EDMA3 Resource Manager

Release version 02.11.02.XX

Release Notes

May 24, 2011

The product release notes in this document are for EDMA3 Resource Manager, which is a part of the EDMA3 Low Level Driver package. The Resource Manager is a TI mandated library for all EDMA3 peripheral users to acquire and configure EDMA3 hardware resources (DMA/QDMA channels, PaRAM Sets, TCCs etc.) and DMA Interrupt Service Routines. The Resource Manager is made generic across SoCs and across Operating Systems.

TABLE OF CONTENTS

1	In This Release	3
2	Out-of-Box Contents	4
3	Known Issues	5
4	Limitations	6
5	Fixed In This Release	7
6	Revision history	8
7	Appendix: Changes from last release	9



1 In This Release

This is the version 02.11.02.XX release of EDMA3 Resource Manager and contains libraries, sample initilization libraries and support documents.

This release contains sample OS adaptation layer for BIOS 6, which could be used by BIOS 6 based applications.

* New features in the components of release

1) TIDSP00012625 – Addition of TI816x-m3vpss and TI816x-m3video platform to EDMA3LLD

2 Out-of-Box Contents

edma3_lld_02_11_02_04.tar.gz contains following:

- 1. Source code for EDMA3 Resource Manager, Driver and other necessary abstractions.
 - Project files (DSP/BIOS[™]), CCS4 build files, XDC package.bld files (for supporting getlibs function) and all Makerules and Makefiles, to build EDMA3 package in host environment. Please note from this point of time, libraries can be built using Makefiles only. Hence libraries need to be built through command prompt using gmake command (Please refer the user guide available with this release for detailed build instructions).
 - The above mentioned items are located inside the <installation dir>\ edma3_lld_02_11_02_XX\ directory.
 - Please note that the CCS setup files and GEL files are _NOT_ provided with this release and this would be available with latest CCSv4 releases or from EVM manufacturer.
- 2. Release Notes (this document) providing an overview of this release.
- 3. User Guide and data sheets.
- 4 EDMA3 Resource Manager API (generated) documentation in CHM format.



3 Known Issues

1. Instrumentation (all components)

Release Note

Instrumentation code is not yet implemented as the XDC/CCSv4 version at the point of development did not support RTA and instrumentation APIs.

Workaround

None

2. EDMA3 hardware doesn't works properly in FIFO mode with all the controllers.

Release Note

Very few peripherals support EDMA3 FIFO mode. EMIF controller doesn't support the same. So EDMA3 CANNOT be used in FIFO mode for doing a mem-2-mem data transfers, EDMA3 being configured in the FIFO mode. Applications trying to use EDMA3 in FIFO mode should first check their respective peripheral-controller document for this mode support.

Workaround

None

3.	PingPong Example Fails for certain EDMA instances for some					
	DSP cores in Release mode only.					

Release Note

PingPong example fails for certain EDMA Instances for some DSP cores in Release Mode only. It passes in the Debug mode.

Workaround

None

4.	ARM 9 support for OMAPL138 is not available on Make based build of	
	EDMA3LLD	

Workaround

None

5. The following IR is raised on this release.		
IR# SDSCM00039169 tci6608-sim/tci6616-sim		EDMA3 Example fails for following Big Endian Simulators:
Workaround		
None		



4 Limitations

None.



5 Fixed In This Release

IR	Description
SDOCM00080618	ti.platforms.evmTI816X and evmTI814X need to be supported
SDOCM00080034	CC Base Address in TI814X configuration in ti/sdo/edma3/rm/src/configs is wrong
SDOCM00081696	EDMA package gives error while including as XDC package
SDOCM00081697	release build of EDMA3LLD build with GENERIC flag defined

6 Revision history

Date	Author	Comments	Version
Oct 16, 2008	Anuj Aggarwal	First release supporting platform DA830 on BIOS 6.	02.00.00.XX
June 3, 2009	Anuj Aggarwal	Patch release for DA830 platform on BIOS 6.	02.00.01.XX
Dec 7, 2009	Anuj Aggarwal	Migration to BSD license and support added for TCI6498. See section 1 for more details.	02.10.00.XX
Apr 9,2009	Imtiaz SMA	Added support for the C6748 and OMAPL138 (DSP only) platforms. See section 1 for more details.	02.10.01.XX
May 12, 2010	Vinay K Nooji	Added support for OMAPL138 ARM platform.	02.10.02.XX
Sep 6, 2010	Sundaram Raju	Support for the TI816X Simulator & platform, C6472 & TCI6486 platform and TI814X platform have been added.	02.10.03.XX
Oct 12, 2010	Sundaram Raju	Support for C66x(ELF) in Generic library of Resource Manager and bug fixes	02.10.04.XX
Feb 02, 2011	Sundaram Raju	Support for Make based build for all the libraries and sample applications	02.11.00.XX
Feb 15, 2011	Raghu Nambiath	Support for C66x target for all the libraries and sample applications	02.11.01.XX
	Sundaram Raju		
May 24, 2011	Prasad Konnur	Addition of TI816x-m3vpss and TI816x-m3video platforms to EDMA3LLD	02.11.02.XX



