



## Test Plan Execution Report

Test Project: VISIONSDK

Test Plan: PSDKV\_Test\_Plan\_3\_5\_Functional\_RVP

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## **Test Project: VISIONSDK**

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Project: VISIONSDK Location: TII Owner: Sivasankaran, Shiju

## **Test Plan: PSDKV\_Test\_Plan\_3\_5\_Functional\_RVP**

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RVP Functional Test Plan

Will cover all functional test for rvp

## 1.1.Test Suite : SRV

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### 1.1.1.Test Suite : CAL\_SRV

#### 1.1.1.1.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  Select Capture Source as  "OV10640 Sensor for SV - IMI (TDA3x ONLY)"  or  "AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)"  & Display Output as HDMI 1080P	Capture Source should be  OV10640 Sensor for SV - IMI (TDA3x ONLY) or  AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)  depending upon the hardware connected & selected by user  & 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		
Requirements	ADASVISION-1396: 4ch 2D surround view with OV10640 Bayer sensors ADASVISION-1579: low cost surround view with TDA3x		
Keywords:	tda3xx-evm tda3xx_rvp c_qualification m_iss		
Execution Details			
Build	REL_3_5		
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 Select Capture Source as "OV10640 Sensor for SV - IMI (TDA3x ONLY)" or "AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)" & Display Output as HDMI 1080P	Capture Source should be OV10640 Sensor for SV - IMI (TDA3x ONLY) or AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY) depending upon the hardware connected & selected by user & Display device as HDMI 1080P	
2	Go to ISS setting 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 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>Requirements</u>	ADASVISION-1579: low cost surround view with TDA3x		
<u>Keywords:</u>	tda3xx-evm tda3xx_rvp		
<b>Execution Details</b>			
Build	REL_3_5		
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 Select Capture Source as "OV10640 Sensor for SV - IMI (TDA3x ONLY)" or "AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)" & Display Output as HDMI 1080P	Capture Source should be OV10640 Sensor for SV - IMI (TDA3x ONLY) or AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY) depending upon the hardware connected & selected by user & 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>Requirements</u>	ADASVISION-1167: Error handling requirements ADASVISION-1526: Error handling ADASVISION-1579: low cost surround view with TDA3x		
<u>Keywords:</u>	tda3xx-evm tda3xx_rvp		
<b>Execution Details</b>			
Build	REL_3_5		
Tester	x0246581		
<u>Execution Result:</u>	<b>Passed</b>		
<u>Execution Mode:</u>	<b>Manual</b>		
<u>Execution duration (sec):</u>			

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

#### Test Case VISIONSDK-131: ISS\_3D\_SRV\_960/964deser

##### Summary:

ISS 3D SRV UC

Input : IMI OV10640 / TIDA AR140 / TIDA AR143 with 960/964 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 Select Capture Source as "OV10640 Sensor for SV - IMI (TDA3x ONLY)" or "AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)"	Capture Source should be OV10640 Sensor for SV - IMI (TDA3x ONLY) or AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY) depending upon the hardware connected & selected by user	

	& Display Output as HDMI 1080P	& 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. Noise levels should be very low.	
<u>Execution type:</u>	Automated		
<u>Estimated exec. duration (sec):</u>	60.00		
<u>Priority:</u>	Medium		
<u>Requirements</u>	ADASVISION-1037: TDA3x 3D SRV: Improve imaging for SRV with Improve AE stability & Integrate Photometric alignment ADASVISION-1068: TDA3x 3D SRV : Auto calculate number of slice parameters ADASVISION-1069: TDA3c 3D SRV: Lens type : Distortion table ADASVISION-1071: TDA3x 3D SRV : Boot time optimization ADASVISION-1087: Support synchronization of camera in UB964 ADASVISION-1090: Update TI logo ADASVISION-1257: AR0143 Sensor Support ADASVISION-1295: Display Link support for various input data formats ADASVISION-1298: Display Link - Progressive mode display ADASVISION-1300: Display Link - Video window positioning support ADASVISION-1304: Display Link - Display Multi instance support ADASVISION-1306: Display Link - HDMI display support ADASVISION-1307: Display Link - Support for standard display resolutions ADASVISION-1308: Display Link - support for custom resolutions ADASVISION-1309: Display Link - Blending support of Grpx and Video planes ADASVISION-1310: Display Link - Blending support for Video planes ADASVISION-1311: Display Link - Color keying support ADASVISION-1312: Display Link - Set back Ground Color of VENC ADASVISION-1317: Display Link - Transparency Color Key Selection support ADASVISION-1318: Display Link - VENC section ADASVISION-1324: multi sensors support ADASVISION-1325: support LVDS capture ADASVISION-1326: Support OV10640 Raw/Bayer sensors ADASVISION-1456: ISS capture - mode ADASVISION-1457: ISS capture - interface ADASVISION-1458: ISS capture - CSI2 mode ADASVISION-1459: ISS capture - resolution ADASVISION-1461: ISS capture - packing ADASVISION-1466: ISS multi-channel capture ADASVISION-1467: ISS M2M -ISP - GLBCE selection ADASVISION-1468: ISS M2M -ISP - resizer ADASVISION-1469: ISS M2M -ISP - output dataformat ADASVISION-1470: ISS M2M -ISP - input data format ADASVISION-1471: ISS M2M -ISP - NF ADASVISION-1472: ISS M2M -ISP - WDR modes ADASVISION-1473: ISS M2M -ISP - resizer ADASVISION-1474: ISS M2M -ISP multiple instance ADASVISION-1475: ISS M2M - H3A ADASVISION-1477: ISS M2M (LDC + VTNF) - LDC selection ADASVISION-1478: ISS M2M (LDC + VTNF) - LDC data format ADASVISION-1479: ISS M2M (LDC + VTNF) - VTNF data format ADASVISION-1480: ISS M2M (LDC + VTNF) - LDC create time config ADASVISION-1481: ISS M2M (LDC + VTNF) - VTNF create time config ADASVISION-1482: ISS M2M (LDC + VTNF) - general ADASVISION-1483: ISS M2M RSZ - resizer ADASVISION-1484: ISS M2M RSZ - output dataformat ADASVISION-1485: ISS M2M RSZ - input data format ADASVISION-1486: ISS M2M RSZ - Multi scale (pyramid generation for PD/TSR etc) ADASVISION-1487: ISS M2M RSZ - multi-instance ADASVISION-1488: ISS M2M RSZ - multi-instance with ISP M2M ADASVISION-1489: ISS M2M RSZ - multi-CH ADASVISION-1579: low cost surround view with TDA3x ADASVISION-1606: Algo Link DeWarp for multiple channel LDC correction. ADASVISION-1621: ISS: Capture Link & M2M ISP : Support MIPI RAW 12 dataformat ADASVISION-1643: ISP Based SRV : Split LUT's ADASVISION-1644: ISP Based SRV: Configurable blend seam angle ADASVISION-1645: ISP Based SRV: Configurable blend seam start point ADASVISION-1647: ISP Based SRV: Compression of LUT's ADASVISION-1684: ISP Based SRV: Updated interface of Mesh Generation Tool ADASVISION-1685: ISP Based SRV: Parametric transition between view points ADASVISION-1686: ISP Based SRV: Adaptive bowl support on LDC Surroundview ADASVISION-1687: ISP Based SRV: Compression and reorganization of V2W Table(s) ADASVISION-1688: ISP Based SRV: Generating Car Box Edges/view ADASVISION-1701: AR143 (MARs) Camera and Fusion board support on TDA2Px ADASVISION-1709: TDA3x SRV: Add multi camera harmonization ADASVISION-1786: SerDes cleanup for ISS sensor drivers		

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<b>Keywords:</b>	tda3xx-evm tda3xx_rvp c_qualification
<b>Execution Details</b>	
Build	REL_3_5
Tester	x0246581
<b>Execution Result:</b>	<b>Passed</b>
<b>Execution Mode:</b>	<b>Manual</b>
<b>Execution duration (sec):</b>	

**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

#:	Step actions:	Expected Results:	Execution Status:
1	Go to System Settings  Select Capture Source as "OV10640 Sensor for SV - IMI (TDA3x ONLY)"  or "AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)"  & Display Output as HDMI 1080P	Capture Source should be  OV10640 Sensor for SV - IMI (TDA3x ONLY) or  AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)  depending upon the hardware connected & selected by user  & 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. 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 Select "s" to Start/Stop transition Select "n" to change to next View Point Select "r" to change to previous View Point	On selecting "s"  Transitions should stop  On selecting "n"  Transition should happen to next view point  On selecting "r"  Transition should happen to previous view point  On selecting "s" again  Transition should start normally	
<b>Execution type:</b>	Manual		

<u>Estimated exec. duration (sec):</u>	
<u>Priority:</u>	Medium
<u>Requirements</u>	ADASVISION-1036: TDA3x 3D SRV: 360 degree flyaround (Phase 1) ADASVISION-1037: TDA3x 3D SRV: Improve imaging for SRV with Improve AE stability & Integrate Photometric alignment ADASVISION-1068: TDA3x 3D SRV : Auto calculate number of slice parameters ADASVISION-1069: TDA3c 3D SRV: Lens type : Distortion table ADASVISION-1071: TDA3x 3D SRV : Boot time optimization ADASVISION-1527: API config outbound check ADASVISION-1736: Enable AEWB for all 4 Channels for ISS based 3D SRV on TDA2Px and TDA3x ADASVISION-889: 3D SRV on TDA3x "Enhancements" ADASVISION-962: TDA3x 3D SRV: Enabling 2A and WDR
<u>Keywords:</u>	tda3xx-evm tda3xx_rvp c_integration
<b>Execution Details</b>	
Build	REL_3_5
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 & 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  Select Capture Source as "OV10640 Sensor for SV - IMI (TDA3x ONLY)" or "AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)"  & Display Output as HDMI 1080P	Capture Source should be  OV10640 Sensor for SV - IMI (TDA3x ONLY) or  AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)  depending upon the hardware connected & selected by user  & 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. Noise levels should be very low.	
3	Select "1" to Save a Captured RAW frame from channel 0 (Will be saved in DDR)  Select "2" to Save a DeWarp Output Frame (Will be saved in DDR)  Select "3" to Save ISP output frames (Will be saved in MMC/SD : All channels)	On selecting "1"  RAW frame from channel 0 should be saved in DDR  On selecting "2"  DeWarp Output Frame should be saved in DDR	

