

Multi-Core-SDK-100-Release-Notes

Introduction

This document is the Release Notes for **Release 1.0.0** of the Multicore Software Development Kit (MCSDK) for the BIOS operating system. This BIOS MCSDK software release give developers the ability to evaluate the hardware and software capabilities of the evaluation platform and provide a core software to rapidly develop a multicore application.

Components in BIOS MCSDK Package

The BIOS MCSDK contains following components

- Platform Development Kit for supported C64x+ devices (PDK C64x), this component includes chip support library (CSL) and low level drivers (EMAC LLD)
- Network Development Kit (NDK)
- EDMA3 low level driver
- MCSDK component, this component includes demonstration applications (HPDSPA demo) and platform library for the supported components

The BIOS MCSDK requires Code Composer Studio (CCS) to be installed in the system.

BIOS MCSDK depends on following components, that are typically provided as a part of CCS:

- CodeGen Tools (CGT), compiler for C64x+ devices
- SYS/BIOS operating system
- Inter-Processor Communication (IPC)
- XDC Tools

Please see *BIOS MCSDK Users Guide* for more details on each components.

Documentation

- **EVM Quick Start Guide**: Provides information on hardware setup and running the demonstration application that is loaded on flash.
- **BIOS MCSDK Getting Started Guide** ^[1]: Provides information on installing the software from the two software packages (MCSDK, CCS), connect to the target EVM using JTAG, load pre-compiled libraries to the EVM, and run the application.
- **BIOS MCSDK Users Guide** ^[2]: Provides detailed information regarding software elements and infrastructure to allow developers to start creating applications.

Device Support

The devices and platforms supported with the 1.0.0 release include:

- **C6472:** This release supports the Texas Instruments TMS320C6472 ^[3] high performance DSP; the EVM supported by the software is TMDSEVM6472 ^[4].
- **C6457:** This release supports the Texas Instruments TMS320C6457 ^[5] high performance DSP; the EVM supported by the software is TMDSEVM6457L ^[6].
- **C6474:** This release supports the Texas Instruments TMS320C6474 ^[7] high performance DSP; the EVM supported by the software is currently in development.

Known Issues/Limitations

The complete list of defects can be obtained from the MCSDK 1.0.0 issue list ^[8].

Technical Support and Product Updates

For technical discussions and issues, please visit

- **C64x Multicore forum:** http://e2e.ti.com/support/dsp/c6000_multi-core_dsps/f/439.aspx
- **BIOS Embedded Software forum:** <http://e2e.ti.com/support/embedded/f/355.aspx>
- **Embedded Processors wiki:** http://processors.wiki.ti.com/index.php/Main_Page

For product updates, please visit

- **Multicore Software Development Kits:** <http://focus.ti.com/docs/toolsw/folders/print/bioslinuxmcsdk.html>

The EVM comes with disks containing the MCSDK software and CCS. You can start with these or go to the MCSDK software download site listed above to check for the latest updates and version. The BIOS-MCSDK release download will also have pointers to applicable CCS and compiler release versions as well. Please review the release notes and software manifest before downloading and/or installing the software.

Official Builds

Build 1.0.0.8 (GA)

Date: 23 November 2010

What's New

- Software update for EVM6472
- EVM6457L boot loader issue fix
- NDK test applications included in MCSDK
- NDK fix for CCS help issue

Component Versions

The release requires BIOS-MCSDK and CCS packages to be installed in the system.

Following table shows individual component versions these packages installs.

Component	Version
BIOS MCSDK 1.00.00.08 Package	
PDK C64x	1.00.00.06
NDK	2.20.02.22
MCSDK	1.00.00.08
EMAC LLD	02.10.03.04
CCS v4.2.0 Package	
Code Gen Tools	7.0.3
SYS/BIOS	6.30.02.42
IPC	1.21.02.23
XDC Tools	3.20.03.63

It is recommended to install all the above packages or make sure the individual component versions are present in the system.

Validation Information

This release has gone through a formal validation cycle.

Migration from previous version

Not applicable since this is first external release.

Build 1.0.0.7 (Beta)

This build is an internal release of BIOS MCSDK 1.0.0 for evaluation purposes only.

Date: 21 October 2010

What's New

- Packaging change to have PlatformLib in MCSDK directory
- Changed release name to BIOS MCSDK
- C6474 platform support
- Update to CCS v4.2.0

Component Versions

The release requires BIOS-MCSDK and CCS packages to be installed in the system.

Following table shows individual component versions these packages installs.

