFF, VTNF = OFF, WDR = OFF                              | Selected ISS settings will be saved                              |                          |

|  |   |  |  |
|--|---|--|--|
| 3                                      | Run 1CH ISS capture + ISS + Display UC  | Display must come up and no buffer drops should be observed.<br>Exposure and colors should look correct. |  |
| 4                                      | Open Command Prompt on Host machine<br><br>Get the sensor.bin file from driver<br><br>and save it using iss_save_dcc_file network command | There should not be any error/assertion in saving dcc file   |  |
| <u>Execution type:</u> Manual          |   |  |  |
| <u>Estimated exec. duration (sec):</u> |   |  |  |
| <u>Priority:</u> Medium                |   |  |  |
| <u>Keywords:</u> tda3xx-evm            |   |  |  |
| <b>Execution Details</b>               |   |  |  |
| Build                                  | REL_3_3   |  |  |
| Tester                                 | x0246581  |  |  |
| <u>Execution Result:</u>               | <b>Passed</b>   |  |  |
| <u>Execution Mode:</u>                 | <b>Manual</b>   |  |  |
| <u>Execution duration (sec):</u>       |   |  |  |

**Test Case VISIONSDK-271: ISS\_Capture\_AR132\_LM\_Send\_DCC\_Profile**Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with AR132

Input : AR132 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| <u>#:</u>                              | <u>Step actions:</u>   | <u>Expected Results:</u>  | <u>Execution Status:</u> |
|--|--|---|--------------------------|
| 1                                      | Go to System Settings<br><br>Select Capture Source as AR132<br><br>& Display Output as HDMI 1080P                  | Capture Source shuld be AR132<br><br>& Display device as HDMI 1080P   |                          |
| 2                                      | Go to ISS setting<br><br>Select LDC = OFF, VTNF = OFF, WDR = OFF   | Selected ISS settings will be saved   |                          |
| 3                                      | Run 1CH ISS capture + ISS + Display UC   | Display must come up and no buffer drops should be observed.<br>Exposure and colors should look correct.    |                          |
| 4                                      | Open Command Prompt on Host machine<br><br>and send new sensor.bin file using<br>iss_send_dcc_file network command | New DCC profile must be used from the QSPI memory<br><br>There should be a print on console indicating that |                          |
| <u>Execution type:</u> Manual          |  |   |                          |
| <u>Estimated exec. duration (sec):</u> |  |   |                          |
| <u>Priority:</u> Medium                |  |   |                          |
| <u>Keywords:</u> tda3xx-evm            |  |   |                          |
| <b>Execution Details</b>               |  |   |                          |
| Build                                  | REL_3_3  |   |                          |
| Tester                                 | x0246581   |   |                          |
| <u>Execution Result:</u>               | <b>Passed</b>  |   |                          |
| <u>Execution Mode:</u>                 | <b>Manual</b>  |   |                          |
| <u>Execution duration (sec):</u>       |  |   |                          |

**Test Case VISIONSDK-272: ISS\_Capture\_AR132\_LM\_Clear\_DCC\_Profile**Summary:

WDR mode - basic ISS functionality test

ISS Single channle Capture UC with AR132

Input : AR132 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/display is running on IPU1-0 at 30fps

| <u>#:</u> | <u>Step actions:</u>   | <u>Expected Results:</u>   | <u>Execution Status:</u> |
|-----------|--|--|--------------------------|
| 1         | Go to System Settings<br>Select Capture Source as AR132<br>& Display Output as HDMI 1080P                              | Capture Source shuld be AR132<br>& Display device as HDMI 1080P  |                          |
| 2         | Go to ISS setting<br>Select LDC = OFF, VTNF = OFF, WDR = OFF   | Selected ISS settings will be saved  |                          |
| 3         | Run 1CH ISS capture + ISS + Display UC   | Display must come up and no buffer drops should be observed.<br>Exposure and colors should look correct. |                          |
| 4         | Open Command Prompt on Host machine<br>and clear DCC profile from QSPI using<br>iss_clear_dcc_qspi_mem network command | There should not be any error/assertion in<br>cleaning dcc profile in qspi                               |                          |

Execution type: ManualEstimated exec. duration (sec):Priority: MediumKeywords: tda3xx-evm**Execution Details**

Build REL\_3\_3

Tester x0246581

Execution Result: **Passed**Execution Mode: **Manual**Execution duration (sec):**Test Case VISIONSDK-286: ISS\_Capture\_AR132\_LM\_Monochrome**Summary:

Linear mode - basic ISS functionality test

ISS Single channel Capture + ISS ISP Monochrome Display UC with AR132

Input : AR132 sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture/Display is running on IPU1-0 at 30fps

| <u>#:</u> | <u>Step actions:</u>  | <u>Expected Results:</u>  | <u>Execution Status:</u> |
|-----------|---|---|--------------------------|
| 1         | Go to System Settings<br>Select Capture Source as AR132<br>& Display Output as HDMI 1080P | Capture Source should be AR132<br>& Display device as HDMI 1080P  |                          |
| 2         | Run "1CH ISS capture (AR0132) + ISS ISP Monochrome + Display" UC                          | Display must come up and no buffer drops should be observed<br>Exposure and colors should look correct.<br>Most important - white/grey objects should not have any color cast |                          |

Execution type: ManualEstimated exec. duration 60.00

|                                  |               |
|----------------------------------|---------------|
| <u>(sec):</u>                    |               |
| <u>Priority:</u>                 | Medium        |
| <u>Keywords:</u>                 | tda3xx-evm    |
| <b>Execution Details</b>         |               |
| Build                            | REL_3_3       |
| Tester                           | x0246581      |
| <u>Execution Result:</u>         | <b>Passed</b> |
| <u>Execution Mode:</u>           | <b>Manual</b> |
| <u>Execution duration (sec):</u> |               |

#### Test Case VISIONSDK-307: ISS\_dump\_frames\_various\_tap\_points

##### Summary:

ISS Single channle Capture UC with AR140/OV10640/IMX224

Input : AR140/OV10640/IMX224 sensor

Output : HDMI 1080P

##### Preconditions:

Binaries should built with NDK enabled

Verify that Capture/Display is running on IPU1-0 at 30fps

| <u>#:</u>                              | <u>Step actions:</u>   | <u>Expected Results:</u>  | <u>Execution Status:</u> |
|--|--|---|--------------------------|
| 1                                      | Go to System Settings<br><br>Select Capture Source as AR140/OV10640/IMX224<br><br>& Display Output as HDMI 1080P | Capture Source shuld be AR140/OV10640/IMX224<br><br>& Display device as HDMI 1080P  |                          |
| 2                                      | Run "1CH ISS capture + ISS ISP + ISS LDC+VTNF + Display" UC  | Display must come up and no buffer drops should be observed<br>Exposure and colors should look correct.<br>Most important - white/grey objects should not have any color cast |                          |
| 3                                      | Run DCC tool for ISS image tuning<br><br>Connect to target EVM (using IP) & dump frames from various tap-points  | should be able to dump frames from various tap-points   |                          |
| <u>Execution type:</u>                 | Manual   |   |                          |
| <u>Estimated exec. duration (sec):</u> | 60.00  |   |                          |
| <u>Priority:</u>                       | Medium   |   |                          |
| <u>Keywords:</u>                       | None   |   |                          |
| <b>Execution Details</b>               |  |   |                          |
| Build                                  | REL_3_3  |   |                          |
| Tester                                 | x0246581   |   |                          |
| <u>Execution Result:</u>               | <b>Passed</b>  |   |                          |
| <u>Execution Mode:</u>                 | <b>Manual</b>  |   |                          |
| <u>Execution duration (sec):</u>       |  |   |                          |

## 1.4.4.Test Suite : TIDL

### 1.4.4.1.Test Suite : TIDL\_FILE\_IO

#### Test Case VISIONSDK-158: TIDL\_File\_IO\_UC\_DSP\_Performance

##### Summary:

TIDL File IO UC on DSP:

Check Performance numbers

##### Preconditions:

Verify below files should be present in SD card

1. Use case config file (TIDLCFG.TXT)
2. IN.RGB
3. PRM.BIN
4. NET.BIN

| <u>#:</u>                              | <u>Step actions:</u>  | <u>Expected Results:</u>                   | <u>Execution Status:</u> |
|--|---|--|--------------------------|
| 1                                      | 1. Select TIDL File IO UC from Main Menu<br>2. Select DSP<br>3. Select Dump Output frames to file | Frame will be dumped to SD card as OUT.BIN |                          |
| 2                                      | Press "P" to check performance numbers  | On DSP should be <=120sec                  |                          |
| <u>Execution type:</u>                 | Automated   |  |                          |
| <u>Estimated exec. duration (sec):</u> | 60.00   |  |                          |
| <u>Priority:</u>                       | Medium  |  |                          |
| <u>Keywords:</u>                       | tda2xx-evm<br>tda3xx-evm<br>c_performance   |  |                          |
| <b>Execution Details</b>               |   |  |                          |
| Build                                  | REL_3_3   |  |                          |
| Tester                                 | x0246581  |  |                          |
| <u>Execution Result:</u>               | <b>Passed</b>   |  |                          |
| <u>Execution Mode:</u>                 | <b>Manual</b>   |  |                          |
| <u>Execution duration (sec):</u>       |   |  |                          |

#### Test Case VISIONSDK-159: TIDL\_File\_IO\_UC\_DSP\_Dump\_Frames\_File

##### Summary:

TIDL File IO UC on DSP:

Dumping frames to File

##### Preconditions:

Verify below files should be present in SD card

1. Use case config file (TIDLCFG.TXT)
2. IN.RGB
3. PRM.BIN
4. NET.BIN

| #:                                     | Step actions:   | Expected Results:                          | Execution Status: |
|--|---|--|-------------------|
| 1                                      | 1. Select TIDL File IO UC from Main Menu<br>2. Select DSP<br>3. Select Dump Output frmaes to file | Frame will be dumped to SD card as OUT.BIN |                   |
| 2                                      | Compare with Reference output   | On comparing no differences should be seen |                   |
| <u>Execution type:</u>                 | Automated   |  |                   |
| <u>Estimated exec. duration (sec):</u> | 60.00   |  |                   |
| <u>Priority:</u>                       | Medium  |  |                   |
| <u>Keywords:</u>                       | tda2xx-evm<br>tda3xx-evm  |  |                   |
| <b>Execution Details</b>               |   |  |                   |
| Build                                  | REL_3_3   |  |                   |
| Tester                                 | x0246581  |  |                   |
| <u>Execution Result:</u>               | <b>Passed</b>   |  |                   |
| <u>Execution Mode:</u>                 | <b>Manual</b>   |  |                   |
| <u>Execution duration (sec):</u>       |   |  |                   |

**Test Case VISIONSDK-160: TIDL\_File\_IO\_UC\_DSP\_Free\_Run**Summary:

TIDL File IO UC on DSP:

Free Run

Preconditions:

Verify below files should be present in SD card

1. Use case config file (TIDLCFG.TXT)
2. IN.RGB
3. PRM.BIN
4. NET.BIN

| #:                                     | Step actions:   | Expected Results:                                    | Execution Status: |
|--|---|--|-------------------|
| 1                                      | 1. Select TIDL File IO UC from Main Menu<br>2. Select DSP<br>3. Select Free run | No Display & also No Frame will be dumped to SD card |                   |
| <u>Execution type:</u>                 | Automated   |  |                   |
| <u>Estimated exec. duration (sec):</u> | 60.00   |  |                   |
| <u>Priority:</u>                       | Medium  |  |                   |
| <u>Keywords:</u>                       | tda2xx-evm<br>tda3xx-evm  |  |                   |
| <b>Execution Details</b>               |   |  |                   |
| Build                                  | REL_3_3   |  |                   |
| Tester                                 | x0246581  |  |                   |
| <u>Execution Result:</u>               | <b>Passed</b>   |  |                   |
| <u>Execution Mode:</u>                 | <b>Manual</b>   |  |                   |
| <u>Execution duration (sec):</u>       |   |  |                   |

**Test Case VISIONSDK-161: TIDL\_File\_IO\_UC\_EVE\_Performance**Summary:



TIDL File IO UC on EVE:

Check Performance numbers

Preconditions:

Verify below files should be present in SD card

1. Use case config file (TIDLCFG.TXT)
2. IN.RGB
3. PRM.BIN
4. NET.BIN

| #:                              | Step actions:   | Expected Results:                          | Execution Status: |
|---------------------------------|---|--|-------------------|
| 1                               | 1. Select TIDL File IO UC from Main Menu<br><br>2. Select EVE<br><br>3. Select Dump Output frmaes to file | Frame will be dumped to SD card as OUT.BIN |                   |
| 2                               | Press "P" to check performance numbers  | On EVE should be <=450sec                  |                   |
| Execution type:                 | Automated   |  |                   |
| Estimated exec. duration (sec): | 60.00   |  |                   |
| Priority:                       | Medium  |  |                   |
| Keywords:                       | tda2xx-evm<br>tda3xx-evm<br>c_performance   |  |                   |
| Execution Details               |   |  |                   |
| Build                           | REL_3_3   |  |                   |
| Tester                          | x0246581  |  |                   |
| Execution Result:               | Passed  |  |                   |
| Execution Mode:                 | Manual  |  |                   |
| Execution duration (sec):       |   |  |                   |