	Select "d" to Save Display Frame to MMC/SD card	On selecting "3"  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>Requirements</u>	ADASVISION-1036: TDA3x 3D SRV: 360 degree flyaround (Phase 1) ADASVISION-1037: TDA3x 3D SRV: Improve imaging for SRV with Improve AE stability & Integrate Photometric alignment ADASVISION-1068: TDA3x 3D SRV : Auto calculate number of slice parameters ADASVISION-1069: TDA3c 3D SRV: Lens type : Distortion table ADASVISION-1071: TDA3x 3D SRV : Boot time optimization ADASVISION-1542: Algorithm Link Support (Framework and Skeleton portion) ADASVISION-1543: Algorithm Link Support for all CPU cores ADASVISION-1544: Algorithm Link Support Prioritization ADASVISION-1545: Algorithm Link Support Multiple instantiation ADASVISION-1546: Algorithm Link Support Multiple input and output queues ADASVISION-1547: Algorithm Link Support Multiple input channels ADASVISION-1548: Algorithm Link Support Out of order release of input and output buffers ADASVISION-1549: Algorithm Link Support Memory allocations ADASVISION-1550: Algorithm Link Support DSP subsystem DMA resource allocations ADASVISION-1551: Algorithm Link Support EVE subsystem DMA resource allocations ADASVISION-1552: Algorithm Link Support System DMA resource allocations ADASVISION-1553: Algorithm Link Support In place computation support ADASVISION-1554: Algorithm Link Support Non-In place computation support ADASVISION-1555: Algorithm Link Support Multiple Algos ADASVISION-1556: Algorithm Link Support Alg Configurations ADASVISION-889: 3D SRV on TDA3x "AcA" Enhancements ADASVISION-962: TDA3x 3D SRV: Enabling 2A and WDR		
<u>Keywords:</u>	tda3xx-evm tda3xx_rvp		
<b>Execution Details</b>			
Build	REL_3_5		
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-135: ISS_3D_2D_SRV_960/964deser</b>			
<u>Summary:</u>			
ISS 2D + 3D SRV UC			
Input : IMI OV10640 / TIDA AR140 / TIDA AR143 with 960/964 deserializer			
Output : HDMI 1080P			
<u>Preconditions:</u>			
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  Select Capture Source as  "OV10640 Sensor for SV - IMI (TDA3x ONLY)"  or	Capture Source should be  OV10640 Sensor for SV - IMI (TDA3x ONLY) or  AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)	

	"AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)"	depending upon the hardware connected & selected by user	
	& Display Output as HDMI 1080P	& 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  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>Requirements</u>	ADASVISION-1398: IPC between M4s ADASVISION-1399: IPC between DSPs ADASVISION-1402: IPC between M4 & DSP ADASVISION-1403: IPC between M4 & EVE ADASVISION-1405: IPC between DSP & EVE ADASVISION-1410: shall support link sendcmd across all cores ADASVISION-1466: ISS multi-channel capture ADASVISION-1467: ISS M2M -ISP - GLBCE selection ADASVISION-1468: ISS M2M -ISP - resizer ADASVISION-1469: ISS M2M -ISP - output dataformat ADASVISION-1470: ISS M2M -ISP - input data format ADASVISION-1472: ISS M2M -ISP - WDR modes ADASVISION-1473: ISS M2M -ISP - resizer ADASVISION-1474: ISS M2M -ISP multiple instance ADASVISION-1475: ISS M2M - H3A ADASVISION-1476: ISS M2M sub-frame ADASVISION-1483: ISS M2M RSZ - resizer ADASVISION-1484: ISS M2M RSZ - output dataformat ADASVISION-1485: ISS M2M RSZ - input data format ADASVISION-1487: ISS M2M RSZ - multi-instance ADASVISION-1488: ISS M2M RSZ - multi-instance with ISP M2M ADASVISION-1489: ISS M2M RSZ - multi-CH ADASVISION-1490: Algorithm Link ISS 2A - Auto-exposure using H3A data as input ADASVISION-1491: Algorithm Link ISS 2A - Auto-white balance using H3A data as input ADASVISION-1492: Algorithm Link ISS 2A - Auto-exposure for WDR mode operation using H3A data as input ADASVISION-1493: Algorithm Link ISS 2A - multi-CH mode of operation for H3A for surround view cameras ADASVISION-1503: ESM support ADASVISION-1504: DAP MPU support ADASVISION-1518: Synchronization of frames across multiple channels ADASVISION-1519: duplication of output ADASVISION-1520: Merging of multiple outputs ADASVISION-1701: AR143 (MARs) Camera and Fusion board support on TDA2Px ADASVISION-882: 2D+3D SRV on TDA3x		
<u>Keywords:</u>	tda3xx-evm tda3xx_rvp c_regression c_stress c_qualification c_stability m_iss m_algorithm		
<b>Execution Details</b>			
Build	REL_3_5		
Tester	x0246581		
<u>Execution Result:</u>	<b>Passed</b>		
<u>Execution Mode:</u>	<b>Manual</b>		
<u>Execution duration (sec):</u>			

**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 & 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 Select Capture Source as "OV10640 Sensor for SV - IMI (TDA3x ONLY)" or "AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)" & Display Output as HDMI 1080P	Capture Source should be OV10640 Sensor for SV - IMI (TDA3x ONLY) or AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY) depending upon the hardware connected & selected by user & 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 and no buffer drops should be observed	

Execution type: Automated

Estimated exec. duration (sec): 60.00

Priority: Medium

Requirements

ADASVISION-1038: TDA3x 3D SRV: 3D + Rear view UC  
 ADASVISION-1397: Rear Camera usecase  
 ADASVISION-1518: Synchronization of frames across multiple channels  
 ADASVISION-1519: duplication of output  
 ADASVISION-1520: Merging of multiple outputs  
 ADASVISION-1521: select a particular channel  
 ADASVISION-1522: Dummy Sink (Null Link)  
 ADASVISION-1523: Dummy source (NullSrc Link)  
 ADASVISION-269: TDA3x: CMS & Rear Camera augmented reality visualization on rear view mirror  
 ADASVISION-830: For all SRV - DSP load optimization using SIMD

Keywords: tda3xx-evm  
tda3xx\_rvp

**Execution Details**

Build REL\_3\_5

Tester x0246581

Execution Result: **Passed**

Execution Mode: **Manual**

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 Select Capture Source as "OV10640 Sensor for SV - IMI (TDA3x ONLY)" or "AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)" & Display Output as HDMI 1080P	Capture Source should be OV10640 Sensor for SV - IMI (TDA3x ONLY) or AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY) depending upon the hardware connected & selected by user & 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>Requirements</u>	ADASVISION-1036: TDA3x 3D SRV: 360 degree flyaround (Phase 1) ADASVISION-1037: TDA3x 3D SRV: Improve imaging for SRV with Improve AE stability & Integrate Photometric alignment ADASVISION-1068: TDA3x 3D SRV : Auto calculate number of slice parameters ADASVISION-1069: TDA3c 3D SRV: Lens type : Distortion table ADASVISION-1071: TDA3x 3D SRV : Boot time optimization ADASVISION-1167: Error handling requirements ADASVISION-1526: Error handling ADASVISION-962: TDA3x 3D SRV: Enabling 2A and WDR		
<u>Keywords:</u>	tda3xx-evm tda3xx_rvp		
<b>Execution Details</b>			
Build	REL_3_5		
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 Select Capture Source as	Capture Source should be	



	"OV10640 Sensor for SV - IMI (TDA3x ONLY)" or "AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)" & Display Output as HDMI 1080P	OV10640 Sensor for SV - IMI (TDA3x ONLY) or AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY) depending upon the hardware connected & selected by user & 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  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>Requirements</u>	ADASVISION-1036: TDA3x 3D SRV: 360 degree flyaround (Phase 1) ADASVISION-1037: TDA3x 3D SRV: Improve imaging for SRV with Improve AE stability & Integrate Photometric alignment ADASVISION-1068: TDA3x 3D SRV : Auto calculate number of slice parameters ADASVISION-1069: TDA3c 3D SRV: Lens type : Distortion table ADASVISION-1071: TDA3x 3D SRV : Boot time optimization ADASVISION-1466: ISS multi-channel capture ADASVISION-1467: ISS M2M -ISP - GLBCE selection ADASVISION-1468: ISS M2M -ISP - resizer ADASVISION-1469: ISS M2M -ISP - output dataformat ADASVISION-1470: ISS M2M -ISP - input data format ADASVISION-1472: ISS M2M -ISP - WDR modes ADASVISION-1473: ISS M2M -ISP - resizer ADASVISION-1474: ISS M2M -ISP multiple instance ADASVISION-1475: ISS M2M - H3A ADASVISION-1483: ISS M2M RSZ - resizer ADASVISION-1484: ISS M2M RSZ - output dataformat ADASVISION-1485: ISS M2M RSZ - input data format ADASVISION-1487: ISS M2M RSZ - multi-instance ADASVISION-1488: ISS M2M RSZ - multi-instance with ISP M2M ADASVISION-1489: ISS M2M RSZ - multi-CH ADASVISION-1579: low cost surround view with TDA3x ADASVISION-1606: Algo Link DeWarp for multiple channel LDC correction. ADASVISION-1621: ISS: Capture Link & M2M ISP : Support MIPI RAW 12 dataformat ADASVISION-1643: ISP Based SRV : Split LUT's ADASVISION-1644: ISP Based SRV: Configurable blend seam angle ADASVISION-1645: ISP Based SRV: Configurable blend seam start point ADASVISION-1647: ISP Based SRV: Compression of LUT's ADASVISION-1684: ISP Based SRV: Updated interface of Mesh Generation Tool ADASVISION-1685: ISP Based SRV: Parametric transition between view points ADASVISION-1686: ISP Based SRV: Adaptive bowl support on LDC Surroundview ADASVISION-1687: ISP Based SRV: Compression and reorganization of V2W Table(s) ADASVISION-1688: ISP Based SRV: Generating Car Box Edges/view ADASVISION-1715: [TDA3x 3D SRV]: Add support for Output Resolution change ADASVISION-1761: [TDA3x 3D SRV] Update Mesh tool for output resolution change ADASVISION-830: For all SRV - DSP load optimization using SIMD ADASVISION-889: 3D SRV on TDA3x "Enhancements" ADASVISION-932: TDA3x 3D SRV on 128MB memory map ADASVISION-962: TDA3x 3D SRV: Enabling 2A and WDR		
<u>Keywords:</u>	tda3xx-evm tda3xx_rvp c_qualification		
<b>Execution Details</b>			
Build	REL_3_5		
Tester	x0246581		
<u>Execution Result:</u>	<b>Passed</b>		
<u>Execution Mode:</u>	<b>Manual</b>		
<u>Execution duration (sec):</u>			

**Test Case VISIONSDK-343: ISS\_3D\_SRV\_960/964deser\_with\_200\_ViewPoints**Summary:

## ISS 3D SRV UC

Input : IMI OV10640 / TIDA AR140 / TIDA AR143 with 960/964 deserializer  
or OV10635 with 964 deserializer

Output : HDMI 1080P

Binaries: 1GB (DDR\_MEM\_1024M)

Preconditions:

Build binaries with DDR\_MEM=DDR\_MEM\_1024M

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  Select Capture Source as "OV10640 Sensor for SV - IMI (TDA3x ONLY)" or "AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)"  & Display Output as HDMI 1080P	Capture Source should be  OV10640 Sensor for SV - IMI (TDA3x ONLY) or  AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)  depending upon the hardware connected & selected by user  & 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. Noise levels should be very low.	

