DSP/BIOS McASP Device Driver

Version: 1.10.03

Release Notes

April 16, 2009

The product release notes in this document are for DM6437/C6424/DM648/C6452 DSP/BIOS McASP Device Driver

1 New In This Release

The user guide has been updated for the various pragma directives, macro definitions and compiler switches used in the driver.

2 System Requirements

1. Refer top level release notes for tools and BIOS versions.

3 Release Components

This McASP driver consists of

- Product release note (this document)
- McASP Design document
- McASP User Guide
- McASP Datasheet
- McASP Source code

4 Code Compliance

This McASP code is not MISRAC2 code compliant.

5 Installation and Usage

1. Install BIOS package as per instructions provided along with the package.
2. McASP Device driver sources are available in <root>/drivers/mcasp folder.
3. Build the mcasp project file in build directory to build the debug/release library.
4. Sample application details are provided in the package in the following path <root>\ drivers/mcasp/sample folder
5. To refer to the detailed debug messages of the sample application, please refer message log of BIOS.

6 Uninstallation

1. Refer 'BIOS_McASP_Driver_UserGuide.doc'.

7 Adding instance of the device driver

To have MCASP device driver included in the application, it is required to add the TCI file (i.e. "dm6437_mcasp0.tci" for DM6437) in the TCF file of the application.

8 Fixed In This Release

1	The IOCTL could control only the transmit channel
This issue (DPSP00011468) has been fixed. Correct handle and opMode are now used. File affected: ti/sdo/pspdrivers/drivers/mcasp/src/ddc_mcasp.c	

9   Known Issues

9.1   Issues for DM6437/C6424

1	SPDIF, inter board and external hardware loop back mode tests are not done
Workaround	
None	

2	Following interrupts are not supported in the present driver
	    i. McASP clock failure
	    ii. Last slot interrupt
	    iii. Start of frame interrupt
	    iv. Bad clock interrupt

Workaround	
None	

3	Interrupt mode is not supported
Workaround	
None	

4	No other task except Audio should use EDMA event queue 0. This is a system limitation. If the same event queue 0 is used for Audio and any other task Audio driver will (McASP) undergo underrun/overrun constantly resulting in a system hang.
Workaround	
None	

5	Application callback function with SIO/DIO class driver is not tested
Workaround	
None	

9.2 Issues for DM648/C6452

1	SPDIF, inter board and external hardware loop back mode tests are not done
Workaround	
None	

2	Following interrupts are not supported in the present driver
	     v. McASP clock failure
	     vi. Last slot interrupt
	     vii. Start of frame interrupt
	     viii. Bad clock interrupt

Workaround	
None	

3	Interrupt mode is not supported
Workaround	
None	

4	In DLB mode, configure receive and transmit channels for no. of TDM slots greater than 2 slots (i.e. I2S mode)
Explanation	
In DLB mode, configure receive and transmit channels for no. of TDM slots greater than 2 slots (i.e. I2S mode). In case of TDM slots equal to 2 first two samples of received data is always in correct.	
Workaround	
Always configure the no. of TDM slots to 32	

Date	Author	Comments	Version
December 01, 2006	Pratik Joshi	BFT release 0.2.0	1.1
December 27, 2006	Pratik Joshi	Closed review comments	1.2
January 2, 2007	Pratik Joshi	Know issues updated for release 0.4.0	1.3
January 16, 2007	Pratik Joshi	Known issues updated for release 0.4.2	1.4
January 29, 2007	Pratik Joshi	CCS version changed	1.5
February 3, 2007	Pratik Joshi	Known issues updated for release 0.5.0	1.6
March 22, 2007	Pratik Joshi	Known issues updated for release 0.6.0	1.7
April 20, 2007	Pratik Joshi	Release notes update for release 0.7.0	1.8
May 8, 2007	Pratik Joshi	Release notes update for release GA 1.0.0	1.9
May 14, 2007	Pratik Joshi	Release notes update for release GA 1.0.1	1.10
June 2, 2007	Anuj Aggarwal	Release notes update for patch release GA 1.00.01	1.11
June 29, 2007	Amit Chatterjee	Modified Release Version	1.12
July 18, 2007	Pratik Joshi	Modified Release Version	1.13
November 15, 2007	Nagarjuna K	Modified for DM6437/C6424/DM648/C6452 package	1.14
May 28,2008	Imtiaz SMA	Updated the user guides for release 1.10.01	1.15