**Test Case VISIONSDK-162: TIDL\_File\_IO\_UC\_EVE\_Dump\_Frames\_File**Summary:

TIDL File IO UC on EVE:

Dump frames to file

Preconditions:

Verify below files should be present in SD card

1. Use case config file (TIDLCFG.TXT)
2. IN.RGB
3. PRM.BIN
4. NET.BIN

| #:                                     | Step actions:   | Expected Results:                          | Execution Status: |
|--|---|--|-------------------|
| 1                                      | 1. Select TIDL File IO UC from Main Menu<br>2. Select EVE<br>3. Select Dump Output frames to file | Frame will be dumped to SD card as OUT.BIN |                   |
| 2                                      | Compare with Reference output   | On comparing no differences should be seen |                   |
| <u>Execution type:</u>                 |   | Automated                                  |                   |
| <u>Estimated exec. duration (sec):</u> |   | 60.00                                      |                   |
| <u>Priority:</u>                       |   | Medium                                     |                   |
| <u>Keywords:</u>                       |   | tda2xx-evm                                 |                   |

|                                  |               |
|----------------------------------|---------------|
|                                  | tda3xx-evm    |
| <b>Execution Details</b>         |               |
| Build                            | REL_3_3       |
| Tester                           | x0246581      |
| <u>Execution Result:</u>         | <b>Passed</b> |
| <u>Execution Mode:</u>           | <b>Manual</b> |
| <u>Execution duration (sec):</u> |               |

#### Test Case VISIONSDK-163: TIDL\_File\_IO\_UC\_EVE\_Free\_Run

##### Summary:

TIDL File IO UC on EVE:

Free Run

##### Preconditions:

Verify below files should be present in SD card

1. Use case config file (TIDLCFG.TXT)
2. IN.RGB
3. PRM.BIN
4. NET.BIN

| <u>#:</u>                              | <u>Step actions:</u>  | <u>Expected Results:</u>                             | <u>Execution Status:</u> |
|--|---|--|--------------------------|
| 1                                      | 1. Select TIDL File IO UC from Main Menu<br>2. Select EVE<br>3. Select Free run | No Display & also No Frame will be dumped to SD card |                          |
| <u>Execution type:</u>                 | Automated   |  |                          |
| <u>Estimated exec. duration (sec):</u> | 60.00   |  |                          |
| <u>Priority:</u>                       | Medium  |  |                          |
| <u>Keywords:</u>                       | tda2xx-evm<br>tda3xx-evm  |  |                          |
| <b>Execution Details</b>               |   |  |                          |
| Build                                  | REL_3_3   |  |                          |
| Tester                                 | x0246581  |  |                          |
| <u>Execution Result:</u>               | <b>Passed</b>   |  |                          |
| <u>Execution Mode:</u>                 | <b>Manual</b>   |  |                          |
| <u>Execution duration (sec):</u>       |   |  |                          |

## 1.4.5.Test Suite : MISC

### 1.4.5.1.Test Suite : SyncLink

Test Case VISIONSDK-187: VIP\_Capture\_Sync\_Null

Summary:

Single Cam Capture Sync Null UC

supported on TDA2x/TDA2Ex/TDA3x

Input : OV10635 Sensor

Output : Null

Preconditions:

Verify that Capture is running on IPU1-0 at 30fps and display running on IPU1-0 at 60fps

| #: | Step actions: | Expected Results:   | Execution Status: |
|----|---------------|---|-------------------|
| 1  | Run Testsuite | Check Logs of Capture Sync Null UC<br><br>Capture should be running on IPU1-0 at 30fps and display should be running on IPU1-0 at 60fps |                   |

Execution type:

Manual

Estimated exec. duration (sec):

Priority:

Medium

Keywords:

tda2xx-evm  
tda2ex-evm  
tda3xx-evm  
tda2ex-entry  
tda2px-evm  
m\_connector\_links

Execution Details

Build

REL\_3\_3

Tester

x0246581

Execution Result:

Passed

Execution Mode:

Manual

Execution duration (sec):

### 1.4.5.2.Test Suite : DupLink

|  |                      |   |                          |
|--|----------------------|---|--------------------------|
| <b>Test Case VISIONSDK-165: VIP_Capture_Dup_Display</b>                                  |                      |   |                          |
| <u>Summary:</u>  |                      |   |                          |
| Single Cam Capture Dup Display UC  |                      |   |                          |
| supported on TDA2x/TDA2Ex/TDA3x  |                      |   |                          |
| Input : OV10635 Sensor   |                      |   |                          |
| Output : HDMI 1080P  |                      |   |                          |
| <u>Preconditions:</u>  |                      |   |                          |
| Verify that Capture is running on IPU1-0 at 30fps and display running on IPU1-0 at 60fps |                      |   |                          |
| <u>#:</u>  | <u>Step actions:</u> | <u>Expected Results:</u>  | <u>Execution Status:</u> |
| 1  | Run Testsuite        | Check Logs of Capture Dup Display UC<br>Capture should be running on IPU1-0 at 30fps and display should be running on IPU1-0 at 60fps |                          |

|  |   |
|--|---|
| <u>Execution type:</u>                 | Manual  |
| <u>Estimated exec. duration (sec):</u> |   |
| <u>Priority:</u>                       | Medium  |
| <u>Keywords:</u>                       | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm<br>m_connector_links |
| <b>Execution Details</b>               |   |
| Build                                  | REL_3_3   |
| Tester                                 | x0246581  |
| <u>Execution Result:</u>               | <b>Passed</b>   |
| <u>Execution Mode:</u>                 | <b>Manual</b>   |
| <u>Execution duration (sec):</u>       |   |

#### 1.4.5.3.Test Suite : MergeLink

|  |   |   |                          |
|--|---|---|--------------------------|
| <b>Test Case VISIONSDK-166: VIP_Capture_Merge_Display</b>                                |   |   |                          |
| <u>Summary:</u>  |   |   |                          |
| Single Cam Capture Merge Display UC  |   |   |                          |
| supported on TDA2x/TDA2Ex/TDA3x  |   |   |                          |
| Input : OV10635 Sensor   |   |   |                          |
| Output : HDMI 1080P  |   |   |                          |
| <u>Preconditions:</u>  |   |   |                          |
| Verify that Capture is running on IPU1-0 at 30fps and display running on IPU1-0 at 60fps |   |   |                          |
| <u>#:</u>  | <u>Step actions:</u>  | <u>Expected Results:</u>  | <u>Execution Status:</u> |
| 1  | Run Testsuite   | Check Logs of Capture Merge Display UC<br><br>Capture should be running on IPU1-0 at 30fps and display should be running on IPU1-0 at 60fps |                          |
| <u>Execution type:</u>   | Manual  |   |                          |
| <u>Estimated exec. duration (sec):</u>   |   |   |                          |
| <u>Priority:</u>   | Medium  |   |                          |
| <u>Keywords:</u>   | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm<br>m_connector_links |   |                          |
| <b>Execution Details</b>   |   |   |                          |
| Build  | REL_3_3   |   |                          |
| Tester   | x0246581  |   |                          |
| <u>Execution Result:</u>   | <b>Passed</b>   |   |                          |
| <u>Execution Mode:</u>   | <b>Manual</b>   |   |                          |
| <u>Execution duration (sec):</u>   |   |   |                          |

#### 1.4.5.4.Test Suite : StatisticsLogs

|   |  |  |  |
|---|--|--|--|
| <b>Test Case VISIONSDK-211: VIP_SingleCam_Capture_Display_Statistics_Logs</b> |  |  |  |
| <u>Summary:</u>   |  |  |  |
| Capture Display UC  |  |  |  |
| Input : OV10635   |  |  |  |
| Output : HDMI 1080P   |  |  |  |

Preconditions:

Verify that Capture is running on IPU1-0 at 30fps and display running on IPU1-0 at 60fps

| #:                              | Step actions:   | Expected Results:   | Execution Status: |
|---------------------------------|---|---|-------------------|
| 1                               | Go to System Settings<br><br>Select Capture Source as OV10635<br><br>& Display Output as HDMI 1080P | Capture Source shuld be OV10635<br><br>& Display device as HDMI 1080P   |                   |
| 2                               | Run 1 Ch VIP capture + Display UC   | Display must come up and no buffer drops should be observe  |                   |
| 3                               | Press "P"   | It should print all performance statistics<br><br>1. Load on all cores<br><br>2. DDR BW usage<br><br>3. FPS for each Link<br><br>4. Latency to process frames |                   |
| Execution type:                 | Automated   |   |                   |
| Estimated exec. duration (sec): | 60.00   |   |                   |
| Priority:                       | Medium  |   |                   |
| Keywords:                       | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm<br>tda3xx_rvp                  |   |                   |
| Execution Details               |   |   |                   |
| Build                           | REL_3_3   |   |                   |
| Tester                          | x0246581  |   |                   |
| Execution Result:               | Passed  |   |                   |
| Execution Mode:                 | Automated   |   |                   |
| Execution duration (sec):       |   |   |                   |
| Execution notes                 | TestLogPath<br><br>]]>  |   |                   |

**Test Case VISIONSDK-212: Print\_PRCM\_Statistics\_Dpll\_Status**Summary:

Print PRCM Statistics Dpll Status

| #:                              | Step actions:  | Expected Results:                             | Execution Status: |
|---------------------------------|--|---|-------------------|
| 1                               | Go to System Settings -> Print PRCM Statistics<br><br>Press "1" for Dpll Status    | On selecting "1" should print DPLL Statistics |                   |
| Execution type:                 | Automated  |   |                   |
| Estimated exec. duration (sec): | 60.00  |   |                   |
| Priority:                       | Medium   |   |                   |
| Keywords:                       | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm<br>tda3xx_rvp |   |                   |
| Execution Details               |  |   |                   |
| Build                           | REL_3_3  |   |                   |
| Tester                          | x0246581   |   |                   |

|                                  |                    |
|----------------------------------|--------------------|
| <u>Execution Result:</u>         | <b>Passed</b>      |
| <u>Execution Mode:</u>           | <b>Automated</b>   |
| <u>Execution duration (sec):</u> |                    |
| Execution notes                  | TestLogPath<br>]]> |

**Test Case VISIONSDK-213: Print\_PRCM\_Statistics\_Temperature**Summary:

Print PRCM Statistics Temperature

| #:                              | Step actions:  | Expected Results:  | Execution Status: |
|---------------------------------|--|--|-------------------|
| 1                               | Go to System Settings -> Print PRCM Statistics<br><br>Press "2" for Temperature    | On selecting "2" should print current min & max temperature on all cores |                   |
| Execution type:                 | Automated  |  |                   |
| Estimated exec. duration (sec): | 60.00  |  |                   |
| Priority:                       | Medium   |  |                   |
| Keywords:                       | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm<br>tda3xx_rvp |  |                   |
| Execution Details               |  |  |                   |
| Build                           | REL_3_3  |  |                   |
| Tester                          | x0246581   |  |                   |
| Execution Result:               | Passed   |  |                   |
| Execution Mode:                 | Automated  |  |                   |
| Execution duration (sec):       |  |  |                   |
| Execution notes                 | TestLogPath<br><br>]]>   |  |                   |

**Test Case VISIONSDK-214: Print\_PRCM\_Statistics\_Voltage**Summary:

Print PRCM Statistics Voltage

| #:                              | Step actions:  | Expected Results:                           | Execution Status: |
|---------------------------------|--|---|-------------------|
| 1                               | Go to System Settings -> Print PRCM Statistics<br><br>Press "3" for Voltage        | On selecting "3" should print voltage usage |                   |
| Execution type:                 | Automated  |   |                   |
| Estimated exec. duration (sec): | 60.00  |   |                   |
| Priority:                       | Medium   |   |                   |
| Keywords:                       | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm<br>tda3xx_rvp |   |                   |
| Execution Details               |  |   |                   |
| Build                           | REL_3_3  |   |                   |
| Tester                          | x0246581   |   |                   |

|                                  |                    |
|----------------------------------|--------------------|
| <u>Execution Result:</u>         | <b>Passed</b>      |
| <u>Execution Mode:</u>           | <b>Automated</b>   |
| <u>Execution duration (sec):</u> |                    |
| Execution notes                  | TestLogPath<br>]]> |

**Test Case VISIONSDK-215: Print\_PRCM\_Statistics\_Module\_Power\_State**Summary:

Print PRCM Statistics Module Power State

| <u>#:</u>                              | <u>Step actions:</u>   | <u>Expected Results:</u>   | <u>Execution Status:</u> |
|--|--|--|--------------------------|
| 1                                      | Go to System Settings -> Print PRCM Statistics<br>Press "4" for Module Power State | On selecting "4" should print Module Power State<br>Module Name & Module state<br>Module SIDLE State<br>Clock Activite State<br>Power Domain State |                          |
| <u>Execution type:</u>                 | Automated  |  |                          |
| <u>Estimated exec. duration (sec):</u> | 60.00  |  |                          |
| <u>Priority:</u>                       | Medium   |  |                          |
| <u>Keywords:</u>                       | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm<br>tda3xx_rvp |  |                          |
| <b>Execution Details</b>               |  |  |                          |
| Build                                  | REL_3_3  |  |                          |
| Tester                                 | x0246581   |  |                          |
| <u>Execution Result:</u>               | <b>Passed</b>  |  |                          |
| <u>Execution Mode:</u>                 | <b>Automated</b>   |  |                          |
| <u>Execution duration (sec):</u>       |  |  |                          |
| Execution notes                        | TestLogPath<br>]]>   |  |                          |