Execution type: Automated

Estimated exec. duration (sec): 60.00

Priority: Medium

<u>Requirements</u>	ADASVISION-1037: TDA3x 3D SRV: Improve imaging for SRV with Improve AE stability & Integrate Photometric alignment ADASVISION-1068: TDA3x 3D SRV : Auto calculate number of slice parameters ADASVISION-1069: TDA3c 3D SRV: Lens type : Distortion table ADASVISION-1071: TDA3x 3D SRV : Boot time optimization ADASVISION-1087: Support synchronization of camera in UB964 ADASVISION-1090: Update TI logo ADASVISION-1257: AR0143 Sensor Support ADASVISION-1295: Display Link support for various input data formats ADASVISION-1298: Display Link - Progressive mode display ADASVISION-1300: Display Link - Video window positioning support ADASVISION-1304: Display Link - Display Multi instance support ADASVISION-1306: Display Link - HDMI display support ADASVISION-1307: Display Link - Support for standard display resolutions ADASVISION-1308: Display Link - support for custom resolutions ADASVISION-1309: Display Link - Blending support of Grpx and Video planes ADASVISION-1310: Display Link - Blending support for Video planes ADASVISION-1311: Display Link - Color keying support ADASVISION-1312: Display Link - Set back Ground Color of VENC ADASVISION-1317: Display Link - Transparency Color Key Selection support ADASVISION-1318: Display Link - VENC section ADASVISION-1324: multi sensors support ADASVISION-1325: support LVDS capture ADASVISION-1326: Support OV10640 Raw/Bayer sensors ADASVISION-1456: ISS capture - mode ADASVISION-1457: ISS capture - interface ADASVISION-1458: ISS capture - CSI2 mode ADASVISION-1459: ISS capture - resolution ADASVISION-1461: ISS capture - packing ADASVISION-1466: ISS multi-channel capture ADASVISION-1467: ISS M2M -ISP - GLBCE selection ADASVISION-1468: ISS M2M -ISP - resizer ADASVISION-1469: ISS M2M -ISP - output dataformat ADASVISION-1470: ISS M2M -ISP - input data format
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ADASVISION-1471: ISS M2M -ISP - NF  
 ADASVISION-1472: ISS M2M -ISP - WDR modes  
 ADASVISION-1473: ISS M2M -ISP - resizer  
 ADASVISION-1474: ISS M2M -ISP multiple instance  
 ADASVISION-1475: ISS M2M - H3A  
 ADASVISION-1477: ISS M2M (LDC + VTNF) - LDC selection  
 ADASVISION-1478: ISS M2M (LDC + VTNF) - LDC data format  
 ADASVISION-1479: ISS M2M (LDC + VTNF) - VTNF data format  
 ADASVISION-1480: ISS M2M (LDC + VTNF) - LDC create time config  
 ADASVISION-1481: ISS M2M (LDC + VTNF) - VTNF create time config  
 ADASVISION-1482: ISS M2M (LDC + VTNF) - general  
 ADASVISION-1483: ISS M2M RSZ - resizer  
 ADASVISION-1484: ISS M2M RSZ - output dataformat  
 ADASVISION-1485: ISS M2M RSZ - input data format  
 ADASVISION-1486: ISS M2M RSZ - Multi scale (pyramid generation for PD/TSR etc)  
 ADASVISION-1487: ISS M2M RSZ - multi-instance  
 ADASVISION-1488: ISS M2M RSZ - multi-instance with ISP M2M  
 ADASVISION-1489: ISS M2M RSZ - multi-CH  
 ADASVISION-1579: low cost surround view with TDA3x  
 ADASVISION-1606: Algo Link DeWarp for multiple channel LDC correction.  
 ADASVISION-1621: ISS: Capture Link & M2M ISP : Support MIPI RAW 12 dataformat  
 ADASVISION-1643: ISP Based SRV : Split LUT's  
 ADASVISION-1644: ISP Based SRV: Configurable blend seam angle  
 ADASVISION-1645: ISP Based SRV: Configurable blend seam start point  
 ADASVISION-1647: ISP Based SRV: Compression of LUT's  
 ADASVISION-1684: ISP Based SRV: Updated interface of Mesh Generation Tool  
 ADASVISION-1685: ISP Based SRV: Parametric transition between view points  
 ADASVISION-1686: ISP Based SRV: Adaptive bowl support on LDC Surroundview  
 ADASVISION-1687: ISP Based SRV: Compression and reorganization of V2W Table(s)  
 ADASVISION-1688: ISP Based SRV: Generating Car Box Edges/view  
 ADASVISION-1701: AR143 (MARs) Camera and Fusion board support on TDA2Px  
 ADASVISION-1709: TDA3x SRV: Add multi camera harmonization  
 ADASVISION-1786: SerDes cleanup for ISS sensor drivers  
 ADASVISION-1844: [TDA3x SRV] Support more View Points (~200) with 1GB memory map  
 ADASVISION-1857: [TDA3x-RVP] Support 1GB memory map  
 ADASVISION-830: For all SRV - DSP load optimization using SIMD  
 ADASVISION-889: 3D SRV on TDA3x " Enhancements  
 ADASVISION-932: TDA3x 3D SRV on 128MB memory map  
 ADASVISION-962: TDA3x 3D SRV: Enabling 2A and WDR

**Keywords:**  
 tda3xx-evm  
 tda3xx\_rvp  
 c\_qualification

#### Execution Details

Build: REL\_3\_5  
 Tester: x0246581

**Execution Result:** Passed

**Execution Mode:** Manual

**Execution duration (sec):**

## 1.1.2.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  Select Capture Source as OV10635 Sensor 720P30 or  OV10635 Sensor for Mosaic Display - SAT0088/OV10635 (TDA2EX ONLY) or  OV10640 Sensor for SV - IMI (TDA3x ONLY) or  AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)  depending upon the hardware connected  & Display Output as HDMI 1080P (TDA2x/TDA2Ex/TDA3x), HDMI XGA TDM mode (TDA3x ONLY)	Capture Source should be  OV10635 Sensor 720P30 or  OV10635 Sensor for Mosaic Display - SAT0088/OV10635 (TDA2EX ONLY) or  OV10640 Sensor for SV - IMI (TDA3x ONLY) or  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  8 Red color rectangle boxes (2 in each quadrant) should be visible  and no buffer drops should be observed	
3	Select Auto Calibration	On selecting Auto calibration  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>Requirements</u>	ADASVISION-1762: SRV Auto calibration - auto selection of ROI for Surround View (1MB Vs 2MB) ADASVISION-854: Support for handling region-of-interest input frame for 3DSRV & 2DSRV use-cases ADASVISION-883: Improved auto-calibration for 2D & 3D ADASVISION-999: Performance: Complex algorithm should work on shadowed buffers		
<u>Keywords:</u>	tda2xx-evm tda2ex-evm tda3xx-evm tda2ex-entry tda2px-evm tda3xx_rvp c_qualification		
<b>Execution Details</b>			
Build	REL_3_5		
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  Select Capture Source as OV10635 Sensor 720P30 or OV10635 Sensor for Mosaic Display - SAT0088/OV10635 (TDA2EX ONLY) or OV10640 Sensor for SV - IMI (TDA3x ONLY) or AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)	Capture Source should be  OV10635 Sensor 720P30 or  OV10635 Sensor for Mosaic Display - SAT0088/OV10635 (TDA2EX ONLY) or	

	depending upon the hardware connected  & Display Output as HDMI 1080P (TDA2x/TDA2Ex/TDA3x), HDMI XGA TDM mode (TDA3x ONLY)	OV10640 Sensor for SV - IMI (TDA3x ONLY) or  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  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  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)  to MMC/SD card & insert into EVM  & 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>Requirements</u>		ADASVISION-854: Support for handling region-of-interest input frame for 3DSRV & 2DSRV use-cases ADASVISION-984: Calibration: Allow to pass a parameter where all the generated files get read from/written ADASVISION-999: Performance: Complex algorithm should work on shadowed buffers	
<u>Keywords:</u>		tda2xx-evm tda2ex-evm tda3xx-evm tda2ex-entry tda2px-evm tda3xx_rvp	
<b>Execution Details</b>			
Build		REL_3_5	
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  Select Capture Source as OV10635 Sensor 720P30 or  OV10635 Sensor for Mosaic Display - SAT0088/OV10635 (TDA2EX ONLY) or  OV10640 Sensor for SV - IMI (TDA3x ONLY) or  AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)  depending upon the hardware connected  & Display Output as HDMI 1080P (TDA2x/TDA2Ex/TDA3x), HDMI XGA TDM mode (TDA3x ONLY)	Capture Source should be  OV10635 Sensor 720P30 or  OV10635 Sensor for Mosaic Display - SAT0088/OV10635 (TDA2EX ONLY) or  OV10640 Sensor for SV - IMI (TDA3x ONLY) or  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  and no buffer drops should be observe	
3	Select Default Calibration	On selecting Default calibration  It will 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>Requirements</u>	ADASVISION-854: Support for handling region-of-interest input frame for 3DSRV & 2DSRV use-cases		
<u>Keywords:</u>	tda2xx-evm tda2ex-evm tda3xx-evm tda2ex-entry tda2px-evm tda3xx_rvp		
<b>Execution Details</b>			
Build	REL_3_5		
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  Select Capture Source as OV10635 Sensor 720P30 or  OV10635 Sensor for Mosaic Display - SAT0088/OV10635 (TDA2EX ONLY) or  OV10640 Sensor for SV - IMI (TDA3x ONLY) or  AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)  depending upon the hardware connected  & Display Output as HDMI 1080P (TDA2x/TDA2Ex/TDA3x), HDMI XGA TDM mode (TDA3x ONLY)	Capture Source should be  OV10635 Sensor 720P30 or  OV10635 Sensor for Mosaic Display - SAT0088/OV10635 (TDA2EX ONLY) or  OV10640 Sensor for SV - IMI (TDA3x ONLY) or  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  and no buffer drops should be observe	
3	Select Auto Calibration	On selecting Auto calibration  It will detect corners for all 4 cameras & generate  PERSMAT.BIN (in case of TDA2x/TDA2ex)  LUT.BIN (in case of TDA3x)	
4	Select "d" to Save Display Frame to MMC/SD card	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>Requirements</u>	ADASVISION-1601: SD card file system support with VSDK		



