

TEXAS INSTRUMENTS THE WORLD LEADER IN DSP AND ANALOG

# **Release Notes**

C6748 BIOSPSP 03.01.01.00

July 01, 2013



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#### 1 Introduction

This PSP Package serves as fundamental software platform for development, deployment and execution of application software on C6748 based platform. PSP abstracts the functionality provided by the C6748.

This PSP package is intended for the DSP that runs SYS/BIOS<sup>™</sup> (user guide that comes along with this release, details the system requirements)

#### 1.1 Release Category

This PSP release versioned 03.01.01.00 is GA release for EVM 6748. To know the details of this release refer <u>Drivers/Components for this release</u> section in this document.

#### **1.2 Text Conventions**

þ	This bullet indicates important information.
	Please read such text carefully.
	This bullet indicates additional information.

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# 2 Out-of-Box Contents

biospsp\_03\_00\_xx\_xx\_Setup.exe contains following:

1.	<ul> <li>Source code for driver and other necessary abstractions.</li> </ul>						
	<ul> <li>Reference Project files (SYS/BIOS™), CCS5 build files</li> </ul>						
	<ul> <li>The above mentioned items are located inside the <installation dir="">\biospsp_03_00_xx_xx\ directory</installation></li> </ul>						
	<ul> <li>Please refer the user guide for introduction about the folder structure</li> </ul>						
	<ul> <li>Please note that the CCS setup files and GEL files are _NOT_ provision with this release and this would be available with latest CCSv5 release from EVM manufacturer.</li> </ul>						
2.	Release Notes (this document) provides an overview of this release.						
3.	User Guide that provides information on package usage and each driver's usage.						
4.	Datasheet that provides resource usage and performance information of the each driver.						



# 3 Dependencies

- CCS 5.1.0.09000 or higher
- C6748 EVM
- SYS/BIOS 6.33.01.25
- Code Generation Tools 7.3.1
- EDMA3 and I2C driver from C6748 Starterware v01.20.04.01
- XDC 3.23.00.32

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#### 4 Drivers/Components for this release

This section lists the drivers / components that are delivered as part of this release.

- SYS/BIOS 6.33.01.25 Drivers
  - Audio (McBSP, McASP, AUDIO interface and CODEC)
  - PSC (that helps to turn the clock on/off for the modules)
  - rCSL header files and examples for rCSL usage
- Sample applications that demonstrate the use of above drivers

Please note that, at this point of time the drivers do not have any abstraction for the OS APIs and they use the OS (SYS/BIOS 6.33.01.25) inside the drivers.

- All the drivers are tested only in ELF format. Even though the package contains the coff libraries for the entire driver modules, those modules are not tested using the coff sample applications.
- Build for all rCSL examples is excluded from makefile

#### 4.1 Other changes

- 1. The release has dependency on C6748 Starterware PSP for dependencies on I2C, EDMA and PSC.
- 2. The interface for Starterware EDMA driver with BIOS is provided in this release for guidance to users to be used for development purpose.
- PSC driver from Starterware PSP is used indirectly from Starterware PSP driver modules. BIOS PSP drivers do not make use of Starterware PSC driver directly.



## 5 Known Issues

- 5.1 McBSP
  - SDOCM00086545 The McBSP data reception fails in FIFO disable mode.
     Workaround None.



#### 6 Limitations

#### 6.1 I2C (SYS/BIOS) Device Driver

- Loopback is not supported
- In case of time bound IO requests, on timeout the driver is not able to perform any operations on the peripheral. (This peripheral limitation is documented in the technical reference manual of I2C under ICMDR register)

#### 6.2 McASP (SYS/BIOS™) Device Driver

• Mcasp Driver does not support switching from DIT mode to TDM mode dynamically.

#### 6.3 EVM 6748 Limitation

- Only McBSP instance ``1'' can be used since the clock from MII interferes with the McBSP clock



## 7 EVM Validation Status

Driver Module	Device Instance	Validated on LCDK	Validated on C6748 EVM
McASP	0	No	Yes
McBSP	1	No	Yes

### Note:

The BIOSPSP Sample applications will not work on the LCDK board if BIOS Power module is enabled/added.

Refer sections 5 and 6 for more information.



# 8 Fixed in this release

#### None

 $\bowtie$  Please refer to release notes of previous release (C6748 BIOSPSP 03.00.01.00) for latest fixed issues list for services and features supported.



# 9 Special notes

- Please refer the user guide for installation, build instructions and tool version information.
- The resource allocation is the responsibility of application (system integrator)



# 10 Technical Support

To submit questions about issues with this BIOSPSP drivers release please go to the external forums at <u>http://e2e.ti.com/</u>.