**Test Case VISIONSDK-216: Print\_PRCM\_Statistics\_CPU\_Frequency**Summary:

Print PRCM Statistics CPU Frequency

| <u>#:</u>                              | <u>Step actions:</u>  | <u>Expected Results:</u>                             | <u>Execution Status:</u> |
|--|---|--|--------------------------|
| 1                                      | Go to System Settings -> Print PRCM Statistics<br>Press "5" for CPU Frequency | On selecting "5" should print Frequency of all cores |                          |
| <u>Execution type:</u>                 | Automated   |  |                          |
| <u>Estimated exec. duration (sec):</u> | 60.00   |  |                          |
| <u>Priority:</u>                       | Medium  |  |                          |
| <u>Keywords:</u>                       | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry                        |  |                          |

|                                  |                          |
|----------------------------------|--------------------------|
|                                  | tda2px-evm<br>tda3xx_rvp |
| <b>Execution Details</b>         |                          |
| Build                            | REL_3_3                  |
| Tester                           | x0246581                 |
| <u>Execution Result:</u>         | <b>Passed</b>            |
| <u>Execution Mode:</u>           | <b>Automated</b>         |
| <u>Execution duration (sec):</u> |                          |
| Execution notes                  | TestLogPath<br>]]>       |

#### Test Case VISIONSDK-217: Print\_PRCM\_Statistics\_Peripherals\_Frequency

##### Summary:

Print PRCM Statistics Peripherals Frequency

| <u>#:</u>                              | <u>Step actions:</u>  | <u>Expected Results:</u>  | <u>Execution Status:</u> |
|--|---|---|--------------------------|
| 1                                      | Go to System Settings -> Print PRCM Statistics<br>Press "6" for Peripherals Frequency | On selecting "6" should print Peripherals Frequency of QSPI & DSS |                          |
| <u>Execution type:</u>                 | Automated   |   |                          |
| <u>Estimated exec. duration (sec):</u> | 60.00   |   |                          |
| <u>Priority:</u>                       | Medium  |   |                          |
| <u>Keywords:</u>                       | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm<br>tda3xx_rvp    |   |                          |
| <b>Execution Details</b>               |   |   |                          |
| Build                                  | REL_3_3   |   |                          |
| Tester                                 | x0246581  |   |                          |
| <u>Execution Result:</u>               | <b>Passed</b>   |   |                          |
| <u>Execution Mode:</u>                 | <b>Automated</b>  |   |                          |
| <u>Execution duration (sec):</u>       |   |   |                          |
| Execution notes                        | TestLogPath<br>]]>  |   |                          |

#### Test Case VISIONSDK-218: Print\_PRCM\_Statistics\_Prcm\_Register\_Data

##### Summary:

Print PRCM Statistics Prcm Register Data

| <u>#:</u>                              | <u>Step actions:</u>   | <u>Expected Results:</u>   | <u>Execution Status:</u> |
|--|--|--|--------------------------|
| 1                                      | Go to System Settings -> Print PRCM Statistics<br>Press "7" for Prcm Register Data | On selecting "6" should print Prcm Register Data of all POWER DOMAIN<br>Reg. Address & Value |                          |
| <u>Execution type:</u>                 | Automated  |  |                          |
| <u>Estimated exec. duration (sec):</u> | 60.00  |  |                          |
| <u>Priority:</u>                       | Medium   |  |                          |
| <u>Keywords:</u>                       | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry                             |  |                          |



|                                  |                          |
|----------------------------------|--------------------------|
|                                  | tda2px-evm<br>tda3xx_rvp |
| <b>Execution Details</b>         |                          |
| Build                            | REL_3_3                  |
| Tester                           | x0246581                 |
| <u>Execution Result:</u>         | <b>Passed</b>            |
| <u>Execution Mode:</u>           | <b>Automated</b>         |
| <u>Execution duration (sec):</u> |                          |
| Execution notes                  | TestLogPath<br><br>]]>   |

**Test Case VISIONSDK-219: Print\_PRCM\_Statistics\_Power\_Consumption**Summary:

Print PRCM Statistics Power Consumption

Supported only on TDA2x

| <u>#:</u>                              | <u>Step actions:</u>  | <u>Expected Results:</u>                        | <u>Execution Status:</u> |
|--|---|---|--------------------------|
| 1                                      | Go to System Settings -> Print PRCM Statistics<br><br>Press "8" for Power Consumption | On selecting "8" should print Power Consumption |                          |
| <u>Execution type:</u>                 | Automated   |   |                          |
| <u>Estimated exec. duration (sec):</u> | 60.00   |   |                          |
| <u>Priority:</u>                       | Medium  |   |                          |
| <u>Keywords:</u>                       | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm<br>tda3xx_rvp    |   |                          |
| <b>Execution Details</b>               |   |   |                          |
| Build                                  | REL_3_3   |   |                          |
| Tester                                 | x0246581  |   |                          |
| <u>Execution Result:</u>               | <b>Passed</b>   |   |                          |
| <u>Execution Mode:</u>                 | <b>Automated</b>  |   |                          |
| <u>Execution duration (sec):</u>       |   |   |                          |
| Execution notes                        | TestLogPath<br><br>]]>  |   |                          |

**Test Case VISIONSDK-220: Print\_PRCM\_Statistics\_All\_PRCM\_Stats**Summary:

Print PRCM Statistics All PRCM Stats

| <u>#:</u> | <u>Step actions:</u>   | <u>Expected Results:</u>   | <u>Execution Status:</u> |
|-----------|--|--|--------------------------|
| 1         | Go to System Settings -> Print PRCM Statistics<br><br>Press "9" for All PRCM Stats | On selecting "9" should print All PRCM Stats<br><br>Dpll Status<br><br>Temperature<br><br>Voltage<br><br>Module Power State<br><br>CPU frequency |                          |

|  |  |  |
|--|--|--|
|  | Peripherals Frequency  |  |
|  | Prcm register Data   |  |
|  | Power Consumption  |  |
| <u>Execution type:</u>                 | Automated  |  |
| <u>Estimated exec. duration (sec):</u> | 60.00  |  |
| <u>Priority:</u>                       | Medium   |  |
| <u>Keywords:</u>                       | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm<br>tda3xx_rvp |  |
| <b>Execution Details</b>               |  |  |
| Build                                  | REL_3_3  |  |
| Tester                                 | x0246581   |  |
| <u>Execution Result:</u>               | <b>Passed</b>  |  |
| <u>Execution Mode:</u>                 | <b>Automated</b>   |  |
| <u>Execution duration (sec):</u>       |  |  |
| Execution notes                        | TestLogPath<br><br>]]>   |  |

#### 1.4.5.5.Test Suite : FATFS

|   |  |  |                          |
|---|--|--|--------------------------|
| <b>Test Case VISIONSDK-228: File_IO_UC_MMCSDB_IPI1_0</b>                  |  |  |                          |
| <u>Summary:</u>   |  |  |                          |
| File IO UC using MMCSDB on IPI1_0   |  |  |                          |
| Read ApplImage from SD card &   |  |  |                          |
| write back same to SD card  |  |  |                          |
| <u>Preconditions:</u>   |  |  |                          |
| Verify FATFS running IPI1_0   |  |  |                          |
| Build SDK with FATFS flags enabled & NDK disabled and FATFS lib on IPI1_0 |  |  |                          |
| <u>#:</u>   | <u>Step actions:</u>   | <u>Expected Results:</u>   | <u>Execution Status:</u> |
| 1   | 1. Select File IO UC from Menu                                       | No Display<br><br>On console, Time taken to read & write should be displayed |                          |
| <u>Execution type:</u>  | Automated  |  |                          |
| <u>Estimated exec. duration (sec):</u>                                    | 60.00  |  |                          |
| <u>Priority:</u>  | Medium   |  |                          |
| <u>Keywords:</u>  | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm |  |                          |
| <b>Execution Details</b>  |  |  |                          |
| Build   | REL_3_3  |  |                          |
| Tester  | x0246581   |  |                          |
| <u>Execution Result:</u>  | <b>Passed</b>  |  |                          |
| <u>Execution Mode:</u>  | <b>Automated</b>   |  |                          |
| <u>Execution duration (sec):</u>  |  |  |                          |
| Execution notes   | TestLogPath<br><br>]]>   |  |                          |

#### 1.4.5.6.Test Suite : Limp\_Home\_Mode

**Test Case VISIONSDK-277: Limp\_Home\_Mode**Summary:

Limp Home Mode UC

Input : HDMI

Output : HDMI 1080P

Preconditions:

Verify whether display shows a smooth stitching of the single cam views PD+TSR+VD+LD+TLR+SFM  
All running at 15fps, Also check performance stats match with datasheet

| <u>#:</u> | <u>Step actions:</u>  | <u>Expected Results:</u>  | <u>Execution Status:</u> |
|-----------|---|---|--------------------------|
| 1         | Go to System Settings<br><br>Select Capture Source as HDMI<br><br>& Display Output as HDMI 1080P  | Capture Source should be HDMI<br><br>& Display device as HDMI 1080P   |                          |
| 2         | Run 1CH VIP capture (HDMI) + FrontCam Analytics 2 (PD+TSR+VD+LD+TLR+SFM) (DSPx, EVEx) + Display UC  | Display must come up and no buffer drops should be observed   |                          |
| 3         | Press "t"   | Should Show Thermal Configuration Menu  |                          |
| 4         | Choose below listed options one by one by one<br><br>1: Change THOT Temperature<br><br>2: Change TCOLD Temperature<br><br>3: Show current THOT Temperature<br><br>4: Show current TCOLD Temperature<br><br>5: Change Threshold Step Size<br><br>6: Show Limp Home Status<br><br>7: Switch to Limp Home Mode<br><br>8: Return to Normal Usecase Mode<br><br>x: Exit Thermal Menu | Option should be selected<br><br>On pressing "1" should display temperature to change ranging from 10 -100 deg c<br><br>On pressing "2" should display temperature to change ranging from 10 -100 deg c<br><br>On pressing "3" should display current THOT temperature<br><br>On pressing "4" should display current TCOLD temperature<br><br>On pressing "5" should display temperature to change ranging from 3 - 15 deg c<br><br>On pressing "6" should display current Limp Home Status (Limp Home Mode = ACTIVE!! or IN-ACTIVE!! should display on console)<br><br>On pressing "7" should switch to Limp Home Mode<br><br>On pressing "8" Return to Normal Usecase Mode<br><br>On pressing "x" should Exit from Thermal menu |                          |

Execution type: AutomatedEstimated exec. duration (sec): 60.00Priority: Medium
Keywords:  
tda2xx-evm  
tda3xx-evm  
tda2px-evm
**Execution Details**

Build REL\_3\_3

Tester x0246581

Execution Result: **Passed**Execution Mode: **Manual**Execution duration (sec):**1.4.5.7.Test Suite : Task\_time\_measure\_utility****Test Case VISIONSDK-289: VIP\_Capture\_Display\_task\_time\_measure\_utility**

Summary:

Capture Display UC

supported on all platforms

Input : OV10635

Output : HDMI 1080P

Preconditions:

Verify that Capture is running on IPU1-0 at 30fps and display running on IPU1-0 at 60fps

| #:                              | Step actions:   | Expected Results:   | Execution Status: |
|---------------------------------|---|---|-------------------|
| 1                               | Go to System Settings<br><br>Select Capture Source as OV10635<br><br>& Display Output as HDMI 1080P | Capture Source should be OV10635<br><br>& Display device as HDMI 1080P                |                   |
| 2                               | Run 1 Ch VIP capture + Display UC   | Display must come up and no buffer drops should be observe                            |                   |
| 3                               | Press "4" for Demonstrate Task Timer utility  | On console should print Global time taken & actual time taken by utility for function |                   |
| Execution type:                 |   | Automated   |                   |
| Estimated exec. duration (sec): |   | 60.00   |                   |
| Priority:                       |   | Medium  |                   |
| Keywords:                       |   | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm                  |                   |
| Execution Details               |   |   |                   |
| Build                           | REL_3_3   |   |                   |
| Tester                          | x0246581  |   |                   |
| Execution Result:               | Passed  |   |                   |
| Execution Mode:                 | Automated   |   |                   |
| Execution duration (sec):       |   |   |                   |
| Execution notes                 | TestLogPath<br><br>]]>  |   |                   |