	ADASVISION-854: Support for handling region-of-interest input frame for 3DSRV & 2DSRV use-cases ADASVISION-883: Improved auto-calibration for 2D & 3D
<b>Keywords:</b>	tda2xx-evm tda2ex-evm tda3xx-evm tda2ex-entry tda2px-evm tda3xx_rvp
<b>Execution Details</b>	
Build	REL_3_5
Tester	x0246581
<b>Execution Result:</b>	<b>Passed</b>
<b>Execution Mode:</b>	<b>Manual</b>
<b>Execution duration (sec):</b>	

#### 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  Select Capture Source as OV10635 Sensor 720P30 or  OV10635 Sensor for Mosaic Display - SAT0088/OV10635 (TDA2EX ONLY) or  OV10640 Sensor for SV - IMI (TDA3x ONLY) or  AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)  depending upon the hardware connected  & Display Output as HDMI 1080P (TDA2x/TDA2Ex/TDA3x), HDMI XGA TDM mode (TDA3x ONLY)	Capture Source should be  OV10635 Sensor 720P30 or  OV10635 Sensor for Mosaic Display - SAT0088/OV10635 (TDA2EX ONLY) or  OV10640 Sensor for SV - IMI (TDA3x ONLY) or  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  and no buffer drops should be observe	

3	Select Auto Calibration	On selecting Auto calibration  It will detect corners for all 4 cameras & generate  PERSMAT.BIN (in case of TDA2x/TDA2ex)  LUT.BIN (in case of TDA3x)	
4	Select "7" to Update 2D Pers Mat (after auto/manual calibration if required)	On selecting "7"  2D Pers Mat should be updated	
<u>Execution type:</u>		Manual	
<u>Estimated exec. duration (sec):</u>			
<u>Priority:</u>		Medium	
<u>Requirements</u>		ADASVISION-854: Support for handling region-of-interest input frame for 3DSRV & 2DSRV use-cases ADASVISION-883: Improved auto-calibration for 2D & 3D	
<u>Keywords:</u>		tda2xx-evm tda2ex-evm tda3xx-evm tda2ex-entry tda2px-evm tda3xx_rvp	
<b>Execution Details</b>			
Build		REL_3_5	
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  Select Capture Source as OV10635 Sensor 720P30 or  OV10635 Sensor for Mosaic Display - SAT0088/OV10635 (TDA2EX ONLY) or  OV10640 Sensor for SV - IMI (TDA3x ONLY) or  AR0140 Sensor for SV - TIDA00262 (TDA3x ONLY)  depending upon the hardware connected  & Display Output as HDMI 1080P (TDA2x/TDA2Ex/TDA3x), HDMI XGA TDM mode (TDA3x ONLY)	Capture Source should be  OV10635 Sensor 720P30 or  OV10635 Sensor for Mosaic Display - SAT0088/OV10635 (TDA2EX ONLY) or  OV10640 Sensor for SV - IMI (TDA3x ONLY) or  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	It throws error	

<u>Execution type:</u>	Manual
<u>Estimated exec. duration (sec):</u>	
<u>Priority:</u>	Medium
<u>Requirements</u>	ADASVISION-854: Support for handling region-of-interest input frame for 3DSRV & 2DSRV use-cases ADASVISION-883: Improved auto-calibration for 2D & 3D
<u>Keywords:</u>	tda2xx-evm tda2ex-evm tda3xx-evm tda2ex-entry tda2px-evm tda3xx_rvp
<b>Execution Details</b>	
Build	REL_3_5
Tester	x0246581
<u>Execution Result:</u>	<b>Passed</b>
<u>Execution Mode:</u>	<b>Manual</b>
<u>Execution duration (sec):</u>	

#### 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

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

	(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>Requirements</u>	ADASVISION-854: Support for handling region-of-interest input frame for 3DSRV & 2DSRV use-cases ADASVISION-883: Improved auto-calibration for 2D & 3D		
<u>Keywords:</u>	tda2xx-evm tda2ex-evm tda3xx-evm tda2ex-entry tda2px-evm tda3xx_rvp		
<b>Execution Details</b>			
Build	REL_3_5		
Tester	x0246581		
<u>Execution Result:</u>	<b>Passed</b>		
<u>Execution Mode:</u>	<b>Manual</b>		
<u>Execution duration (sec):</u>			

### 1.1.3.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>Requirements</u>	ADASVISION-1036: TDA3x 3D SRV: 360 degree flyaround (Phase 1) ADASVISION-1037: TDA3x 3D SRV: Improve imaging for SRV with Improve AE stability & Integrate Photometric alignment ADASVISION-1068: TDA3x 3D SRV : Auto calculate number of slice parameters ADASVISION-1069: TDA3c 3D SRV: Lens type : Distortion table ADASVISION-1071: TDA3x 3D SRV : Boot time optimization ADASVISION-830: For all SRV - DSP load optimization using SIMD ADASVISION-889: 3D SRV on TDA3x " Enhancements ADASVISION-932: TDA3x 3D SRV on 128MB memory map ADASVISION-962: TDA3x 3D SRV: Enabling 2A and WDR		
<u>Keywords:</u>	tda3xx-evm tda3xx_rvp		
<b>Execution Details</b>			
Build	REL_3_5		
Tester	x0246581		
<u>Execution Result:</u>	<b>Passed</b>		
<u>Execution Mode:</u>	<b>Manual</b>		
<u>Execution duration (sec):</u>			

## 1.2.Test Suite : Mono\_Cam

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## 1.2.1.Test Suite : ISS

### 1.2.1.1.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 Select Capture Source as AR0143 & Display Output as HDMI 1080P	Capture Source shuld be AR0143 & 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 Exposure and colors should look correct. Most important - white/grey objects should not have any color cast	

Execution type: Manual

Estimated exec. duration (sec): 60.00

Priority: Medium

**Requirements**  
 ADASVISION-1257: AR0143 Sensor Support  
 ADASVISION-1395: 1CH 720p30 CSI2/LVDS/Paralle capture + ISS ISP M2M WDR + ISS M2M LDC+VTNF + Display  
 ADASVISION-1436: Basic Capture + ISP processing + display use case  
 ADASVISION-1604: Support sensor frame work  
 ADASVISION-1701: AR143 (MARs) Camera and Fusion board support on TDA2Px

**Keywords:**  
 tda3xx-evm  
 c\_stress  
 c\_qualification  
 c\_stability

##### Execution Details

Build: REL\_3\_5

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 Select Capture Source as AR0143 & Display Output as HDMI 1080P	Capture Source should be AR0143 & 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 Exposure and colors should look correct. 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	
<u>Execution type:</u>	Manual		
<u>Estimated exec. duration (sec):</u>	60.00		
<u>Priority:</u>	Medium		
<u>Requirements</u>	ADASVISION-1257: AR0143 Sensor Support ADASVISION-1395: 1CH 720p30 CSI2/LVDS/Parallel capture + ISS ISP M2M WDR + ISS M2M LDC+VTNF + Display ADASVISION-1436: Basic Capture + ISP processing + display use case ADASVISION-1604: Support sensor frame work ADASVISION-1701: AR143 (MARs) Camera and Fusion board support on TDA2Px		
<u>Keywords:</u>	tda3xx-evm c_regression c_performance c_qualification m_iss		
<b>Execution Details</b>			
Build	REL_3_5		
Tester	x0246581		
<u>Execution Result:</u>	<b>Passed</b>		
<u>Execution Mode:</u>	<b>Manual</b>		
<u>Execution duration (sec):</u>			

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

WDR mode - basic ISS functionality test

ISS Single channel 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 Select Capture Source as AR143 & Display Output as HDMI 1080P	Capture Source should be AR143 & Display device as HDMI 1080P	
2	Go to ISS setting 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. Exposure and colors should look correct.	
<u>Execution type:</u>	Automated		
<u>Estimated exec. duration (sec):</u>	60.00		



<u>Priority:</u>	Medium
<u>Requirements</u>	ADASVISION-1257: AR0143 Sensor Support ADASVISION-1395: 1CH 720p30 CSI2/LVDS/Paralle capture + ISS ISP M2M WDR + ISS M2M LDC+VTNF + Display ADASVISION-1456: ISS capture - mode ADASVISION-1472: ISS M2M -ISP - WDR modes ADASVISION-1604: Support sensor frame work
<u>Keywords:</u>	tda3xx-evm
<b>Execution Details</b>	
Build	REL_3_5
Tester	x0246581
<u>Execution Result:</u>	<b>Passed</b>
<u>Execution Mode:</u>	<b>Manual</b>
<u>Execution duration (sec):</u>	

**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

<u>#:</u>	<u>Step actions:</u>	<u>Expected Results:</u>	<u>Execution Status:</u>
1	Go to System Settings Select Capture Source as AR143 & Display Output as HDMI 1080P	Capture Source shuld be AR143 & Display device as HDMI 1080P	
2	Go to ISS setting 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.	

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

Requirements

ADASVISION-1257: AR0143 Sensor Support  
ADASVISION-1395: 1CH 720p30 CSI2/LVDS/Paralle capture + ISS ISP M2M WDR + ISS M2M LDC+VTNF + Display  
ADASVISION-1456: ISS capture - mode  
ADASVISION-1472: ISS M2M -ISP - WDR modes

Keywords:

tda3xx-evm  
c\_stress  
c\_stability

**Execution Details**

Build REL\_3\_5

Tester x0246581

Execution Result: **Failed**Execution Mode: **Manual**Execution duration (sec):

Execution notes ADASVISION-1848: [TDA3x/TDA2Px] Non Image Quality issue with 2A &amp; 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 Select Capture Source as AR143 & Display Output as HDMI 1080P	Capture Source shuld be AR143 & Display device as HDMI 1080P	
2	Go to ISS setting 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>Requirements</u>	ADASVISION-1257: AR0143 Sensor Support ADASVISION-1395: 1CH 720p30 CSI2/LVDS/Paralle capture + ISS ISP M2M WDR + ISS M2M LDC+VTNF + Display ADASVISION-1456: ISS capture - mode ADASVISION-1472: ISS M2M -ISP - WDR modes ADASVISION-1604: Support sensor frame work		
<u>Keywords:</u>	tda3xx-evm		
<b>Execution Details</b>			
Build	REL_3_5		
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 Select Capture Source as AR143 & Display Output as HDMI 1080P	Capture Source shuld be AR143 & Display device as HDMI 1080P	
2	Go to ISS setting 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 in dark as well as bright regions. 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>Requirements</u>	ADASVISION-1257: AR0143 Sensor Support ADASVISION-1395: 1CH 720p30 CSI2/LVDS/Paralle capture + ISS ISP M2M WDR + ISS M2M LDC+VTNF + Display ADASVISION-1456: ISS capture - mode ADASVISION-1472: ISS M2M -ISP - WDR modes		
<u>Keywords:</u>	tda3xx-evm		
<b>Execution Details</b>			
Build	REL_3_5		
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] Non 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 Select Capture Source as AR143 & Display Output as HDMI 1080P	Capture Source shuld be AR143 & Display device as HDMI 1080P	
2	Go to ISS setting 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 All the details in the scene should be visible. Noise levels should be very low. 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>Requirements</u>	ADASVISION-1257: AR0143 Sensor Support ADASVISION-1456: ISS capture - mode ADASVISION-1472: ISS M2M -ISP - WDR modes ADASVISION-1490: Algorithm Link ISS 2A - Auto-exposure using H3A data as input ADASVISION-1491: Algorithm Link ISS 2A - Auto-white balance using H3A data as input ADASVISION-1492: Algorithm Link ISS 2A - Auto-exposure for WDR mode operation using H3A data as input		
<u>Keywords:</u>	tda3xx-evm		
<b>Execution Details</b>			

Build	REL_3_5
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 Select Capture Source as AR143 & Display Output as HDMI 1080P	Capture Source shuld be AR143 & Display device as HDMI 1080P	
2	Go to ISS setting 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 All the details in the scene should be visible. Preview maybe noisy. Toggling between VTNF (0/1) should have visible impact on temporal noise.	