Component	Version
BIOS MCSDK 1.00.00.07 Package	
PDK C64x	1.00.00.06
NDK	2.20.00.19
MCSDK	1.00.00.07
EMAC LLD	02.10.03.04
CCS v4.2.0 Package	
Code Gen Tools	7.0.3
SYS/BIOS	6.30.02.42
IPC	1.21.02.23
XDC Tools	3.20.03.63

It is recommended to install all the above packages or make sure the individual component versions are present in the system.

Validation Information

This release has gone through a formal validation cycle.

Migration from previous version

Not applicable since this is the first release.

Build 1.0.0.6 (Alpha3)

This build is an internal release of BIOS MCSDK 1.0.0 for evaluation purposes only.

Date: 17 September 2010

What's New

- C6457 platform support
- Multi-level installer

Component Versions

Component	Version
PDK 1.0.0.5	
CSL-C6472	03.00.06.04
CSL-C6457	03.05.00
EMAC LLD	1.0.1.0
Platform Library	1.00.00.01
DSP/BIOS 6.21.03.21 !	
IPC 1.20.00.23 !	
NDK 2.20.00.02:eng	
EDMA3 02.10.03.04 !	

MCSDK 1.00.00.06	
HUA	1.0.0.8_Alpha
Dependencies	
CodeGen	6.1.15
CCS	4.1.2

! not packaged as a part of this MCSDK release

Validation Information

This release has not gone through a formal validation test cycle and is limited for internal use within Texas Instruments only.

Migration from previous version

Not applicable, this is the internal release.

Build 1.0.0.5 (Alpha2)

This build is an internal release of BIOS MCSDK 1.0.0 for evaluation purposes only.


Date: 17 August 2010

What's New

- The release name is changed to MCSDK and it contains three components as stated above
- This MCSDK release renames BIOS_PSP component to PDK
- The PDK contains new EMAC LLD module for the supported platform
- The PDK contains Platform Library implementation for its APIs

Component Versions

Component	Version
PDK 1.0.0.4	
CSL-C6472	03.00.06.03
EMAC LLD	1.0.0 Alpha
Platform Library	1.00.00.00
DSP/BIOS 6.21.03.21	
IPC 1.20.00.23	
NDK 2.20.00.02:eng	
EDMA3 02.10.02	
MCSDK 1.00.00.05	
HUA	1.0.0.5_Alpha
Dependencies	
CodeGen	6.1.15
CCS	4.1.2

 **Note:** The following components are not packaged as a part of this MCSDK release: DSP/BIOS, IPC, EDMA3 LLD.

Validation Information

This release has not gone through a formal validation test cycle and is limited for internal use within Texas Instruments only.

Migration from previous version

Not applicable, this is the internal release.

Build 1.0.0.4 (Alpha1)

This build is the initial release of BIOS MCSDK 1.0.0 for internal evaluation purposes only.


Date: 30 June 2010


What's New

- First release supporting C6472

Component Versions

Component	Version
BIOSPSP 1.0.0.2	
CSL-C6472	03.00.06.03
EDMA3	02.10.02
NSP	02.01.00.02
Platform Library	Not Available
DSP/BIOS 6.21.03.21	
IPC 1.20.00.23	
NDK 2.20.00.01:eng	
MCSDK 1.00.00.02	
HUA	1.0.0.2_Alpha
Dependencies	
CodeGen	6.1.15
CCS	4.1.2

 **Note:** DSP/BIOS and IPC are not packaged as a part of this MCSDK release.

 **Note:** NDK Support Package (NSP) is temporary until EMAC LLD is implemented.

Validation Information

This release has not gone through a formal validation test cycle and is limited for internal use within Texas Instruments only.

Migration from previous version

Not applicable, this is the initial release.

References

- [1] http://processors.wiki.ti.com/index.php/BIOS_MCSDK_1.0_Getting_Started_Guide
 - [2] http://processors.wiki.ti.com/index.php/BIOS_MCSDK_1.0_User_Guide
 - [3] <http://focus.ti.com/docs/prod/folders/print/tms320c6472>
 - [4] <http://focus.ti.com/docs/toolsw/folders/print/tmdsevm6472.html>
 - [5] <http://focus.ti.com/docs/prod/folders/print/tms320c6457>
 - [6] <http://focus.ti.com/docs/toolsw/folders/print/tmdsevm6457l.html>
 - [7] <http://focus.ti.com/docs/prod/folders/print/tms320c6474>
 - [8] <https://cqweb.ext.ti.com/cqweb/main?command=GenerateMainFrame&service=CQ&schema=SDO-Web&contextid=SDOWP&entityDefName=IncidentReport&username=readonly&password=readonly&queryID=34401489>
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