**1.4.5.8.Test Suite : TLFW\_verify**

| <b>Test Case VISIONSDK-309: TLFW_verification</b> |  |   |                          |
|---|--|---|--------------------------|
| <u>Summary:</u>                                   |  |   |                          |
| Verifying testlink fw                             |  |   |                          |
| <u>Preconditions:</u>                             |  |   |                          |
| staf should be running                            |  |   |                          |
| <u>#:</u>   | <u>Step actions:</u>   | <u>Expected Results:</u>  | <u>Execution Status:</u> |
| 1   | 1. Add all vision SDK test cases to test link, Map with requirements from JIRA<br><br>2. Create a test plan & under that create a build<br><br>3. Add test cases to execute for that particular build<br><br>4. Trigger all automated test cases from test link<br><br>5. Execute remaining manual test cases from test link | User should be able to trigger all automated test cases from test link<br><br>& also able to update test result for manual test cases |                          |

|  |                         |  |  |
|--|-------------------------|--|--|
|  | 6. Generate test report |  |  |
| <u>Execution type:</u>                 | Manual                  |  |  |
| <u>Estimated exec. duration (sec):</u> |                         |  |  |
| <u>Priority:</u>                       | Medium                  |  |  |
| <u>Keywords:</u>                       | None                    |  |  |
| <b>Execution Details</b>               |                         |  |  |
| Build                                  | REL_3_3                 |  |  |
| Tester                                 | x0246581                |  |  |
| <u>Execution Result:</u>               | <b>Passed</b>           |  |  |
| <u>Execution Mode:</u>                 | <b>Manual</b>           |  |  |
| <u>Execution duration (sec):</u>       |                         |  |  |

|   |  |   |                          |
|---|--|---|--------------------------|
| <b>Test Case VISIONSDK-325: VSDK_restructuring_directory_structure</b>    |  |   |                          |
| <u>Summary:</u><br>restructuring directory structure for VSDk 3.0 release |  |   |                          |
| <u>#:</u>   | <u>Step actions:</u>   | <u>Expected Results:</u>                | <u>Execution Status:</u> |
| 1   | Restructure directory structure for VSDK into separate Folder as below<br><br>link_fw<br><br>Make System (Common for FW & all Apps modules)<br><br>sample_app<br><br>apps<br><br>algorithms<br><br>docs<br><br>testsuite | Directory structure should be as stated |                          |
| <u>Execution type:</u>  | Manual   |   |                          |
| <u>Estimated exec. duration (sec):</u>                                    |  |   |                          |
| <u>Priority:</u>  | Medium   |   |                          |
| <u>Keywords:</u>  | None   |   |                          |
| <b>Execution Details</b>  |  |   |                          |
| Build   | REL_3_3  |   |                          |
| Tester  | x0246581   |   |                          |
| <u>Execution Result:</u>  | <b>Passed</b>  |   |                          |
| <u>Execution Mode:</u>  | <b>Manual</b>  |   |                          |
| <u>Execution duration (sec):</u>  |  |   |                          |

## 1.4.6.Test Suite : ECC\_FFI

|  |   |  |                   |
|--|---|--|-------------------|
| Test Case VISIONSDK-121: Capture_FrameCopy_FFI_DSP1_Display                |   |  |                   |
| Summary:   |   |  |                   |
| ECC FFI UC - 1CH VIP capture + QM Alg Frame Copy with FFI (DSP1) + Display |   |  |                   |
| Input : OV10635 sensor   |   |  |                   |
| Output : HDMI 1080P  |   |  |                   |
| Preconditions:   |   |  |                   |
| Ensure Binaries build with ECC_FFI_INCLUDE=yes                             |   |  |                   |
| Verify that Capture/display is running on IPU1-0 at 30fps                  |   |  |                   |
| #:   | Step actions:   | Expected Results:  | Execution Status: |
| 1  | Run "1CH VIP capture + QM Alg Frame Copy with FFI (DSP1) + Display " UC | Display must come up and no buffer drops should be observed<br>Performance stats must match with Datasheet |                   |
| Execution type:  | Automated   |  |                   |
| Estimated exec. duration (sec):  | 60.00   |  |                   |
| Priority:  | Medium  |  |                   |
| Keywords:  | None  |  |                   |
| Execution Details  |   |  |                   |
| Build  | REL_3_3   |  |                   |
| Tester   | x0246581  |  |                   |
| Execution Result:  | Passed  |  |                   |
| Execution Mode:  | Automated   |  |                   |
| Execution duration (sec):  |   |  |                   |
| Execution notes  | TestLogPath<br><br>]]>  |  |                   |

|   |   |  |                          |
|---|---|--|--------------------------|
| <b>Test Case VISIONSDK-122: Capture_FrameCopy_FFI_EVE1_Display</b>                      |   |  |                          |
| <u>Summary:</u>   |   |  |                          |
| ECC FFI UC - 1CH VIP capture + QM Alg Frame Copy with FFI (EVE1) + Display (TDA3x only) |   |  |                          |
| Input : OV10635 sensor  |   |  |                          |
| Output : HDMI 1080P   |   |  |                          |
| <u>Preconditions:</u>   |   |  |                          |
| Ensure Binaries build with ECC_FFI_INCLUDE=yes  |   |  |                          |
| Verify that Capture/display is running on IPU1-0 at 30fps                               |   |  |                          |
| <u>#:</u>   | <u>Step actions:</u>  | <u>Expected Results:</u>   | <u>Execution Status:</u> |
| 1   | Run "1CH VIP capture + QM Alg Frame Copy with FFI (EVE1) + Display (TDA3x only)" UC | Display must come up and no buffer drops should be observed<br>Performance stats must match with Datasheet |                          |
| <u>Execution type:</u>  | Automated   |  |                          |
| <u>Estimated exec. duration (sec):</u>  | 60.00   |  |                          |
| <u>Priority:</u>  | Medium  |  |                          |

|                                  |                        |
|----------------------------------|------------------------|
| <u>Keywords:</u>                 | None                   |
| <b>Execution Details</b>         |                        |
| Build                            | REL_3_3                |
| Tester                           | x0246581               |
| <u>Execution Result:</u>         | <b>Passed</b>          |
| <u>Execution Mode:</u>           | <b>Automated</b>       |
| <u>Execution duration (sec):</u> |                        |
| Execution notes                  | TestLogPath<br><br>]]> |

## 1.4.7.Test Suite : IPC\_LIB

|   |   |  |                          |
|---|---|--|--------------------------|
| <b>Test Case VISIONSDK-123: IPC_LIB</b>                   |   |  |                          |
| <u>Summary:</u>   |   |  |                          |
| IPC LIB UC  |   |  |                          |
| Input : OV10635 sensor                                    |   |  |                          |
| Output : HDMI 1080P                                       |   |  |                          |
| <u>Preconditions:</u>                                     |   |  |                          |
| Build binaries for all platform with IPC_LIB_INCLUDE=yes  |   |  |                          |
| Verify that Capture/display is running on IPU1-0 at 30fps |   |  |                          |
| <u>#:</u>   | <u>Step actions:</u>  | <u>Expected Results:</u>   | <u>Execution Status:</u> |
| 1   | Run all UCc one by one from UC menu   | Display must come up and no buffer drops should be observed<br>Performance stats must match with Datasheet |                          |
| <u>Execution type:</u>                                    | Manual  |  |                          |
| <u>Estimated exec. duration (sec):</u>                    |   |  |                          |
| <u>Priority:</u>  | Medium  |  |                          |
| <u>Keywords:</u>  | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm<br>m_ipc |  |                          |
| <b>Execution Details</b>                                  |   |  |                          |
| Build   | REL_3_3   |  |                          |
| Tester  | x0246581  |  |                          |
| <u>Execution Result:</u>                                  | <b>Passed</b>   |  |                          |
| <u>Execution Mode:</u>                                    | <b>Automated</b>  |  |                          |
| <u>Execution duration (sec):</u>                          |   |  |                          |
| Execution notes   | TestLogPath<br><br>]]>  |  |                          |

|  |                                     |  |                          |
|--|-------------------------------------|--|--------------------------|
| <b>Test Case VISIONSDK-240: Low_Latency_IPC</b>                              |                                     |  |                          |
| <u>Summary:</u>  |                                     |  |                          |
| Low Latency IPC UC   |                                     |  |                          |
| Input : OV10635 sensor   |                                     |  |                          |
| Output : HDMI 1080P  |                                     |  |                          |
| <u>Preconditions:</u>  |                                     |  |                          |
| Build binaries for all platform with IPC_LIB_INCLUDE=yes & WORKQ_INCLUDE=yes |                                     |  |                          |
| Verify that Capture/display is running on IPU1-0 at 30fps                    |                                     |  |                          |
| <u>#:</u>  | <u>Step actions:</u>                | <u>Expected Results:</u>   | <u>Execution Status:</u> |
| 1  | Run all UCc one by one from UC menu | Display must come up and no buffer drops should be observed<br>Performance stats must match with Datasheet |                          |
| <u>Execution type:</u>   | Manual                              |  |                          |
| <u>Estimated exec. duration</u>  |                                     |  |                          |



|                                  |  |
|----------------------------------|--|
| <u>(sec):</u>                    |  |
| <u>Priority:</u>                 | Medium   |
| <u>Keywords:</u>                 | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm |
| <b>Execution Details</b>         |  |
| Build                            | REL_3_3  |
| Tester                           | x0246581   |
| <u>Execution Result:</u>         | <b>Passed</b>  |
| <u>Execution Mode:</u>           | <b>Manual</b>  |
| <u>Execution duration (sec):</u> |  |

## 1.4.8.Test Suite : RTI

### Test Case VISIONSDK-226: VIP\_Capture\_Display\_suspend\_IPU1\_0

#### Summary:

Capture Display UC

Input : OV10635

Output : HDMI 1080P

#### Preconditions:

Verify that Capture is running on IPU1-0 at 30fps and display running on IPU1-0 at 60fps

verify RTI configuration with expiry detection and recovery support

Load the binaries using CCS/SD card

| #:                              | Step actions:   | Expected Results:  | Execution Status: |
|---------------------------------|---|--|-------------------|
| 1                               | Go to System Settings<br>Select Capture Source as OV10635<br>& Display Output as HDMI 1080P | Capture Source should be OV10635<br>& Display device as HDMI 1080P               |                   |
| 2                               | Run 1 Ch VIP capture + Display UC   | Display must come up and no buffer drops should be observe                       |                   |
| 3                               | Suspend/reset the IPU core through CCS  | System should re-start automatically<br><br>RTI logs should displayed on console |                   |
| Execution type:                 | Manual  |  |                   |
| Estimated exec. duration (sec): |   |  |                   |
| Priority:                       | Medium  |  |                   |
| Keywords:                       | tda3xx-evm  |  |                   |
| Execution Details               |   |  |                   |
| Build                           | REL_3_3   |  |                   |
| Tester                          | x0246581  |  |                   |
| Execution Result:               | Passed  |  |                   |
| Execution Mode:                 | Manual  |  |                   |
| Execution duration (sec):       |   |  |                   |

### Test Case VISIONSDK-227: VIP\_Capture\_FrameCopy\_Display\_suspend\_DSP\_EVE

#### Summary:

Capture Framecopy Display UC on DSP1/EVE1

Input : OV10635

Output : HDMI 1080P

#### Preconditions:

Verify that Capture is running on IPU1-0 at 30fps and display running on IPU1-0 at 60fps

verify RTI configuration with expiry detection and recovery support

Load the binaries using CCS/SD card

| #: | Step actions: | Expected Results: | Execution |
|----|---------------|-------------------|-----------|
|----|---------------|-------------------|-----------|

|  |   |  | <u>Status:</u> |
|--|---|--|----------------|
| 1                                      | Go to System Settings<br>Select Capture Source as OV10635<br>& Display Output as HDMI 1080P | Capture Source should be OV10635<br>& Display device as HDMI 1080P                     |                |
| 2                                      | Run 1 Ch VIP capture + Framecopy + Display UC   | Display must come up and no buffer drops should be observed                            |                |
| 3                                      | Suspend/reset the DSP/EVE core through CCS  | CPU load bar of suspended core shown as red<br>RTI logs should be displayed on console |                |
| <u>Execution type:</u>                 | Manual  |  |                |
| <u>Estimated exec. duration (sec):</u> |   |  |                |
| <u>Priority:</u>                       | Medium  |  |                |
| <u>Keywords:</u>                       | tda3xx-evm  |  |                |
| <b>Execution Details</b>               |   |  |                |
| Build                                  | REL_3_3   |  |                |
| Tester                                 | x0246581  |  |                |
| <u>Execution Result:</u>               | <b>Passed</b>   |  |                |
| <u>Execution Mode:</u>                 | <b>Manual</b>   |  |                |
| <u>Execution duration (sec):</u>       |   |  |                |

## 1.5.Test Suite : Open\_Compute

---

## 1.5.1.Test Suite : OpenVX

### Test Case VISIONSDK-223: OpenVX\_Confirmation\_Test

#### Summary:

OpenVX Confirmation Test v1.1

supported on both Bios/Linux

#### Preconditions:

Verify that Capture is running on IPU1-0 at 30fps and display running on IPU1-0 at 60fps

| #:                                     | Step actions:  | Expected Results:                          | Execution Status: |
|--|--|--|-------------------|
| 1                                      | Boot EVM<br>Run OpenVX Confirmation Test v1.1                        | Confirmation test should run automatically |                   |
| <u>Execution type:</u>                 | Manual   |  |                   |
| <u>Estimated exec. duration (sec):</u> | 60.00  |  |                   |
| <u>Priority:</u>                       | Medium   |  |                   |
| <u>Keywords:</u>                       | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm |  |                   |
| <b>Execution Details</b>               |  |  |                   |
| Build                                  | REL_3_3  |  |                   |
| Tester                                 | x0246581   |  |                   |
| <u>Execution Result:</u>               | <b>Passed</b>  |  |                   |
| <u>Execution Mode:</u>                 | <b>Manual</b>  |  |                   |
| <u>Execution duration (sec):</u>       |  |  |                   |