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

ADASVISION-1257: AR0143 Sensor Support  
 ADASVISION-1456: ISS capture - mode  
 ADASVISION-1457: ISS capture - interface  
 ADASVISION-1459: ISS capture - resolution  
 ADASVISION-1467: ISS M2M -ISP - GLBCE selection  
 ADASVISION-1468: ISS M2M -ISP - resizer  
 ADASVISION-1469: ISS M2M -ISP - output dataformat  
 ADASVISION-1470: ISS M2M -ISP - input data format  
 ADASVISION-1472: ISS M2M -ISP - WDR modes  
 ADASVISION-1473: ISS M2M -ISP - resizer  
 ADASVISION-1475: ISS M2M - H3A  
 ADASVISION-1479: ISS M2M (LDC + VTNF) - VTNF data format  
 ADASVISION-1481: ISS M2M (LDC + VTNF) - VTNF create time config  
 ADASVISION-1483: ISS M2M RSZ - resizer  
 ADASVISION-1484: ISS M2M RSZ - output dataformat  
 ADASVISION-1485: ISS M2M RSZ - input data format  
 ADASVISION-1490: Algorithm Link ISS 2A - Auto-exposure using H3A data as input  
 ADASVISION-1491: Algorithm Link ISS 2A - Auto-white balance using H3A data as input  
 ADASVISION-1492: Algorithm Link ISS 2A - Auto-exposure for WDR mode operation using H3A data as input

Keywords: tda3xx-evm**Execution Details**

Build	REL_3_5
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 Select Capture Source as AR143 & Display Output as HDMI 1080P	Capture Source shuld be AR143 & Display device as HDMI 1080P	
2	Go to ISS setting 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 Preview must look undistorted	

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

ADASVISION-1257: AR0143 Sensor Support  
 ADASVISION-1456: ISS capture - mode  
 ADASVISION-1457: ISS capture - interface  
 ADASVISION-1459: ISS capture - resolution  
 ADASVISION-1467: ISS M2M -ISP - GLBCE selection  
 ADASVISION-1468: ISS M2M -ISP - resizer  
 ADASVISION-1469: ISS M2M -ISP - output dataformat  
 ADASVISION-1470: ISS M2M -ISP - input data format  
 ADASVISION-1472: ISS M2M -ISP - WDR modes  
 ADASVISION-1473: ISS M2M -ISP - resizer  
 ADASVISION-1475: ISS M2M - H3A  
 ADASVISION-1477: ISS M2M (LDC + VTNF) - LDC selection  
 ADASVISION-1478: ISS M2M (LDC + VTNF) - LDC data format  
 ADASVISION-1480: ISS M2M (LDC + VTNF) - LDC create time config  
 ADASVISION-1483: ISS M2M RSZ - resizer  
 ADASVISION-1484: ISS M2M RSZ - output dataformat  
 ADASVISION-1485: ISS M2M RSZ - input data format  
 ADASVISION-1490: Algorithm Link ISS 2A - Auto-exposure using H3A data as input  
 ADASVISION-1491: Algorithm Link ISS 2A - Auto-white balance using H3A data as input  
 ADASVISION-1492: Algorithm Link ISS 2A - Auto-exposure for WDR mode operation using H3A data as input

Keywords: tda3xx-evm**Execution Details**

Build REL\_3\_5

Tester x0246581

Execution Result: **Passed**Execution Mode: **Manual**Execution duration (sec):**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  Select Capture Source as AR143  & Display Output as HDMI 1080P	Capture Source should be AR143  & Display device as HDMI 1080P	
2	Go to ISS setting  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 LDC effect should be visible.  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.	

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

Requirements

ADASVISION-1257: AR0143 Sensor Support  
 ADASVISION-1456: ISS capture - mode  
 ADASVISION-1457: ISS capture - interface  
 ADASVISION-1459: ISS capture - resolution  
 ADASVISION-1467: ISS M2M -ISP - GLBCE selection  
 ADASVISION-1468: ISS M2M -ISP - resizer  
 ADASVISION-1469: ISS M2M -ISP - output dataformat  
 ADASVISION-1470: ISS M2M -ISP - input data format  
 ADASVISION-1472: ISS M2M -ISP - WDR modes  
 ADASVISION-1473: ISS M2M -ISP - resizer  
 ADASVISION-1475: ISS M2M - H3A  
 ADASVISION-1477: ISS M2M (LDC + VTNF) - LDC selection  
 ADASVISION-1478: ISS M2M (LDC + VTNF) - LDC data format  
 ADASVISION-1479: ISS M2M (LDC + VTNF) - VTNF data format  
 ADASVISION-1480: ISS M2M (LDC + VTNF) - LDC create time config  
 ADASVISION-1481: ISS M2M (LDC + VTNF) - VTNF create time config  
 ADASVISION-1482: ISS M2M (LDC + VTNF) - general  
 ADASVISION-1483: ISS M2M RSZ - resizer  
 ADASVISION-1484: ISS M2M RSZ - output dataformat  
 ADASVISION-1485: ISS M2M RSZ - input data format  
 ADASVISION-1490: Algorithm Link ISS 2A - Auto-exposure using H3A data as input  
 ADASVISION-1491: Algorithm Link ISS 2A - Auto-white balance using H3A data as input  
 ADASVISION-1492: Algorithm Link ISS 2A - Auto-exposure for WDR mode operation using H3A data as input

Keywords: tda3xx-evm**Execution Details**

Build REL\_3\_5

Tester x0246581

Execution Result: **Passed**Execution Mode: **Manual**Execution duration (sec):**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

#:	Step actions:	Expected Results:	Execution Status:
1	Go to System Settings  Select Capture Source as AR140/OV10640/IMX224  & Display Output as HDMI 1080P	Capture Source should be AR140/OV10640/IMX224  & 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 Exposure and colors should look correct. Most important - white/grey objects should not have any color cast	
3	Run DCC tool for ISS image tuning  Connect to target EVM (using IP) & dump frames from various tap-points	should be able to dump frames from various tap-points	
Execution type:	Manual		
Estimated exec. duration (sec):	60.00		
Priority:	Medium		
Requirements	ADASVISION-1395: 1CH 720p30 CSI2/LVDS/Paralle capture + ISS ISP M2M WDR + ISS M2M LDC+VTNF + Display ADASVISION-1436: Basic Capture + ISP processing + display use case ADASVISION-1511: ISS tuning tool ADASVISION-1587: TDA3x ISS UC - SDK links and Utils to support static memory allocation ADASVISION-1600: ISS - add various tap-points for dumping the frames ADASVISION-1604: Support sensor frame work ADASVISION-1671: APIs to read UB960/964/954/953 status registers and to enable test pattern		
Keywords:	None		
Execution Details			
Build	REL_3_5		
Tester	x0246581		
Execution Result:	Passed		
Execution Mode:	Manual		
Execution duration (sec):			

## 1.2.2.Test Suite : MISC

### 1.2.2.1.Test Suite : StatisticsLogs

#### 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 Press "1" for Dpll Status	On selecting "1" should print DPLL Statistics	
<u>Execution type:</u>	Automated		
<u>Estimated exec. duration (sec):</u>	60.00		
<u>Priority:</u>	Medium		
<u>Requirements</u>	ADASVISION-1561: power managemant Software Enhancements and Advanced Features for TDA2x/TDA3x/TDA2Ex ADASVISION-1562: power managemant - Profilling Support for Actual CPU idle time ADASVISION-1563: Vision SDK Print Statistics for PM		
<u>Keywords:</u>	tda2xx-evm tda2ex-evm tda3xx-evm tda2ex-entry tda2px-evm tda3xx_rvp		
<b>Execution Details</b>			
Build	REL_3_5		
Tester	x0246581		
<u>Execution Result:</u>	<b>Passed</b>		
<u>Execution Mode:</u>	<b>Manual</b>		
<u>Execution duration (sec):</u>			

#### 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 Press "2" for Temperature	On selecting "2" should print current min & max temperature on all cores	
<u>Execution type:</u>	Automated		
<u>Estimated exec. duration (sec):</u>	60.00		
<u>Priority:</u>	Medium		
<u>Requirements</u>	ADASVISION-1561: power managemant Software Enhancements and Advanced Features for TDA2x/TDA3x/TDA2Ex ADASVISION-1563: Vision SDK Print Statistics for PM ADASVISION-1566: PM - VSDKPRINTSTATS: Print the Temperature		
<u>Keywords:</u>	tda2xx-evm		



	tda2ex-evm tda3xx-evm tda2ex-entry tda2px-evm tda3xx_rvp
<b>Execution Details</b>	
Build	REL_3_5
Tester	x0246581
<u>Execution Result:</u>	<b>Passed</b>
<u>Execution Mode:</u>	<b>Manual</b>
<u>Execution duration (sec):</u>	

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

Print PRCM Statistics Voltage

<u>#:</u>	<u>Step actions:</u>	<u>Expected Results:</u>	<u>Execution Status:</u>
1	Go to System Settings -> Print PRCM Statistics  Press "3" for Voltage	On selecting "3" should print voltage usage	
<u>Execution type:</u>	Automated		
<u>Estimated exec. duration (sec):</u>	60.00		
<u>Priority:</u>	Medium		
<u>Requirements</u>	ADASVISION-1561: power managemant Software Enhancements and Advanced Features for TDA2x/TDA3x/TDA2Ex ADASVISION-1563: Vision SDK Print Statistics for PM ADASVISION-1567: PM - VSDKPRINTSTATS: Print the Voltage		
<u>Keywords:</u>	tda2xx-evm tda2ex-evm tda3xx-evm tda2ex-entry tda2px-evm tda3xx_rvp		
<b>Execution Details</b>			
Build	REL_3_5		
Tester	x0246581		
<u>Execution Result:</u>	<b>Passed</b>		
<u>Execution Mode:</u>	<b>Manual</b>		
<u>Execution duration (sec):</u>			

