

Release Notes

BIOSUSB 01.10.03

6 April 2010

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1 Introduction

The BIOSUSB Package (based on JUNGO USB stack) provides capability to incorporate a USB host or USB device functionality for an embedded C6747/OMAPL137 and C6748/OMAPL138 platform device.

This BIOSUSB package is intended for DSP that runs DSP/BIOS™ (user guide that come along with this release details the system requirements)

1.1 Release Category

This BIOSUSB release versioned 01.10.03 is a GA release support for C6747/OMAPL137 or C6748/OMAPL138 EVMs.

1.2 Text Conventions

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

2 Out-of-Box Contents

BIOSUSB_01_10_03_Setup.exe contains following:

1	<ul style="list-style-type: none"> ➤ Libraries for device, host, dual role mode configuration and usb power management library. ➤ Source code for host, device, dual role and usb power management example, MSC-Device Glue application. ➤ The above mentioned items are located inside the "<bios_installation_dir>\ti\packages\" ➤ Project files for each example (DSP/BIOS™), CCS3 and CCS4 build files ➤ Please note that the CCS setup files and GEL files are <u>NOT</u> provided with this release and this would be available with latest CCSv3 releases or from EVM vendor.
2	Release Notes (this document) providing an overview of this release
3	User Guide that provides information on usage of the package .
4	Data sheet provides performance figures and CPU load for MSC host and MSC device configuration.

3 Dependencies

The following products are required to be installed prior to using the BIOSUSB Package for C6747/OMAPL37 and C6748/OMAPL138 platform:

For CCS3 Environment

- ❖ CCS 3.3.80.11 (service release 10)
- ❖ DSP-BIOS versioned **5.41.03.17**
- ❖ Code Generation Tools **6.1.9**
- ❖ EVM C6747/OMAPL37 (Rev-D recommended) or C6748/OMAPL138 Board (Beta- version recommended)
- ❖ XDS 510 USB Emulator (Optional) – EVM has on board emulator

For CCS4 Environment

- ❖ CCS4 version 4.0.0.16000
- ❖ DSP-BIOS versioned **5.41.03.17**
- ❖ XDS 510 USB Emulator (Optional) – EVM has on board emulator

Dependent Packages

- ❖ EDMA 3 LLD – versioned **01.11.00.02**
- ❖ ERTFS File System package versioned **1.10.01.31**
- ❖ PSP_DRIVERS Package - The BIOSPSP GA Package with versioned **1.30.00**

4 BIOSUSB Features supported in this release

- USB Host features
 - MSC class driver
 - HID class driver

Note: Maximum of two USB mass storage devices are supported.
- USB –Slave/Device features
 - Mass storage class
 - HID class (keyboard function driver)
- USB Dual Mode features
 - Switching between Host and Device mode without reloading the stack image on the platform
- USB Power Management feature
 - Support Suspend/Resume of USB Bus (OHCI/MUSB controllers)
- Other component dependency for BIOSUSB
 - Blockmedia (BIOSPSP Package)
 - ERTFS (ERTFS Package)

4.1 Changes from previous release

- ❖ Added USB Power Management support.
- ❖ Added “usbhosthid_pm” example to illustrate the usb power management capability.
- ❖ Added Dual Mode Stack support
- ❖ Added ‘usbduahid’ example to illustrate the dual mode switching
- ❖ Added endpoint Traffic configuration API to support multiple application needs.

4.2 Other changes

- none

5 Known Issues

5.1 Unable createPartition when two usb stick connected to C6747/C6748 (SDOCM00064929)

when two usb mass storage device or stick connected to usb 1.1 port or usb2.0 port of Freon/primus platform, the two device detected and getDriveId() returns the driveID. After clear partition is done, when trying to create partition, the getdevparams function returns failure. Further not able to create the partition on the usb drive.

Workaround : None.

5.2 USB MSC Device Example (Dynamic removal of MMC/SD or NAND OR SATA device is not supported)

When target as USB Mass storage device exposing MMC/SD or NAND device as storage media to Host PC. The dynamic removal of MMC/SD card or NAND device is not supported.

Workaround : None

5.3 In Host mode when device is disconnected, the disconnect message is not displayed on the console.

Workaround : None

6 Fixed in this Release

IR #	Description
SDOCM00066148	While running 'usbdevhid' example, the application hangs after continuous key press for several minutes
SDOCM00057283	<p>In USB Host configuration when mass storage device is removed while file i/o is in progress and further re-connection of any device is not recognized by the host.</p> <p>This issue is applicable for both USB1 (OHCI) and USB0 (Mentor host controller) interfaces.</p>
SDOCM00066489	<p>In USB Device configuration when USB cable is disconnected from host while file write I/O in progress, further re-connection of any device is not recognized by the host.</p> <p>This issue is applicable for USB0 (Mentor host controller) interface</p>
SDOCM00067133	In Host mode, when cache is enabled the usb device will not be detected when connected to USB1.1-OHCI Port
SDOCM00067819	usb host msc driver and example requires special GEL file in order to work correctly

7 Technical Support BIOSUSB

To submit questions about issues with this BIOSUSB drivers release please go to the external forums at <http://community.ti.com/> or to <http://support.ti.com>

Revision History

Date	Author	Revision History	Version
May 2009	Ravi Babu	Support of C6747 platform on CCS3	01_00_00_04
Nov 2009	Ravi Babu	Support for C6747/C6748 platform on both CCS3/CCS4	01_10_01_01
Feb 2010	Sundaram Raju	Support dual mode feature with additional fixes	01_10_02_01
Apr 2010	Sundaram Raju	Support for USB Power Management	01_10_03_01