### Test Case VISIONSDK-224: OpenVX\_Tutorials

#### Summary:

OpenVX Tutorials

supported on both Bios/Linux

#### Preconditions:

Verify that Capture is running on IPU1-0 at 30fps and display running on IPU1-0 at 60fps

| #:                                     | Step actions:  | Expected Results:                  | Execution Status: |
|--|--|------------------------------------|-------------------|
| 1                                      | Boot EVM<br>Run OpenVX Tutorials                                     | Tutorials should run automatically |                   |
| <u>Execution type:</u>                 | Manual   |                                    |                   |
| <u>Estimated exec. duration (sec):</u> | 60.00  |                                    |                   |
| <u>Priority:</u>                       | Medium   |                                    |                   |
| <u>Keywords:</u>                       | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm |                                    |                   |
| <b>Execution Details</b>               |  |                                    |                   |
| Build                                  | REL_3_3  |                                    |                   |
| Tester                                 | x0246581   |                                    |                   |
| <u>Execution Result:</u>               | <b>Passed</b>  |                                    |                   |

|                                  |               |
|----------------------------------|---------------|
| <u>Execution Mode:</u>           | <b>Manual</b> |
| <u>Execution duration (sec):</u> |               |

**Test Case VISIONSDK-225: VIP\_Capture\_OpenVX\_Display\_Input\_OV10635\_Output\_HDMI\_1080P**Summary:

OpenVX Capture Display UC supported on Bios

Input : OV10635

Output : HDMI 1080P

Preconditions:

Verify that Capture is running on IPU1-0 at 30fps and display running on IPU1-0 at 60fps

| <u>#:</u>                              | <u>Step actions:</u>   | <u>Expected Results:</u>  | <u>Execution Status:</u> |
|--|--|---|--------------------------|
| 1                                      | Go to System Settings<br><br>Select Capture Source as OV10635 Sensor<br><br>& Display Output as HDMI 1080P | Capture Source should be OV10635 Sensor<br><br>& Display device as HDMI 1080P |                          |
| 2                                      | Run "VIP Single Channel Capture + OpenVX + Display" UC   | Display must come up and no buffer drops should be observe                    |                          |
| <u>Execution type:</u>                 | Manual   |   |                          |
| <u>Estimated exec. duration (sec):</u> | 60.00  |   |                          |
| <u>Priority:</u>                       | Medium   |   |                          |
| <u>Keywords:</u>                       | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm                                       |   |                          |
| <b>Execution Details</b>               |  |   |                          |
| Build                                  | REL_3_3  |   |                          |
| Tester                                 | x0246581   |   |                          |
| <u>Execution Result:</u>               | <b>Passed</b>  |   |                          |
| <u>Execution Mode:</u>                 | <b>Manual</b>  |   |                          |
| <u>Execution duration (sec):</u>       |  |   |                          |

## 1.6.Test Suite : Multi\_Cam

---

## 1.6.1.Test Suite : Multi\_Channel\_LVDS\_Capture\_Display

|   |   |   |                          |
|---|---|---|--------------------------|
| Test Case VISIONSDK-22: VIP_4CH_Capture_Display_OV10635_913deser  |   |   |                          |
| <u>Summary:</u>   |   |   |                          |
| 4 Channel Capture Display UC  |   |   |                          |
| Input : OV10635 with 913/914 deserializer   |   |   |                          |
| Output : HDMI 1080P   |   |   |                          |
| <u>Preconditions:</u>   |   |   |                          |
| Verify whether display shows a smooth stitching of the 4 views in Mosaic<br>All running at 30fps. Also check performance stats match with datasheet |   |   |                          |
| <u>#:</u>   | <u>Step actions:</u>  | <u>Expected Results:</u>  | <u>Execution Status:</u> |
| 1   | Go to System Settings<br><br>Select Capture Source as OV10635<br><br>& Display Output as HDMI 1080P                               | Capture Source shuld be OV10635<br><br>& Display device as HDMI 1080P   |                          |
| 2   | Run "4CH VIP Capture + Mosaic Display" UC<br><br>Select "0" For Single channel mode<br><br>Select "1" For Multi channel mode      | On selecting "0"<br><br>Display must come up with CH0 preview on full screen and no buffer drops should be observe<br><br>On selecting "1"<br><br>Display must come up with 4CH mosaic on full screen and no buffer drops should be observe |                          |
| <u>Execution type:</u>  | Automated   |   |                          |
| <u>Estimated exec. duration (sec):</u>  | 60.00   |   |                          |
| <u>Priority:</u>  | Medium  |   |                          |
| <u>Keywords:</u>  | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm<br>c_regression<br>c_qualification<br>m_capture<br>m_display |   |                          |
| <b>Execution Details</b>  |   |   |                          |
| Build   | REL_3_3   |   |                          |
| Tester  | x0246581  |   |                          |
| <u>Execution Result:</u>  | <b>Passed</b>   |   |                          |
| <u>Execution Mode:</u>  | <b>Manual</b>   |   |                          |
| <u>Execution duration (sec):</u>  |   |   |                          |

|   |  |  |  |
|---|--|--|--|
| <b>Test Case VISIONSDK-132: CSI2_4CH_Capture_Display_OV10635_964deser</b> |  |  |  |
| <u>Summary:</u>   |  |  |  |
| 4 Channel Capture Display UC  |  |  |  |
| Input : OV10635 with 964 deserializer                                     |  |  |  |
| Output : HDMI 1080P   |  |  |  |
| <u>Preconditions:</u>   |  |  |  |



Verify whether display shows a smooth stitching of the 4 views in Mosaic  
All running at 30fps. Also check performance stats match with datasheet

| #:                                     | Step actions:   | Expected Results:   | Execution Status: |
|--|---|---|-------------------|
| 1                                      | Go to System Settings<br><br>Select Capture Source as<br>"OV10635 Sensor for Mosaic Display - SAT0088/OV10635 (TDA2EX & TDA3x)"<br><br>& Display Output as HDMI 1080P | Capture Source should be "OV10635 Sensor for Mosaic Display - SAT0088/OV10635 (TDA2EX & TDA3x)"<br><br>& Display device as HDMI 1080P |                   |
| 2                                      | Run "OV10635 & UB964 4CH CSI2 Capture + Display" UC<br><br>Select "1" For Multi channel mode  | On selecting "1"<br><br>Display must come up with 4CH mosaic on full screen and no buffer drops should be observe                     |                   |
| <u>Execution type:</u>                 | Automated   |   |                   |
| <u>Estimated exec. duration (sec):</u> | 60.00   |   |                   |
| <u>Priority:</u>                       | Medium  |   |                   |
| <u>Keywords:</u>                       | tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry  |   |                   |
| <b>Execution Details</b>               |   |   |                   |
| Build                                  | REL_3_3   |   |                   |
| Tester                                 | x0246581  |   |                   |
| <u>Execution Result:</u>               | <b>Passed</b>   |   |                   |
| <u>Execution Mode:</u>                 | <b>Manual</b>   |   |                   |
| <u>Execution duration (sec):</u>       |   |   |                   |

## 1.6.2.Test Suite : SelectLink

---

### Test Case VISIONSDK-186: VIP\_4CH\_Capture\_Select\_Display

#### Summary:

Multi Cam Capture Select Display UC

supported on TDA2x/TDA2Ex/TDA3x

Input : OV10635 Sensor

Output : HDMI 1080P

#### Preconditions:

Verify that Capture is running on IPU1-0 at 30fps and display running on IPU1-0 at 60fps

| <u>#:</u> | <u>Step actions:</u> | <u>Expected Results:</u>   | <u>Execution Status:</u> |
|-----------|----------------------|--|--------------------------|
| 1         | Run Testsuite        | Check Logs of LVDS Capture Select Display UC<br>Capture should be running on IPU1-0 at 30fps and<br>display should be running on IPU1-0 at 60fps |                          |

Execution type: Manual

Estimated exec. duration (sec):

Priority: Medium

Keywords:  
tda2xx-evm  
tda2ex-evm  
tda3xx-evm  
tda2ex-entry  
tda2px-evm

#### **Execution Details**

Build REL\_3\_3

Tester x0246581

Execution Result: **Passed**

Execution Mode: **Manual**

Execution duration (sec):

### 1.6.3.Test Suite : VIP\_4CH\_Capture\_Color\_To\_Gray\_Display

---

**Test Case VISIONSDK-188: VIP\_4CH\_Capture\_Color\_To\_Gray\_Display**
Summary:

Multi Cam Capture Color to Gray Display UC

supported on TDA2x/TDA2Ex/TDA3x

Input : OV10635 Sensor

Output : HDMI 1080P

Preconditions:

Verify that Capture is running on IPU1-0 at 30fps and display running on IPU1-0 at 60fps

| #: | Step actions: | Expected Results:   | Execution Status: |
|----|---------------|---|-------------------|
| 1  | Run Testsuite | Check Logs of LVDS Capture Color to Gray Display UC<br>Capture should be running on IPU1-0 at 30fps and<br>display should be running on IPU1-0 at 60fps |                   |

Execution type: Manual

Estimated exec. duration (sec):

Priority: Medium

Keywords: tda2xx-evm  
tda3xx-evm

**Execution Details**

Build REL\_3\_3

Tester x0246581

Execution Result: **Passed**

Execution Mode: **Manual**

Execution duration (sec):

## 1.6.4.Test Suite : VIP\_4CH\_Capture\_VPE\_Sync\_DMA\_SWMS\_Display

### Test Case VISIONSDK-192: VIP\_4CH\_Capture\_VPE\_Sync\_DMA\_SWMS\_Display

#### Summary:

Multi Cam Capture VPE Sync DMA SWMS Display UC

supported on TDA2x/TDA3x

Input : OV10635 Sensor

Output : HDMI 1080P

On IPU/A15: System EDMA

On DSP: Local DMA

#### Preconditions:

Verify that Capture is running on IPU1-0 at 30fps and display running on IPU1-0 at 60fps

| <u>#:</u> | <u>Step actions:</u> | <u>Expected Results:</u>  | <u>Execution Status:</u> |
|-----------|----------------------|---|--------------------------|
| 1         | Run Testsuite        | Check Logs of LVDS Capture VPE Sync DMA SWMS Display UC<br>Capture should be running on IPU1-0 at 30fps and<br>display should be running on IPU1-0 at 60fps |                          |

Execution type: Manual

Estimated exec. duration (sec):

Priority: Medium

Keywords:  
tda2xx-evm  
tda2ex-evm  
tda3xx-evm  
tda2ex-entry  
tda2px-evm  
c\_integration  
m\_vpe

#### **Execution Details**

Build REL\_3\_3

Tester x0246581

Execution Result: **Passed**

Execution Mode: **Manual**

Execution duration (sec):

## 1.6.5.Test Suite : Rear\_View\_Panorama

Test Case VISIONSDK-301: RSVP\_4CH\_VIP\_Capture\_960deser\_IMI

Summary:

RSVP UC:

4CH VIP Capture + Stereo (DSPx, EVEx) + Image Transform (DSP1) + Seam Detection (DSP2) + Stitching (DSP1) + Display (HDMI) (TDA3X)UC

Input : IMI OV10640 with 960 deserializer

Output : HDMI 1080P

Preconditions:

Ensure TDA3x folder present in SD card with CHARTPOS.BIN & LENS.BIN

Run SRV calibration UC if required to generate LUT.BIN

Verify whether display shows a smooth stitching of all 4 cameras.

All running at 30fps, Also check performance stats match with datasheet

| #: | Step actions:   | Expected Results:  | Execution Status: |
|----|---|--|-------------------|
| 1  | Go to System Settings<br>Select Capture Source as<br>"OV10640 Sensor for SV - IMI (TDA3x ONLY)"<br>& Display Output as HDMI 1080P           | Capture Source should be<br>OV10640 Sensor for SV - IMI<br>(TDA3x ONLY)<br><br>& Display device as HDMI<br>1080P |                   |
| 2  | Run "4CH VIP Capture + Stereo (DSPx, EVEx) + Image Transform (DSP1) + Seam Detection (DSP2) + Stitching (DSP1) + Display (HDMI) (TDA3X)" UC | Display must come up and no<br>buffer drops should be<br>observed  |                   |

Execution type:

Manual

Estimated exec. duration (sec):

Priority:

Medium

Keywords:

tda3xx-evm

Execution Details

Build

REL\_3\_3

Tester

x0246581

Execution Result:

Passed

Execution Mode:

Manual

Execution duration (sec):

|   |  |  |  |
|---|--|--|--|
| <b>Test Case VISIONSDK-302: RSVP_Manual_LDC_LUT_Generation</b>  |  |  |  |
| <u>Summary:</u><br>RSVP UC:<br>"Manual RSVP LDC LUT generation for Stereo (DSPx, EVEx) + Image Transform (DSP1) + Seam Detection (DSP2) + Stitching (DSP1) + Display (HDMI) (TDA3X)" UC<br>Input : IMI OV10640 with 960 deserializer<br>Output : HDMI 1080P |  |  |  |

Preconditions:

Ensure TDA3x folder present in SD card with CHARTPOS.BIN & LENS.BIN

Run SRV calibration UC if required to generate LUT.BIN

Verify whether display shows a smooth stitching of all 4 cameras.