**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  Press "4" for Module Power State	On selecting "4" should print Module Power State  Module Name & Module state  Module SIDLE State  Clock Activite State  Power Domain State	
<u>Execution type:</u>	Automated		
<u>Estimated exec. duration</u>	60.00		

<u>(sec):</u>	
<u>Priority:</u>	Medium
<u>Requirements</u>	ADASVISION-1561: power managemant Software Enhancements and Advanced Features for TDA2x/TDA3x/TDA2Ex ADASVISION-1563: Vision SDK Print Statistics for PM ADASVISION-1565: PM - VSDKPRINTSTATS: Print Module Power State
<u>Keywords:</u>	tda2xx-evm tda2ex-evm tda3xx-evm tda2ex-entry tda2px-evm tda3xx_rvp
<b>Execution Details</b>	
Build	REL_3_5
Tester	x0246581
<u>Execution Result:</u>	<b>Passed</b>
<u>Execution Mode:</u>	<b>Manual</b>
<u>Execution duration (sec):</u>	

**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 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>Requirements</u>	ADASVISION-1561: power managemant Software Enhancements and Advanced Features for TDA2x/TDA3x/TDA2Ex ADASVISION-1563: Vision SDK Print Statistics for PM ADASVISION-1564: PM - VSDKPRINTSTATS: Print Module Frequencies		
<u>Keywords:</u>	tda2xx-evm tda2ex-evm tda3xx-evm tda2ex-entry tda2px-evm tda3xx_rvp		
<b>Execution Details</b>			
Build	REL_3_5		
Tester	x0246581		
<u>Execution Result:</u>	<b>Passed</b>		
<u>Execution Mode:</u>	<b>Manual</b>		
<u>Execution duration (sec):</u>			

**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 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>Requirements</u>	ADASVISION-1561: power mamagement Software Enhancements and Advanced Features for TDA2x/TDA3x/TDA2Ex ADASVISION-1563: Vision SDK Print Statistics for PM ADASVISION-1564: PM - VSDKPRINTSTATS: Print Module Frequencies
<u>Keywords:</u>	tda2xx-evm tda2ex-evm tda3xx-evm tda2ex-entry tda2px-evm tda3xx_rvp
<b>Execution Details</b>	
Build	REL_3_5
Tester	x0246581
<u>Execution Result:</u>	<b>Passed</b>
<u>Execution Mode:</u>	<b>Manual</b>
<u>Execution duration (sec):</u>	

**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  Press "7" for Prcm Register Data	On selecting "6" should print Prcm Register Data of all POWER DOMAIN  Reg. Address & Value	
<u>Execution type:</u>	Automated		
<u>Estimated exec. duration (sec):</u>	60.00		
<u>Priority:</u>	Medium		
<u>Requirements</u>	ADASVISION-1561: power mamagement Software Enhancements and Advanced Features for TDA2x/TDA3x/TDA2Ex ADASVISION-1563: Vision SDK Print Statistics for PM ADASVISION-1565: PM - VSDKPRINTSTATS: Print Module Power State		
<u>Keywords:</u>	tda2xx-evm tda2ex-evm tda3xx-evm tda2ex-entry tda2px-evm tda3xx_rvp		
<b>Execution Details</b>			
Build	REL_3_5		
Tester	x0246581		
<u>Execution Result:</u>	<b>Passed</b>		
<u>Execution Mode:</u>	<b>Manual</b>		
<u>Execution duration (sec):</u>			

**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	On selecting "8" should print Power	

	Statistics Press "8" for Power Consumption	Consumption	
<u>Execution type:</u>	Automated		
<u>Estimated exec. duration (sec):</u>	60.00		
<u>Priority:</u>	Medium		
<u>Requirements</u>	ADASVISION-1561: power mamagemant Software Enhancements and Advanced Features for TDA2x/TDA3x/TDA2Ex ADASVISION-1563: Vision SDK Print Statistics for PM ADASVISION-1565: PM - VSDKPRINTSTATS: Print Module Power State		
<u>Keywords:</u>	tda2xx-evm tda2ex-evm tda3xx-evm tda2ex-entry tda2px-evm tda3xx_rvp		
<b>Execution Details</b>			
Build	REL_3_5		
Tester	x0246581		
<u>Execution Result:</u>	<b>Passed</b>		
<u>Execution Mode:</u>	<b>Manual</b>		
<u>Execution duration (sec):</u>			

**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 Press "9" for All PRCM Stats	On selecting "9" should print All PRCM Stats  Dpll Status  Temperature  Voltage  Module Power State  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>Requirements</u>	ADASVISION-1536: System debug logs ADASVISION-1537: Statistics logs ADASVISION-1538: latency measurement ADASVISION-1539: system loading ADASVISION-1540: DDR BW measurement ADASVISION-1541: Global timestamp ADASVISION-1561: power mamagemant Software Enhancements and Advanced Features for TDA2x/TDA3x/TDA2Ex ADASVISION-1563: Vision SDK Print Statistics for PM ADASVISION-1564: PM - VSDKPRINTSTATS: Print Module Frequencies ADASVISION-1565: PM - VSDKPRINTSTATS: Print Module Power State ADASVISION-1566: PM - VSDKPRINTSTATS: Print the Temperature ADASVISION-1567: PM - VSDKPRINTSTATS: Print the Voltage		
<u>Keywords:</u>	tda2xx-evm tda2ex-evm tda3xx-evm tda2ex-entry		

	tda2px-evm tda3xx_rvp
<b>Execution Details</b>	
Build	REL_3_5
Tester	x0246581
<u>Execution Result:</u>	<b>Passed</b>
<u>Execution Mode:</u>	<b>Manual</b>
<u>Execution duration (sec):</u>	

### 1.2.2.2.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 2. Create a test plan & under that create a build 3. Add test cases to execute for that particular build 4. Trigger all automated test cases from test link 5. Execute remaining manual test cases from test link 6. Generate test report	User should be able to trigger all automated test cases from test link & also able to update test result for manual test cases	
<u>Execution type:</u>	Manual		
<u>Estimated exec. duration (sec):</u>			
<u>Priority:</u>	Medium		
<u>Requirements</u>	ADASVISION-369: Deploy TestLink for VSDK test-case management and automation		
<u>Keywords:</u>	None		
<b>Execution Details</b>			
Build	REL_3_5		
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> 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  link_fw  Make System (Common for FW & all Apps modules)  sample_app  apps  algorithms  docs	Directory structure should be as stated	

	testsuite		
<u>Execution type:</u>	Manual		
<u>Estimated exec. duration (sec):</u>			
<u>Priority:</u>	Medium		
<u>Requirements</u>	ADASVISION-1205: VSDK 3.0 restructuring ADASVISION-929: SDK FW and App separation		
<u>Keywords:</u>	None		
<b>Execution Details</b>			
Build	REL_3_5		
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 : Radar

Test Case VISIONSDK-150: Radar_AR12_Capture_Null			
<u>Summary:</u>			
Radar Capture Null UC			
Input : AR12			
Output : Null			
Supported on : TDA3x/TDA3x ALPS/TDA2x Cascade			
<u>Preconditions:</u>			
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/TDA2x Cascade	Shoul display Main Menu	
2	Run "Radar (Single AR1243) Capture + 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>Requirements</u>	ADASVISION-1441: AR12xx sensor capture ADASVISION-1445: RADAR processing performance benchmarking ADASVISION-992: Radar Data Processing Usecase using AR12xx Sensor Data input		
<u>Keywords:</u>	c_regression c_qualification tda3xx-alps tda3xx-AR12-Booster		
<b>Execution Details</b>			
Build	REL_3_5		
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-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>Requirements</u>	ADASVISION-1269: [RADAR] Integrate Beam Forming Algorithm in SDK ADASVISION-1441: AR12xx sensor capture ADASVISION-1442: RADAR algorithm porting on DSP Alg link ADASVISION-985: Radar Processing Alg Plugin ADASVISION-986: Radar Processing Alg Plugin Flexibility ADASVISION-987: Radar Processing Single Alg Plugin on DSP and EVE ADASVISION-992: Radar Data Processing Usecase using AR12xx Sensor Data input		
<u>Keywords:</u>	c_stress c_qualification c_stability tda3xx-alps tda3xx-AR12-Booster		
<b>Execution Details</b>			
Build	REL_3_5		
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 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>Requirements</u>	ADASVISION-1115: [RADAR] Support for build support and file based capture read process write ADASVISION-1255: Radar Advance frame configuration & dynamic configuration support ADASVISION-1269: [RADAR] Integrate Beam Forming Algorithm in SDK ADASVISION-1442: RADAR algorithm porting on DSP Alg link ADASVISION-1445: RADAR processing performance benchmarking ADASVISION-1570: power mamagement - CPU IDLE ADASVISION-1571: power mamagement - CPUIDLE: MPU Core 0/1 Idle ADASVISION-1572: power mamagement - CPUIDLE: IPU Core Idle ADASVISION-1573: power mamagement - CPUIDLE: DSP 1/2 Core Idle ADASVISION-1574: power mamagement - CPUIDLE: EVE 1/2/3/4 Core Idle ADASVISION-1575: PM - CPUIDLE: Vision SDK Integration of CPU IDLE ADASVISION-1699: [RADAR] Propagate each output channel info properly in RadarProcess Link Alg Plugin		



	ADASVISION-985: Radar Processing Alg Plugin ADASVISION-986: Radar Processing Alg Plugin Flexibility ADASVISION-987: Radar Processing Single Alg Plugin on DSP and EVE ADASVISION-989: Radar data read from SD card ADASVISION-990: Radar Data output to SD Card ADASVISION-993: Radar Data Processing Usecase using File Sensor Data input
<u>Keywords:</u>	tda2xx-evm tda3xx-evm
<b>Execution Details</b>	
Build	REL_3_5
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

<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 Select Data Read/Write Mode as SD card	No display	
3	Select File IO menu Write single frame to SD card	Writing single frame to SD card should be successful	

Execution type: Manual

Estimated exec. duration (sec):

Priority: Medium

##### Requirements

ADASVISION-1115: [RADAR] Support for build support and file based capture read process write  
 ADASVISION-1269: [RADAR] Integrate Beam Forming Algorithm in SDK  
 ADASVISION-1570: power mamagement - CPU IDLE  
 ADASVISION-1571: power mamagement - CPUIDLE: MPU Core 0/1 Idle  
 ADASVISION-1572: power mamagement - CPUIDLE: IPU Core Idle  
 ADASVISION-1573: power mamagement - CPUIDLE: DSP 1/2 Core Idle  
 ADASVISION-1574: power mamagement - CPUIDLE: EVE 1/2/3/4 Core Idle  
 ADASVISION-1575: PM - CPUIDLE: Vision SDK Integration of CPU IDLE  
 ADASVISION-985: Radar Processing Alg Plugin  
 ADASVISION-986: Radar Processing Alg Plugin Flexibility  
 ADASVISION-987: Radar Processing Single Alg Plugin on DSP and EVE  
 ADASVISION-989: Radar data read from SD card  
 ADASVISION-990: Radar Data output to SD Card  
 ADASVISION-993: Radar Data Processing Usecase using File Sensor Data input

Keywords: tda2xx-evm  
tda3xx-evm

##### **Execution Details**

Build REL\_3\_5

Tester x0246581

Execution Result: **Passed**

Execution Mode: **Manual**

Execution duration (sec):

**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 &amp; 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 Select Data Read/Write Mode as Network	No display	
3	Press "P"	Check performance stats	
4	using network_ctrl tool send a diiferent parameter set	should be able to update with new parameter set	

Execution type: ManualEstimated exec. duration (sec):Priority: Medium

Requirements

ADASVISION-1269: [RADAR] Integrate Beam Forming Algorithm in SDK  
 ADASVISION-1699: [RADAR] Propagate each output channel info properly in RadarProcess Link Alg Plugin  
 ADASVISION-1919: Radar: Allow accepting mmwave messages from Network to translate to AWR1243 SPI commands - Base Infr  
 ADASVISION-985: Radar Processing Alg Plugin  
 ADASVISION-986: Radar Processing Alg Plugin Flexibility  
 ADASVISION-987: Radar Processing Single Alg Plugin on DSP and EVE  
 ADASVISION-991: Radar data input and output via Ethernet

Keywords:

tda2xx-evm  
tda3xx-evm

**Execution Details**

Build REL\_3\_5

Tester x0246581

Execution Result: **Passed**Execution Mode: **Manual**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 &amp; 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  Select Data Read/Write Mode as Network	No display	
3	Run network_rx to dump files	Should be able to dump frmaes	
4	Using network_ctrl tool send a different parameter set	should be able to update with new parameter set	
<u>Execution type:</u>	Manual		
<u>Estimated exec. duration (sec):</u>			
<u>Priority:</u>	Medium		
<u>Requirements</u>	ADASVISION-1269: [RADAR] Integrate Beam Forming Algorithm in SDK ADASVISION-1919: Radar: Allow accepting mmwave messages from Network to translate to AWR1243 SPI commands - Base Infr ADASVISION-985: Radar Processing Alg Plugin ADASVISION-986: Radar Processing Alg Plugin Flexibility ADASVISION-987: Radar Processing Single Alg Plugin on DSP and EVE ADASVISION-991: Radar data input and output via Ethernet ADASVISION-993: Radar Data Processing Usecase using File Sensor Data input		
<u>Keywords:</u>	tda2xx-evm tda3xx-evm		
<b>Execution Details</b>			
Build	REL_3_5		
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>Requirements</u>	ADASVISION-1269: [RADAR] Integrate Beam Forming Algorithm in SDK ADASVISION-985: Radar Processing Alg Plugin ADASVISION-986: Radar Processing Alg Plugin Flexibility ADASVISION-987: Radar Processing Single Alg Plugin on DSP and EVE ADASVISION-992: Radar Data Processing Usecase using AR12xx Sensor Data input		
<u>Keywords:</u>	tda3xx-alps tda3xx-AR12-Booster		
<b>Execution Details</b>			
Build	REL_3_5		

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

#:	Step actions:	Expected Results:	Execution Status:
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	

Execution type: Manual

Estimated exec. duration (sec):

Priority: Medium

Requirements

ADASVISION-1255: Radar Advance frame configuration & dynamic configuration support  
 ADASVISION-1268: [RADAR] Integrate Peak Detection EVE Algorithm in SDK  
 ADASVISION-1269: [RADAR] Integrate Beam Forming Algorithm in SDK  
 ADASVISION-1441: AR12xx sensor capture  
 ADASVISION-1443: Radar output interpolation for display  
 ADASVISION-1444: Simple RADAR capture + display use case  
 ADASVISION-1672: [Radar] Add Radar System planner to the Release Package  
 ADASVISION-985: Radar Processing Alg Plugin  
 ADASVISION-986: Radar Processing Alg Plugin Flexibility  
 ADASVISION-987: Radar Processing Single Alg Plugin on DSP and EVE  
 ADASVISION-988: Radar output visualization  
 ADASVISION-990: Radar Data output to SD Card  
 ADASVISION-992: Radar Data Processing Usecase using AR12xx Sensor Data input  
 ADASVISION-993: Radar Data Processing Usecase using File Sensor Data input

Keywords:

c\_regression  
 c\_stress  
 c\_stability  
 tda3xx-AR12-Booster

##### **Execution Details**

Build REL\_3\_5

Tester x0246581

Execution Result: **Passed**

Execution Mode: **Manual**

Execution duration (sec):

#### 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		
Requirements	ADASVISION-1106: [RADAR] Add support for ALPS Hardware ADASVISION-1107: [RADAR] Support for Flashing firmware to AR12 flash on ALPS		
Keywords:	tda3xx-alps		
Execution Details			
Build	REL_3_5		
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	
<u>Execution type:</u>		Manual	
<u>Estimated exec. duration (sec):</u>			
<u>Priority:</u>		Medium	
<u>Requirements</u>		ADASVISION-1255: Radar Advance frame configuration & dynamic configuration support ADASVISION-1268: [RADAR] Integrate Peak Detection EVE Algorithm in SDK ADASVISION-1269: [RADAR] Integrate Beam Forming Algorithm in SDK ADASVISION-1441: AR12xx sensor capture ADASVISION-1443: Radar output interpolation for display ADASVISION-1444: Simple RADAR capture + display use case ADASVISION-1873: 4 x AWR1243 Satellite Demo ADASVISION-1875: Satellite radar chip support in Radar SDK	

	ADASVISION-985: Radar Processing Alg Plugin ADASVISION-986: Radar Processing Alg Plugin Flexibility ADASVISION-987: Radar Processing Single Alg Plugin on DSP and EVE ADASVISION-988: Radar output visualization ADASVISION-990: Radar Data output to SD Card ADASVISION-992: Radar Data Processing Usecase using AR12xx Sensor Data input ADASVISION-993: Radar Data Processing Usecase using File Sensor Data input
<u>Keywords:</u>	c_regression c_stress c_stability tda3xx-AR12-Booster
<b>Execution Details</b>	
Build	REL_3_5
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-314: Radar_Test_Source_Object_Detection</b>			
<u>Summary:</u>			
Radar Test Source Object Detection Input : testdata Output : HDMI			
<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	Enable Macro ENABLE_TEST_SOURCE in chains_common_ar12xx.c & configure test source in ChainsCommon_ar12xxEnableTestSource	Should be able to configure test source	
2	Build the code by running below command 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 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>Requirements</u>	ADASVISION-1255: Radar Advance frame configuration & dynamic configuration support ADASVISION-1268: [RADAR] Integrate Peak Detection EVE Algorithm in SDK ADASVISION-1269: [RADAR] Integrate Beam Forming Algorithm in SDK ADASVISION-1441: AR12xx sensor capture ADASVISION-1443: Radar output interpolation for display ADASVISION-1444: Simple RADAR capture + display use case ADASVISION-1677: [RADAR] Dynamic chirp configuration and thorough dynamic configuration testing ADASVISION-985: Radar Processing Alg Plugin ADASVISION-986: Radar Processing Alg Plugin Flexibility ADASVISION-987: Radar Processing Single Alg Plugin on DSP and EVE ADASVISION-988: Radar output visualization ADASVISION-990: Radar Data output to SD Card ADASVISION-992: Radar Data Processing Usecase using AR12xx Sensor Data input ADASVISION-993: Radar Data Processing Usecase using File Sensor Data input		
<u>Keywords:</u>	c_regression c_stress c_stability tda3xx-AR12-Booster		

Execution Details	
Build	REL_3_5
Tester	x0246581
Execution Result:	Passed
Execution Mode:	Manual
Execution duration (sec):	

## 1.4.Test Suite : Build

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### 1.4.1.Test Suite : VSDK\_Builds

<b>Test Case VISIONSDK-249: VSDK_BIOS_different_builds</b>			
<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 (vsdk_install_path)/vision_sdk/build  & run make -s showconfig	Should display config for tda2xx_evm_bios_all	
2	Modify Rules.mk file to other available MAKECONFIG  & run make -s showconfig	Should display config for MAKECONFIG selected	
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>Requirements</u>	ADASVISION-1080: TDA2Px (J6+) Support with VSDK ADASVISION-1081: J6 Entry support for VSDK ADASVISION-1095: Platform support & maintainability ADASVISION-1167: Error handling requirements ADASVISION-1348: AppImage generation ADASVISION-1350: CPU selection ADASVISION-1351: Multiple Memory maps ADASVISION-1352: Multiple platforms support ADASVISION-1354: Build profile selection ADASVISION-1355: 256MB memory map ADASVISION-1356: 1GB memory map ADASVISION-1357: 128MB memory map ADASVISION-1358: 512MB memory map ADASVISION-1359: MMU configs of different CPUs ADASVISION-1360: Platform selection ADASVISION-1361: Selective builds for following links - VPE, ISS ADASVISION-1408: shall support Bios only build ADASVISION-1409: shall support bios + Liux on A15 ADASVISION-1529: Multiple heap support ADASVISION-1530: Cache configuration ADASVISION-1531: Memory config ADASVISION-1532: External Memory allocation ADASVISION-1533: Internal memory allocation from OCMC ADASVISION-1534: Internal memory allocation from DSP L2 SRAM at create time only, no run time allocation and de-alloc ADASVISION-1535: Internal memory allocation from DSP L1 SRAM ADASVISION-1570: power mamagemant - CPU IDLE ADASVISION-1571: power mamagemant - CPUIDLE: MPU Core 0/1 Idle ADASVISION-1572: power mamagemant - CPUIDLE: IPU Core Idle ADASVISION-1573: power mamagemant - CPUIDLE: DSP 1/2 Core Idle ADASVISION-1574: power mamagemant - CPUIDLE: EVE 1/2/3/4 Core Idle ADASVISION-1575: PM - CPUIDLE: Vision SDK Integration of CPU IDLE ADASVISION-1580: Support for TDA2Ex (J6-Eco) in vision SDK ADASVISION-1586: Static memory allocation in Vision SDK and its component		