All running at 30fps, Also check performance stats match with datasheet

| <u>#:</u>                              | <u>Step actions:</u>   | <u>Expected Results:</u>   | <u>Execution Status:</u> |
|--|--|--|--------------------------|
| 1                                      | Go to System Settings<br>Select Capture Source as<br>"OV10640 Sensor for SV - IMI (TDA3x ONLY)"<br>& Display Output as HDMI 1080P                                  | Capture Source should be<br>OV10640 Sensor for SV -<br>IMI (TDA3x ONLY)<br><br>& Display device as HDMI<br>1080P |                          |
| 2                                      | Run "Manual RSVP LDC LUT generation for Stereo (DSPx, EVEx)<br>+ Image Transform (DSP1) + Seam Detection (DSP2) + Stitching<br>(DSP1) + Display (HDMI) (TDA3X)" UC | Display must come up and<br>no buffer drops should be<br>observed  |                          |
| <u>Execution type:</u>                 | Manual   |  |                          |
| <u>Estimated exec. duration (sec):</u> |  |  |                          |
| <u>Priority:</u>                       | Medium   |  |                          |
| <u>Keywords:</u>                       | tda3xx-evm   |  |                          |
| <b>Execution Details</b>               |  |  |                          |
| Build                                  | REL_3_3  |  |                          |
| Tester                                 | x0246581   |  |                          |
| <u>Execution Result:</u>               | <b>Passed</b>  |  |                          |
| <u>Execution Mode:</u>                 | <b>Manual</b>  |  |                          |
| <u>Execution duration (sec):</u>       |  |  |                          |

## 1.7.Test Suite : Radar

Test Case VISIONSDK-150: Radar\_AR12\_Capture\_Null

Summary:

Radar Capture Null UC

Input : AR12

Output : Null

Preconditions:

Ensure AR12 sensor Radar HW is connected to TDA3x EVM

Debug prints will be in UART2

| #: | Step actions:   | Expected Results:       | Execution Status: |
|----|---|-------------------------|-------------------|
| 1  | Boot TDA3x with Radar setup/TDA3xx ALPS Board                       | Shoul display Main Menu |                   |
| 2  | Run "Radar (Single AR1243) Capture + Null (TDA3xx Only) usecase" UC | No Display              |                   |
| 3  | Press "P"   | Check performance stats |                   |

Execution type:

Manual

Estimated exec. duration (sec):

Priority:

Medium

Keywords:

c\_regression  
c\_qualification  
tda3xx-alps  
tda3xx-AR12-Booster

Execution Details

Build

REL\_3\_3

Tester

x0246581

Execution Result:

Passed

Execution Mode:

Manual

Execution duration (sec):

|  |   |                          |                          |
|--|---|--------------------------|--------------------------|
| <b>Test Case VISIONSDK-152: Radar_AR12_Capture_Radar_FrameCopy_DSP1_Null</b> |   |                          |                          |
| <u>Summary:</u>  |   |                          |                          |
| Radar Capture Radar Frame copy on DSP1 Null UC                               |   |                          |                          |
| Input : AR12   |   |                          |                          |
| Output : Null  |   |                          |                          |
| <u>Preconditions:</u>  |   |                          |                          |
| Ensure AR12 sensor Radar HW is connected to TDA3x EVM                        |   |                          |                          |
| Debug prints will be in UART2  |   |                          |                          |
| <u>#:</u>  | <u>Step actions:</u>  | <u>Expected Results:</u> | <u>Execution Status:</u> |
| 1  | Boot TDA3x with Radar setup/TDA3xx ALPS Board   | Should display Main Menu |                          |
| 2  | Run "Radar (Single AR1243) Capture + Radar Frame Copy (DSP1) + Null (TDA3xx Only) usecase" UC | No Display               |                          |
| 3  | Press "P"   | Check performance stats  |                          |

|  |  |
|--|--|
| <u>Execution type:</u>                 | Manual   |
| <u>Estimated exec. duration (sec):</u> |  |
| <u>Priority:</u>                       | Medium   |
| <u>Keywords:</u>                       | c_stress<br>c_qualification<br>c_stability<br>tda3xx-alps<br>tda3xx-AR12-Booster |
| <b>Execution Details</b>               |  |
| Build                                  | REL_3_3  |
| Tester                                 | x0246581   |
| <u>Execution Result:</u>               | <b>Passed</b>  |
| <u>Execution Mode:</u>                 | <b>Manual</b>  |
| <u>Execution duration (sec):</u>       |  |

**Test Case VISIONSDK-154: NullSrc\_Capture\_Radar\_FFT\_EVE1\_Null\_Read\_Frames\_SDcard**Summary:

Null Source Capture(SD card) Radar FFT on EVE1 Null UC

Input : AR12

Output : Null

Preconditions:

Input files present in SD card

Debug prints will be in

UART1 for TDA2x & UART2 for TDA3x

| <u>#:</u> | <u>Step actions:</u>   | <u>Expected Results:</u> | <u>Execution Status:</u> |
|-----------|--|--------------------------|--------------------------|
| 1         | Boot TDA2x/TDA3x   | Should display Main Menu |                          |
| 2         | Run "Null Source (SD/Network) Input + Radar FFT (EVE1) + Null (SD/Network)" UC<br>Select Data Read/Write Mode as SD card | No display               |                          |
| 3         | Press "P"  | Check performance stats  |                          |

|  |                          |
|--|--------------------------|
| <u>Execution type:</u>                 | Manual                   |
| <u>Estimated exec. duration (sec):</u> |                          |
| <u>Priority:</u>                       | Medium                   |
| <u>Keywords:</u>                       | tda2xx-evm<br>tda3xx-evm |
| <b>Execution Details</b>               |                          |
| Build                                  | REL_3_3                  |
| Tester                                 | x0246581                 |
| <u>Execution Result:</u>               | <b>Passed</b>            |
| <u>Execution Mode:</u>                 | <b>Manual</b>            |
| <u>Execution duration (sec):</u>       |                          |

**Test Case VISIONSDK-155: NullSrc\_Capture\_Radar\_FFT\_EVE1\_Null\_Write\_Frames\_SDcard**Summary:

Null Source Capture(SD card) Radar FFT on EVE1 Null UC

Input : AR12

Output : Null

Preconditions:



Input files present in SD card

Debug prints will be in

UART1 for TDA2x & UART2 for TDA3x

| #:                                     | Step actions:  | Expected Results:                                    | Execution Status: |
|--|--|--|-------------------|
| 1                                      | Boot TDA2x/TDA3x   | Should display Main Menu                             |                   |
| 2                                      | Run "Null Source (SD/Network) Input + Radar FFT (EVE1) + Null (SD/Network)" UC<br>Select Data Read/Write Mode as SD card | No display   |                   |
| 3                                      | Select File IO menu<br>Write single frame to SD card   | Writing single frame to SD card should be successful |                   |
| <u>Execution type:</u>                 | Manual   |  |                   |
| <u>Estimated exec. duration (sec):</u> |  |  |                   |
| <u>Priority:</u>                       | Medium   |  |                   |
| <u>Keywords:</u>                       | tda2xx-evm<br>tda3xx-evm   |  |                   |
| <b>Execution Details</b>               |  |  |                   |
| Build                                  | REL_3_3  |  |                   |
| Tester                                 | x0246581   |  |                   |
| <u>Execution Result:</u>               | <b>Passed</b>  |  |                   |
| <u>Execution Mode:</u>                 | <b>Manual</b>  |  |                   |
| <u>Execution duration (sec):</u>       |  |  |                   |

#### Test Case VISIONSDK-156: NullSrc\_Capture\_Radar\_FFT\_EVE1\_Null\_Read\_Frames\_NW

##### Summary:

Null Source Capture(Network) Radar FFT on EVE1 Null UC

Input : AR12

Output : Null

##### Preconditions:

Ensure NDK is enabled in build

Input files sent through network using network\_tx

Debug prints will be in

UART1 for TDA2x & UART2 for TDA3x

| #:                                     | Step actions:  | Expected Results:        | Execution Status: |
|--|--|--------------------------|-------------------|
| 1                                      | Boot TDA2x/TDA3x   | Should display Main Menu |                   |
| 2                                      | Run "Null Source (SD/Network) Input + Radar FFT (EVE1) + Null (SD/Network)" UC<br>Select Data Read/Write Mode as Network | No display               |                   |
| 3                                      | Press "P"  | Check performance stats  |                   |
| <u>Execution type:</u>                 | Manual   |                          |                   |
| <u>Estimated exec. duration (sec):</u> |  |                          |                   |
| <u>Priority:</u>                       | Medium   |                          |                   |
| <u>Keywords:</u>                       | tda2xx-evm<br>tda3xx-evm   |                          |                   |
| <b>Execution Details</b>               |  |                          |                   |
| Build                                  | REL_3_3  |                          |                   |
| Tester                                 | x0246581   |                          |                   |
| <u>Execution Result:</u>               | <b>Passed</b>  |                          |                   |
| <u>Execution Mode:</u>                 | <b>Manual</b>  |                          |                   |

Execution duration (sec):

### Test Case VISIONSDK-157: NullSrc\_Capture\_Radar\_FFT\_EVE1\_Null\_Write\_Frames\_NW

#### Summary:

Null Source Capture(Network) Radar FFT on EVE1 Null UC

Input : AR12

Output : Null

#### Preconditions:

Ensure NDK is enabled in build

Input files sent through network using network\_tx

Debug prints will be in

UART1 for TDA2x & UART2 for TDA3x

| <u>#:</u>                              | <u>Step actions:</u>   | <u>Expected Results:</u>      | <u>Execution Status:</u> |
|--|--|-------------------------------|--------------------------|
| 1                                      | Boot TDA2x/TDA3x   | Should display Main Menu      |                          |
| 2                                      | Run "Null Source (SD/Network) Input + Radar FFT (EVE1) + Null (SD/Network)" UC<br>Select Data Read/Write Mode as Network | No display                    |                          |
| 3                                      | Run network_rx to dump files   | Should be able to dump frmaes |                          |
| <u>Execution type:</u>                 | Manual   |                               |                          |
| <u>Estimated exec. duration (sec):</u> |  |                               |                          |
| <u>Priority:</u>                       | Medium   |                               |                          |
| <u>Keywords:</u>                       | tda2xx-evm<br>tda3xx-evm   |                               |                          |
| <b>Execution Details</b>               |  |                               |                          |
| Build                                  | REL_3_3  |                               |                          |
| Tester                                 | x0246581   |                               |                          |
| <u>Execution Result:</u>               | <b>Passed</b>  |                               |                          |
| <u>Execution Mode:</u>                 | <b>Manual</b>  |                               |                          |
| <u>Execution duration (sec):</u>       |  |                               |                          |

### Test Case VISIONSDK-232: Radar\_AR12\_Capture\_Radar\_Object\_Detect\_EVE1\_Null

#### Summary:

Radar Capture Radar Object Detect on EVE1 Null UC

Input : AR12

Output : Null

#### Preconditions:

Ensure AR12 sensor Radar HW is connected to TDA3x EVM

Debug prints will be in UART2

| <u>#:</u> | <u>Step actions:</u>   | <u>Expected Results:</u>  | <u>Execution Status:</u> |
|-----------|--|---|--------------------------|
| 1         | Boot TDA3x with Radar setup/TDA3xx ALPS Board  | Should display Main Menu  |                          |
| 2         | Run "Radar (Single AR1243) Capture + Radar Object Detect (EVE1) + Null (TDA3xx Only) usecase" UC | No Display  |                          |
| 3         | Select Normal Frame/Advanced Frame.  | Depending upon selection Normal Frame/Advanced Frame should be selected |                          |
| 4         | Press "P"  | Check performance stats   |                          |
| 5         | Press 'c' to read back and verify parameters.  | Should be able to read and verify parameters                            |                          |

|  |  |                                     |  |
|--|--|-------------------------------------|--|
| 6                                      | Press 'd' to dynamically change the slope. | Slope should be changed dynamically |  |
| <u>Execution type:</u>                 | Manual                                     |                                     |  |
| <u>Estimated exec. duration (sec):</u> |  |                                     |  |
| <u>Priority:</u>                       | Medium                                     |                                     |  |
| <u>Keywords:</u>                       | tda3xx-alps<br>tda3xx-AR12-Booster         |                                     |  |
| <b>Execution Details</b>               |  |                                     |  |
| Build                                  | REL_3_3                                    |                                     |  |
| Tester                                 | x0246581                                   |                                     |  |
| <u>Execution Result:</u>               | <b>Passed</b>                              |                                     |  |
| <u>Execution Mode:</u>                 | <b>Manual</b>                              |                                     |  |
| <u>Execution duration (sec):</u>       |  |                                     |  |

**Test Case VISIONSDK-233: Radar\_AR12\_Capture\_Radar\_Object\_Detect\_EVE1\_Display**Summary:

Radar Capture Radar Object Detect on EVE1 Display UC

Input : AR12

Output : HDMI

Preconditions:

Ensure AR12 sensor Radar HW is connected to TDA3x EVM

Debug prints will be in UART2

| <u>#:</u>                              | <u>Step actions:</u>  | <u>Expected Results:</u>  | <u>Execution Status:</u> |
|--|---|---|--------------------------|
| 1                                      | Boot TDA3x with Radar setup   | Should display Main Menu  |                          |
| 2                                      | Run "Radar (Single AR1243) Capture + Radar Object Detect (EVE1) + Display (TDA3xx Only) usecase" UC | Display should come up & no buffer drops should observed                |                          |
| 3                                      | Select Normal Frame/Advanced Frame.   | Depending upon selection Normal Frame/Advanced Frame should be selected |                          |
| 4                                      | Press "P"   | Check performance stats   |                          |
| 5                                      | Press 'c' to read back and verify parameters.   | Should be able to read and verify parameters                            |                          |
| 6                                      | Press 'd' to dynamically change the slope.  | Slope should be changed dynamically                                     |                          |
| <u>Execution type:</u>                 | Manual  |   |                          |
| <u>Estimated exec. duration (sec):</u> |   |   |                          |
| <u>Priority:</u>                       | Medium  |   |                          |
| <u>Keywords:</u>                       | c_regression<br>c_stress<br>c_stability<br>tda3xx-AR12-Booster                                      |   |                          |
| <b>Execution Details</b>               |   |   |                          |
| Build                                  | REL_3_3   |   |                          |
| Tester                                 | x0246581  |   |                          |
| <u>Execution Result:</u>               | <b>Passed</b>   |   |                          |
| <u>Execution Mode:</u>                 | <b>Manual</b>   |   |                          |
| <u>Execution duration (sec):</u>       |   |   |                          |

**Test Case VISIONSDK-243: Radar\_Flash\_AR12\_Firmware**Summary:

Radar AR12 Firmware Flash UC

supported on TDA3x ALPS board

Input : AR12 Firmware

Preconditions:

AR12 firmware is part of binaries

Debug prints will be in UART2

| #:                              | Step actions:                                  | Expected Results:                         | Execution Status: |
|---------------------------------|--|---|-------------------|
| 1                               | Boot TDA3xx ALPS Board                         | Shoul display Main Menu                   |                   |
| 2                               | Run "AR12 Firmware Flash (ALPS board Only)" UC | No Display                                |                   |
| 3                               | Erase AR12xx Flash                             | Should erase previous firmware from flash |                   |
| 4                               | Flash AR12xx Firmware                          | New firmware should be flashed            |                   |
| Execution type:                 | Manual   |   |                   |
| Estimated exec. duration (sec): |  |   |                   |
| Priority:                       | Medium   |   |                   |
| Keywords:                       | tda3xx-alps                                    |   |                   |
| Execution Details               |  |   |                   |
| Build                           | REL_3_3  |   |                   |
| Tester                          | x0246581                                       |   |                   |
| Execution Result:               | Passed   |   |                   |
| Execution Mode:                 | Manual   |   |                   |
| Execution duration (sec):       |  |   |                   |

**Test Case VISIONSDK-313: Radar\_AR12\_Multi\_Capture\_Radar\_FFT\_EVE1\_Display**Summary:

Radar Capture Radar FFT on EVE1 Display UC

Input : AR12

Output : HDMI

Preconditions:

Ensure AR12 sensor Radar HW is connected to TDA3x EVM

Debug prints will be in UART2

| #:                              | Step actions:   | Expected Results:   | Execution Status: |
|---------------------------------|---|---|-------------------|
| 1                               | Boot TDA3x/RVP with Radar setup   | Should display Main Menu  |                   |
| 2                               | Run "Radar (Single AR1243) Capture + Radar FFT (EVE1) + Display (TDA3xx Only) usecase" UC | Display should come up & no buffer drops should observed                |                   |
| 3                               | Select Normal Frame/Advanced Frame.   | Depending upon selection Normal Frame/Advanced Frame should be selected |                   |
| 4                               | Press "P"   | Check performance stats   |                   |
| 5                               | Press 'c' to read back and verify parameters.   | Should be able to read and verify parameters                            |                   |
| 6                               | Press 'd' to dynamically change the slope.  | Slope should be changed dynamically                                     |                   |
| Execution type:                 | Manual  |   |                   |
| Estimated exec. duration (sec): |   |   |                   |
| Priority:                       | Medium  |   |                   |
| Keywords:                       | c_regression<br>c_stress<br>c_stability<br>tda3xx-AR12-Booster                            |   |                   |
| Execution Details               |   |   |                   |
| Build                           | REL_3_3   |   |                   |
| Tester                          | x0246581  |   |                   |
| Execution Result:               | Passed  |   |                   |
| Execution Mode:                 | Manual  |   |                   |
| Execution duration (sec):       |   |   |                   |

**Test Case VISIONSDK-314: Radar\_Test\_Source\_Object\_Detection**Summary:

Radar Test Source Object Detection

Input : testdata

Output : HDMI

Preconditions:

Ensure AR12 sensor Radar HW is connected to TDA3x EVM

Debug prints will be in UART2

| #:                              | Step actions:  | Expected Results:   | Execution Status: |
|---------------------------------|--|---|-------------------|
| 1                               | Enable Macro ENABLE_TEST_SOURCE in chains_common_ar12xx.c<br><br>& configure test source in ChainsCommon_ar12xxEnableTestSource                | Should be able to configure test source                                 |                   |
| 2                               | Build the code by running below command<br><br>make -s -j depend; make -s -j   | should be able to build   |                   |
| 3                               | Run "Radar (Single AR1243) Capture + Radar Object Detect (EVE1) + Display (TDA3xx Only) usecase" UC<br><br>Select Normal Frame/Advanced Frame. | Depending upon selection Normal Frame/Advanced Frame should be selected |                   |
| 4                               | Press "P"  | Check performance stats   |                   |
| 5                               | Press 'c' to read back and verify parameters.  | Should be able to read and verify parameters                            |                   |
| 6                               | Press 'd' to dynamically change the slope.   | Slope should be changed dynamically                                     |                   |
| Execution type:                 | Manual   |   |                   |
| Estimated exec. duration (sec): |  |   |                   |
| Priority:                       | Medium   |   |                   |
| Keywords:                       | c_regression<br>c_stress<br>c_stability<br>tda3xx-AR12-Booster   |   |                   |
| Execution Details               |  |   |                   |
| Build                           | REL_3_3  |   |                   |
| Tester                          | x0246581   |   |                   |
| Execution Result:               | Passed   |   |                   |
| Execution Mode:                 | Manual   |   |                   |
| Execution duration (sec):       |  |   |                   |

## 1.8.Test Suite : Build

---

### 1.8.1.Test Suite : VSDK\_Builds

|  |   |  |                          |
|--|---|--|--------------------------|
| Test Case VISIONSDK-249: VSDK_BIOS_different_builds                |   |  |                          |
| <u>Summary:</u>  |   |  |                          |
| VSDK BIOS different configurations Build                           |   |  |                          |
| <u>Preconditions:</u>  |   |  |                          |
| Follow UG to Install release package                               |   |  |                          |
| All ti_cmponents (including PDK) should be part of release package |   |  |                          |
| Copy all necessary components (gcc tool,linaro tool chain)         |   |  |                          |
| <u>#:</u>  | <u>Step actions:</u>  | <u>Expected Results:</u>                         | <u>Execution Status:</u> |
| 1  | Navigate to<br>(vsdk_install_path)/vision_sdk/build<br><br>& run make -s showconfig                                   | Should display config for<br>tda2xx_evm_bios_all |                          |
| 2  | Modify Rules.mk file to other available<br>MAKECONFIG<br><br>& run make -s showconfig                                 | Should display config for MAKECONFIG<br>selected |                          |
| 3  | run make -s -j depend<br><br>& then make -s -j  | Should build binaries without any error          |                          |
| 4  | run make -s appimage  | should create Appimage                           |                          |
| 5  | run make -s sbl   | Should create SBL                                |                          |
| <u>Execution type:</u>   | Manual  |  |                          |
| <u>Estimated exec. duration (sec):</u>                             |   |  |                          |
| <u>Priority:</u>   | Medium  |  |                          |
| <u>Keywords:</u>   | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm<br>tda3xx_rvp<br>c_integration                   |  |                          |
| <u>Attached files</u>  | <ul style="list-style-type: none"><li>• BIOS Different Build Config : build_vsdk.sh</li><li>• build_vsdk.sh</li></ul> |  |                          |
| <b>Execution Details</b>   |   |  |                          |
| Build  | REL_3_3   |  |                          |
| Tester   | x0246581  |  |                          |
| <u>Execution Result:</u>   | <b>Passed</b>   |  |                          |
| <u>Execution Mode:</u>   | <b>Manual</b>   |  |                          |
| <u>Execution duration (sec):</u>                                   |   |  |                          |

| <b>Test Case VISIONSDK-278: VSDK_KW_build</b>        |                          |                           |                   |
|--|--------------------------|---------------------------|-------------------|
| <u>Summary:</u><br>VSDK Klocwork Build               |                          |                           |                   |
| <u>Preconditions:</u><br>Jenkin Node is up & running |                          |                           |                   |
| #:   | Step actions:            | Expected Results:         | Execution Status: |
| 1  | Login to Jenkin server & | Should build KW project & |                   |

|  |  |  |  |
|--|--|--|--|
|  | trigger VSK_KW_build projet  | sent a report with open criticcal & major MISRA-C issues |  |
| <u>Execution type:</u>                 | Manual   |  |  |
| <u>Estimated exec. duration (sec):</u> |  |  |  |
| <u>Priority:</u>                       | Medium   |  |  |
| <u>Keywords:</u>                       | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm |  |  |
| <b>Execution Details</b>               |  |  |  |
| Build                                  | REL_3_3  |  |  |
| Tester                                 | x0246581   |  |  |
| <u>Execution Result:</u>               | <b>Passed</b>  |  |  |
| <u>Execution Mode:</u>                 | <b>Manual</b>  |  |  |
| <u>Execution duration (sec):</u>       |  |  |  |



## 1.8.2.Test Suite : Radar\_Builds

|  |  |   |                          |
|--|--|---|--------------------------|
| Test Case VISIONSDK-242: Radar_default_build |  |   |                          |
| <u>Summary:</u>                              |  |   |                          |
| Radar Default Build                          |  |   |                          |
| <u>Preconditions:</u>                        |  |   |                          |
| Follow UG to Install release package         |  |   |                          |
| Copy all necessary components (gcc tool)     |  |   |                          |
| <u>#:</u>                                    | <u>Step actions:</u>   | <u>Expected Results:</u>  | <u>Execution Status:</u> |
| 1  | Navigate to (radar_install_path)/vision_sdk/build & run make -s showconfig | Should display config for tda3xx_evm_bios_radar   |                          |
| 2  | Check default config   | By default all IPU1_0, IPU1_1, DSP1, EVE1 are enabled<br><br>Memory should be 128MB<br><br>NDK should be disabled<br><br>& A15_TARGET_OS=Bios |                          |
| 3  | run make -s -j depend & then make -s -j                                    | Should build binaries without any error   |                          |
| 4  | run make -s appimage   | should create Appimage  |                          |
| 5  | run make -s sbl  | Should create SBL   |                          |
| <u>Execution type:</u>                       | Manual   |   |                          |
| <u>Estimated exec. duration (sec):</u>       |  |   |                          |
| <u>Priority:</u>                             | Medium   |   |                          |
| <u>Keywords:</u>                             | tda3xx-evm<br>c_qualification  |   |                          |
| <b>Execution Details</b>                     |  |   |                          |
| Build  | REL_3_3  |   |                          |
| Tester                                       | x0246581   |   |                          |
| <u>Execution Result:</u>                     | <b>Passed</b>  |   |                          |
| <u>Execution Mode:</u>                       | <b>Manual</b>  |   |                          |
| <u>Execution duration (sec):</u>             |  |   |                          |

|   |  |   |                          |
|---|--|---|--------------------------|
| <b>Test Case VISIONSDK-280: Radar_different_builds</b>              |  |   |                          |
| <u>Summary:</u>   |  |   |                          |
| Radar different configurations Build                                |  |   |                          |
| <u>Preconditions:</u>   |  |   |                          |
| Follow UG to Install release package                                |  |   |                          |
| All ti_components (including PDK) should be part of release package |  |   |                          |
| Copy all necessary components (gcc tool,linaro tool chain)          |  |   |                          |
| <u>#:</u>   | <u>Step actions:</u>   | <u>Expected Results:</u>                        | <u>Execution Status:</u> |
| 1   | Navigate to<br>(v sdk_install_path)/vision_sdk/build<br>& run make -s showconfig | Should display config for tda3xx_evm_bios_radar |                          |

|  |   |  |  |
|--|---|--|--|
| 2                                      | Modify Rules.mk file to other available<br>MAKECONFIG<br>& run make -s showconfig   | Should display config for MAKECONFIG<br>selected |  |
| 3                                      | run make -s -j depend<br>& then make -s -j  | Should build binaries without any error          |  |
| 4                                      | run make -s appimage  | should create Appimage                           |  |
| 5                                      | run make -s sbl   | Should create SBL                                |  |
| <u>Execution type:</u>                 | Manual  |  |  |
| <u>Estimated exec. duration (sec):</u> |   |  |  |
| <u>Priority:</u>                       | Medium  |  |  |
| <u>Keywords:</u>                       | tda2xx-evm<br>tda3xx-evm<br>tda3xx_rvp<br>tda3xx-alps<br>tda3xx-AR12-Booster<br>c_integration                               |  |  |
| <u>Attached files</u>                  | <ul style="list-style-type: none"> <li>• Radar Different Build Config : build_radar.sh</li> <li>• build_radar.sh</li> </ul> |  |  |
| <b>Execution Details</b>               |   |  |  |
| Build                                  | REL_3_3   |  |  |
| Tester                                 | x0246581  |  |  |
| <u>Execution Result:</u>               | <b>Passed</b>   |  |  |
| <u>Execution Mode:</u>                 | <b>Manual</b>   |  |  |
| <u>Execution duration (sec):</u>       |   |  |  |