	ADASVISION-1633: Migrate DSP CGT version of VSDK to use CGT 8.2.4 ADASVISION-1652: TDA2EX ETH SRV platform board Support with VSDK ADASVISION-1751: Support in the makefile to allow for file specific compile options ADASVISION-1857: [TDA3x-RVP] Support 1GB memory map ADASVISION-648: Improve the build time and build process ADASVISION-666: [BSP/STW] Removal of dynamic allocation from BSP and STW libraries ADASVISION-892: RVP support in vision SDK ADASVISION-930: PDK integration with Vision SDK. ADASVISION-955: RVP support in PSDK & VSDK
<u>Keywords:</u>	tda2xx-evm tda2ex-evm tda3xx-evm tda2ex-entry tda2px-evm tda3xx_rvp 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_5
Tester	x0246581
<u>Execution Result:</u>	<b>Passed</b>
<u>Execution Mode:</u>	<b>Manual</b>
<u>Execution duration (sec):</u>	

**Test Case VISIONSDK-278: VSDK\_KW\_build**Summary:

VSDK Klocwork Build

Preconditions:

Jenkin Node is up &amp; running

<u>#:</u>	<u>Step actions:</u>	<u>Expected Results:</u>	<u>Execution Status:</u>
1	Login to Jenkin server & trigger VSK_KW_build projet	Should build KW project & 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>Requirements</u>	ADASVISION-1353: Static code checker Klockwork ADASVISION-1517: Static code checker MISRA-C ADASVISION-1525: Follow coding guidelines		
<u>Keywords:</u>	tda2xx-evm tda2ex-evm tda3xx-evm tda2ex-entry tda2px-evm		
<b>Execution Details</b>			
Build	REL_3_5		
Tester	x0246581		
<u>Execution Result:</u>	<b>Passed</b>		
<u>Execution Mode:</u>	<b>Manual</b>		
<u>Execution duration (sec):</u>			

## 1.4.2.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  Memory should be 128MB  NDK should be disabled  & 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>Requirements</u>	ADASVISION-1108: [RADAR] Support for 128 MB build by default ADASVISION-1348: AppImage generation		
<u>Keywords:</u>	tda3xx-evm c_qualification		
<b>Execution Details</b>			
Build	REL_3_5		
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_BIOS_different_builds</b>			
<u>Summary:</u> Radar 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)			
#:	Step actions:	Expected Results:	Execution Status:
1	Navigate to	Should display config for	

	(vsdk_install_path)/vision_sdk/build & run make -s showconfig	tda3xx_evm_bios_radar	
2	Modify Rules.mk file to other available MAKECONFIG & run make -s showconfig	Should display config for MAKECONFIG selected	
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>Requirements</u>		ADASVISION-1106: [RADAR] Add support for ALPS Hardware ADASVISION-1108: [RADAR] Support for 128 MB build by default ADASVISION-1115: [RADAR] Support for build support and file based capture read process write ADASVISION-1348: Applimage generation ADASVISION-1350: CPU selection ADASVISION-1351: Multiple Memory maps ADASVISION-1352: Multiple platforms support ADASVISION-1354: Build profile selection ADASVISION-1359: MMU configs of different CPUs ADASVISION-1360: Platform selection ADASVISION-1755: [RADAR] Add support for TDA2px EVM ADASVISION-1853: [RADAR] VSDK to support TDA2x cascade radar	
<u>Keywords:</u>		tda2xx-evm tda3xx-evm tda3xx_rvp tda3xx-alps tda3xx-AR12-Booster 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_5		
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 : Release\_Process

<b>Test Case VISIONSDK-245: VSDK_Radar_release_check_list</b>			
<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, mainfest, 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)  & executed in testing phase	Traceability report (Req -> Test) should have all req mapped to tc  Test result matrix should have nothing in "Not Run" state	
3	Check updated project plan, test pain, 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	
6	Check all links in the "index.html"  Remove unwanted links	All links in the "index.html" should work properly	
7	Check all links in the "index.html"  Remove unwanted links	All links in the "index.html" should work properly	
<u>Execution type:</u>	Manual		
<u>Estimated exec. duration (sec):</u>			
<u>Priority:</u>	Medium		
<u>Requirements</u>	ADASVISION-1094: Software release process ADASVISION-1168: SW quality requirements ADASVISION-1513: Release process ADASVISION-1528: Product requirements ADASVISION-1672: [Radar] Add Radar System planner to the Release Package ADASVISION-1675: Processor SDK Vision ti.com landing page - clean-up ADASVISION-1690: Process: Update Software Integration and Test Strategy document ADASVISION-1752: [Radar] Add Radar System planner to the Release Package ADASVISION-875: Develop a How to Debug best practices document, that outlines how to rapidly load binaries, restart		
<u>Keywords:</u>	None		
<b>Execution Details</b>			
Build	REL_3_5		
Tester	x0246581		
<u>Execution Result:</u>	<b>Passed</b>		
<u>Execution Mode:</u>	<b>Manual</b>		
<u>Execution duration (sec):</u>			

### Test Case VISIONSDK-246: VSDK\_package\_creation\_and\_installation

Summary:

## VSDK package creation &amp; installation on windows &amp; linux machine

Preconditions:

VSDK RC package installed &amp; tested

<u>#:</u>	<u>Step actions:</u>	<u>Expected Results:</u>	<u>Execution Status:</u>
1	Modify MPI files to pick correct ti_components  Modify InstallJammer Environment script  Trigger Jenking project for packaging	Windows & Linux installer should be created	
2	Install on windows machine  Check for all customer collaterals  & Build with default config	Installation should be success  Release package should include all customer collaterals such as user guide, data sheet, Release notes, Test reports, Developer guide etc  Build should be success	
3	Install on Linux machine  Check for all customer collaterals  & Build with default config	Installation should be success  Release package should include all customer collaterals such as user guide, data sheet, Release notes, Test reports, Developer guide etc  Build should be success	
<u>Execution type:</u>	Manual		
<u>Estimated exec. duration (sec):</u>			
<u>Priority:</u>	Medium		
<u>Requirements</u>	ADASVISION-1096: packaging and installation ADASVISION-1512: Single installer for vision SDK ADASVISION-1514: Customer collaterals		
<u>Keywords:</u>	c_qualification		
<b>Execution Details</b>			
Build	REL_3_5		
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

<u>#:</u>	<u>Step actions:</u>	<u>Expected Results:</u>	<u>Execution Status:</u>
1	Modify MPI files to pick correct ti_components  Modify InstallJammer Environment script  Trigger Jenking project for packaging	Windows & Linux installer should be created	
2	Install on windows machine  Check for all customer collaterals	Installation should be success  Release package should include all customer collaterals such as user guide, data sheet, Release notes, Test reports, Developer guide etc	

	& Build with default config	Build should be success	
3	Install on Linux machine	Installation should be success	
	Check for all customer collaterals	Release package should include all customer collaterals such as user guide, data sheet, Release notes, Test reports, Developer guide etc	
	& Build with default config	Build should be success	
<u>Execution type:</u>	Manual		
<u>Estimated exec. duration (sec):</u>			
<u>Priority:</u>	Medium		
<u>Requirements</u>	ADASVISION-1096: packaging and installation ADASVISION-1514: Customer collaterals ADASVISION-917: Separate packaging for Radar SDKs		
<u>Keywords:</u>	c_qualification		
<b>Execution Details</b>			
Build	REL_3_5		
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 : Boot\_Modes

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## 1.6.1.Test Suite : QSPI\_Boot

Test Case VISIONSDK-274: Load_Binaries_using_QSPI			
Summary:			
Load Binaries using QSPI			
Preconditions:			
Build Appimage & SBL for QSPI			
#:	Step actions:	Expected Results:	Execution Status:
1	Connect EVM through CCS debug & Follow UG to set SYSBOOT PIN for CCS debug	SYSBOOT PINs should be for debug	
2	Follow UG to Flash SBL & AppImage to QSPI	SBL & AppImage should be flashed to QSPI	
3	Discoonect CCS & Follow UG to set SYSBOOT PIN for QSPI Boot	SYSBOOT PIN should be for QSPI Boot	
4	Boot EVM	EVM should boot with binaries & Display Main Menu	
Execution type:	Manual		
Estimated exec. duration (sec):			
Priority:	Medium		
Requirements	ADASVISION-1346: QSPI boot mode ADASVISION-1347: Flashing method		
Keywords:	tda2xx-evm tda2ex-evm tda3xx-evm tda2ex-entry tda2px-evm tda3xx_rvp		
Execution Details			
Build	REL_3_5		
Tester	x0246581		
Execution Result:	Passed		
Execution Mode:	Manual		
Execution duration (sec):			

## 1.6.2.Test Suite : QSPI\_SD\_Boot

Test Case VISIONSDK-275: Load_Binaries_using_QSPI_SD			
<u>Summary:</u>			
Load Binaries using QSPI SD			
supported only on TDA3x/RVP			
<u>Preconditions:</u>			
Build Appimage & SBL for QSPI SD Boot			
Copy ApplImage to SD card			
<u>#:</u>	<u>Step actions:</u>	<u>Expected Results:</u>	<u>Execution Status:</u>
1	Connect EVM through CCS debug  & 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	Discoonnect CCS  Insert SD card to SD card slot  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 &  Display Main Menu	
<u>Execution type:</u>	Manual		
<u>Estimated exec. duration (sec):</u>			
<u>Priority:</u>	Medium		
<u>Requirements</u>	ADASVISION-1344: SD boot mode ADASVISION-1347: Flashing method ADASVISION-1423: Basic board bringup (serial, pinmux, ddr, nand) using SBL ADASVISION-1425: Boot mode bringup ADASVISION-1601: SD card file system support with VSDK		
<u>Keywords:</u>	tda3xx-evm tda3xx_rvp		
<b>Execution Details</b>			
Build	REL_3_5		
Tester	x0246581		
<u>Execution Result:</u>	<b>Passed</b>		
<u>Execution Mode:</u>	<b>Manual</b>		
<u>Execution duration (sec):</u>			

### 1.6.3.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 & Follow UG to set SYSBOOT PIN for CCS debug	SYSBOOT PINs should be for debug	
2	Load binaries on each core separately 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 & 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		
Requirements	None		
Keywords:	tda2xx-evm tda2ex-evm tda3xx-evm tda2ex-entry tda2px-evm tda3xx_rvp tda3xx-alps tda3xx-AR12-Booster		
Execution Details			
Build	REL_3_5		
Tester	x0246581		
Execution Result:	Passed		
Execution Mode:	Manual		
Execution duration (sec):			