## 1.9.Test Suite : Release\_Process

|   |   |   |                          |
|---|---|---|--------------------------|
| Test Case VISIONSDK-245: VSDK_Radar_release_check_list        |   |   |                          |
| <u>Summary:</u>   |   |   |                          |
| VSDK & Radar release check list                               |   |   |                          |
| <u>Preconditions:</u>   |   |   |                          |
| VSDK & Radar RC package already installed & tested            |   |   |                          |
| Verify that release goes through the standard release process |   |   |                          |
| <u>#:</u>   | <u>Step actions:</u>  | <u>Expected Results:</u>  | <u>Execution Status:</u> |
| 1   | Check for licenses, manifest, release notes, test reports, datasheets   | Release shall comply for the basic release process such as export license, OSRB approval etc.                                       |                          |
| 2   | Check there are test cases for all product requirements (planned in release)<br><br>& executed in testing phase | Traceability report (Req -> Test) should have all req mapped to tc<br><br>Test result matrix should have nothing in "Not Run" state |                          |
| 3   | Check updated project plan, test plan, test strategy docs for release are all available in clearcase            | All updated version of docs should be available in clearcase  |                          |
| 4   | Check for all docs available in vision_sdk/docs folder  | All updated docs for current release should be available  |                          |
| 5   | Check for all docs available in vision_sdk/docs folder  | All updated docs for current release should be available  |                          |
| <u>Execution type:</u>  | Manual  |   |                          |
| <u>Estimated exec. duration (sec):</u>                        |   |   |                          |
| <u>Priority:</u>  | Medium  |   |                          |
| <u>Keywords:</u>  | None  |   |                          |
| <b>Execution Details</b>                                      |   |   |                          |
| Build   | REL_3_3   |   |                          |
| Tester  | x0246581  |   |                          |
| <u>Execution Result:</u>                                      | <b>Passed</b>   |   |                          |
| <u>Execution Mode:</u>  | <b>Manual</b>   |   |                          |
| <u>Execution duration (sec):</u>                              |   |   |                          |

| <b>Test Case VISIONSDK-246: VSDK_package_creation_and_installation</b> |  |   |                   |
|--|--|---|-------------------|
| <u>Summary:</u>  |  |   |                   |
| VSDK package creation & installation on windows & linux machine        |  |   |                   |
| <u>Preconditions:</u>  |  |   |                   |
| VSDK RC package installed & tested                                     |  |   |                   |
| #:   | Step actions:  | Expected Results:                           | Execution Status: |
| 1  | Modify MPI files to pick correct ti_components<br><br>Modify InstallJammer Environment script<br><br>Trigger Jenking project for packaging | Windows & Linux installer should be created |                   |

|  |   |   |  |
|--|---|---|--|
| 2                                      | Install on windows machine<br><br>Check for all customer collaterals<br><br>& Build with default config | Installation should be success<br><br>Release package should include all customer collaterals such as user guide, data sheet, Release notes, Test reports, Developer guide etc<br><br>Build should be success |  |
| 3                                      | Install on Linux machine<br><br>Check for all customer collaterals<br><br>& Build with default config   | Installation should be success<br><br>Release package should include all customer collaterals such as user guide, data sheet, Release notes, Test reports, Developer guide etc<br><br>Build should be success |  |
| <u>Execution type:</u>                 |   | Manual  |  |
| <u>Estimated exec. duration (sec):</u> |   |   |  |
| <u>Priority:</u>                       |   | Medium  |  |
| <u>Keywords:</u>                       |   | c_qualification   |  |
| <b>Execution Details</b>               |   |   |  |
| Build                                  | REL_3_3   |   |  |
| Tester                                 | x0246581  |   |  |
| <u>Execution Result:</u>               | <b>Passed</b>   |   |  |
| <u>Execution Mode:</u>                 | <b>Manual</b>   |   |  |
| <u>Execution duration (sec):</u>       |   |   |  |

**Test Case VISIONSDK-247: Radar\_pacckage\_creation\_and\_installation**Summary:

Radar package creation &amp; installation on windows &amp; linux machine

Preconditions:

Radar RC package installed &amp; tested

| #:                                     | Step actions:  | Expected Results:   | Execution Status: |
|--|--|---|-------------------|
| 1                                      | Modify MPI files to pick correct ti_components<br>Modify InstallJammer Environment script<br>Trigger Jenking project for packaging | Windows & Linux installer should be created   |                   |
| 2                                      | Install on windows machine<br>Check for all customer collaterals<br>& Build with default config                                    | Installation should be success<br>Release package should include all customer collaterals such as user guide, data sheet, Release notes, Test reports, Developer guide etc<br>Build should be success |                   |
| 3                                      | Install on Linux machine<br>Check for all customer collaterals<br>& Build with default config                                      | Installation should be success<br>Release package should include all customer collaterals such as user guide, data sheet, Release notes, Test reports, Developer guide etc<br>Build should be success |                   |
| <u>Execution type:</u>                 |  | Manual  |                   |
| <u>Estimated exec. duration (sec):</u> |  |   |                   |
| <u>Priority:</u>                       |  | Medium  |                   |
| <u>Keywords:</u>                       |  | c_qualification   |                   |
| <b>Execution Details</b>               |  |   |                   |

|                           |               |
|---------------------------|---------------|
| Build                     | REL_3_3       |
| Tester                    | x0246581      |
| Execution Result:         | <b>Passed</b> |
| Execution Mode:           | <b>Manual</b> |
| Execution duration (sec): |               |

## 1.10.Test Suite : Boot\_Modes

---

## 1.10.1.Test Suite : Secure\_Boot

### Test Case VISIONSDK-229: VIP\_Capture\_Display\_UC\_HS\_Sample

#### Summary:

Capture Display UC on HS Sample

Input : OV10635

Output : HDMI 1080P

#### Preconditions:

Build SBL & Appimage with HS\_SAMPLE=yes

&load binaries on HS sample

Verify that Capture is running on IPU1-0 at 30fps and display running on IPU1-0 at 60fps

| <u>#:</u>                              | <u>Step actions:</u>  | <u>Expected Results:</u>   | <u>Execution Status:</u> |
|--|---|--|--------------------------|
| 1                                      | Go to System Settings<br><br>Select Capture Source as OV10635<br><br>& Display Output as HDMI 1080P | Capture Source should be OV10635<br><br>& Display device as HDMI 1080P |                          |
| 2                                      | Run 1 Ch VIP capture + Display UC   | Display must come up and no buffer drops should be observe             |                          |
| 3                                      | Run all UC one by one   | Display must come up and no buffer drops should be observe             |                          |
| <u>Execution type:</u>                 | Manual  |  |                          |
| <u>Estimated exec. duration (sec):</u> |   |  |                          |
| <u>Priority:</u>                       | Medium  |  |                          |
| <u>Keywords:</u>                       | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm  |  |                          |
| <b>Execution Details</b>               |   |  |                          |
| Build                                  | REL_3_3   |  |                          |
| Tester                                 | x0246581  |  |                          |
| <u>Execution Result:</u>               | <b>Passed</b>   |  |                          |
| <u>Execution Mode:</u>                 | <b>Manual</b>   |  |                          |
| <u>Execution duration (sec):</u>       |   |  |                          |

## 1.10.2.Test Suite : QSPI\_Boot

---

### Test Case VISIONSDK-274: Load\_Binaries\_using\_QSPI

#### Summary:

Load Binaries using QSPI

#### Preconditions:

Build Appimage & SBL for QSPI

| <u>#:</u>                              | <u>Step actions:</u>   | <u>Expected Results:</u>                             | <u>Execution Status:</u> |
|--|--|--|--------------------------|
| 1                                      | Connect EVM through CCS debug<br>& Follow UG to set SYSBOOT PIN for CCS debug      | SYSBOOT PINs should be for debug                     |                          |
| 2                                      | Follow UG to Flash SBL & ApplImage to QSPI   | SBL & ApplImage should be flashed to QSPI            |                          |
| 3                                      | Discoonnect CCS &<br>Follow UG to set SYSBOOT PIN for QSPI Boot                    | SYSBOOT PIN should be for QSPI Boot                  |                          |
| 4                                      | Boot EVM   | EVM should boot with binaries &<br>Display Main Menu |                          |
| <u>Execution type:</u>                 | Manual   |  |                          |
| <u>Estimated exec. duration (sec):</u> |  |  |                          |
| <u>Priority:</u>                       | Medium   |  |                          |
| <u>Keywords:</u>                       | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm<br>tda3xx_rvp |  |                          |
| <b>Execution Details</b>               |  |  |                          |
| Build                                  | REL_3_3  |  |                          |
| Tester                                 | x0246581   |  |                          |
| <u>Execution Result:</u>               | <b>Passed</b>  |  |                          |
| <u>Execution Mode:</u>                 | <b>Manual</b>  |  |                          |
| <u>Execution duration (sec):</u>       |  |  |                          |



### 1.10.3.Test Suite : QSPI\_SD\_Boot

---

#### Test Case VISIONSDK-275: Load\_Binaries\_using\_QSPI\_SD

##### Summary:

Load Binaries using QSPI SD

supported only on TDA3x/RVP

##### Preconditions:

Build Appimage & SBL for QSPI SD Boot

Copy AppImage to SD card

| <u>#:</u>                              | <u>Step actions:</u>  | <u>Expected Results:</u>                             | <u>Execution Status:</u> |
|--|---|--|--------------------------|
| 1                                      | Connect EVM through CCS debug<br>& Follow UG to set SYSBOOT PIN for CCS debug                     | SYSBOOT PINs should be for debug                     |                          |
| 2                                      | Follow UG to Flash SBL  | SBL should be flashed to QSPI                        |                          |
| 3                                      | Disconnect CCS<br>Insert SD card to SD card slot<br>Follow UG to set SYSBOOT PIN for QSPI SD Boot | SYSBOOT PIN should be for QSPI SD Boot               |                          |
| 4                                      | Boot EVM  | EVM should boot with binaries &<br>Display Main Menu |                          |
| <u>Execution type:</u>                 | Manual  |  |                          |
| <u>Estimated exec. duration (sec):</u> |   |  |                          |
| <u>Priority:</u>                       | Medium  |  |                          |
| <u>Keywords:</u>                       | tda3xx-evm<br>tda3xx_rvp  |  |                          |
| <b>Execution Details</b>               |   |  |                          |
| Build                                  | REL_3_3   |  |                          |
| Tester                                 | x0246581  |  |                          |
| <u>Execution Result:</u>               | <b>Passed</b>   |  |                          |
| <u>Execution Mode:</u>                 | <b>Manual</b>   |  |                          |
| <u>Execution duration (sec):</u>       |   |  |                          |

## 1.10.4.Test Suite : CCS\_Boot

|  |   |  |                   |
|--|---|--|-------------------|
| Test Case VISIONSDK-332: Load_Binaries_using_CCS |   |  |                   |
| Summary:   |   |  |                   |
| Load Binaries using CCS                          |   |  |                   |
| Preconditions:                                   |   |  |                   |
| Build binaries                                   |   |  |                   |
| #:   | Step actions:   | Expected Results:  | Execution Status: |
| 1  | Connect EVM through CCS debug<br><br>& Follow UG to set SYSBOOT PIN for CCS debug   | SYSBOOT PINs should be for debug   |                   |
| 2  | Load binaries on each core separately<br><br>or use the ".js" script available under vision_sdk/build/rtos/scripts to load on all cores at once | Binaries should be load on each core successfully<br><br>& Display main menu on uart console |                   |
| 3  | From Main Menu run any UC   | UC should run successfully   |                   |
| 4  | Check for few register address whether displaying proper data or not  | Data should be proper  |                   |
| Execution type:                                  | Manual  |  |                   |
| Estimated exec. duration (sec):                  |   |  |                   |
| Priority:  | Medium  |  |                   |
| Keywords:  | tda2xx-evm<br>tda2ex-evm<br>tda3xx-evm<br>tda2ex-entry<br>tda2px-evm<br>tda3xx_rvp<br>tda3xx-alps<br>tda3xx-AR12-Booster                        |  |                   |
| Execution Details                                |   |  |                   |
| Build  | REL_3_3   |  |                   |
| Tester   | x0246581  |  |                   |
| Execution Result:                                | Passed  |  |                   |
| Execution Mode:                                  | Manual  |  |                   |
| Execution duration (sec):                        |   |  |                   |