7 Appendix: Changes from last release

Changes from 02.11.01 Release to 02.11.02 Releases:

- i. New Features in this release
 - 1. TIDSP00012625 Addition of TI816x-m3vpss and TI816x-m3video platform to EDMA3LLD.
- ii. Fixed following IRs:
 - 1. SDOCM00080618: ti.platforms.evmTI816X and evmTI814X need to be supported
 - 2. SDOCM00080034: CC Base Address in TI814X configuration in ti/sdo/edma3/rm/src/configs is wrong
 - 3. SDOCM00081696: EDMA package gives error while including as XDC package
 - 4. SDOCM00081697: release build of EDMA3LLD build with GENERIC flag defined

Changes from 02.11.00 Release to 02.11.01 Releases:

- i. New Features in this release
 - 1. TIDSP00012604 Addition of C66x targets and platforms to EDMA3LLD.
- ii. Fixed following IRs:
 - 1. SDOCM00078641: C66x support for generic RM library for Make based build of EDMA3LLD
 - 2. SDOCM00078808: EDMA LLD example fails for multi core run for TCI6486 target
 - 3. SDOCM00078797: Problems with using Generic RM library on EDMA3LLD

Changes from 02.10.04 Release to 02.11.00 Releases:

- i. New Features in this release
 - 1. TIDSP00012597 Support for Make based build is implemented.
- ii. Fixed following IRs:
 - 1. SDOCM00075906: EDMA3LLD release not appearing as option in the eclipse plug-in in CCSv4 when new release is installed
 - 2. SDOCM00074338: EDMA3 LLD for Centaurus doesn't have pre-built lib for Elf targets
 - 3. SDOCM00078607: Same library files picked up for both SIM and EVM TI816x by the package.xs

Changes from 02.10.03 Release to 02.10.04 Releases:

- i. Implemented the following ECNs:
 - 1. TIDSP00012597 Support for Make based build is implemented.

TEXAS INSTRUMENTS

- ii. Fixed the following IRs:
 - 1. SDOCM00075906 EDMA3LLD release not appearing as option in the eclipse plug-in in CCSv4 when new release is installed
 - 2. SDOCM00074338 EDMA3 LLD for Centaurus doesn't have prebuilt lib for Elf targets
 - 3. SDOCM00078607 Same library files picked up for both SIM and EVM TI816x by the package.xs

Changes from 02.10.03 Release to 02.10.04 Releases:

- i. Implemented the following ECNs:
 - 1. TIDSP00012497 Support for the target C66X (ELF) in the Generic library of Resource Manager has been implemented.
- ii. Fixed the following IRs:
 - 1. SDOCM00074290 EDMA3LLD should not ship config.bld in the `packages\' folder
 - 2. SDOCM00074466 Generic library in Resource Manager returns an error while calling EDMA3_RM_OPEN

Changes from 02.10.02 Release to 02.10.03 Releases:

- i. Implemented the following ECNs:
 - 1. TIDSP00012436 Support for the TI816X Simulator for BIOS6 has been implemented.
 - 2. TIDSP00012435 Support for the TI816X platform for BIOS6 has been implemented.
 - 3. TIDSP00012434 Support for the C6472 & TCI6486 platform for BIOS6 has been implemented.
 - 4. TIDSP00012437 Support for a "generic" platform in the Resource Manager for BIOS6 has been implemented.
 - 5. TIDSP00012461 Support for the TI814X platform for BIOS6 has been implemented.
- ii. Fixed the following IRs:
 - 1. SDOCM00069906 CSL2_DAT_DEMO hangs in the _getchannel function
 - 2. SDOCM00074152 Pulling some Fixes from BIOS5 EDMA3LLD to BIOS6 LLD
 - 3. SDOCM00074153 EDMA3LLD libraries for Nyquist are not building with BIOS 6.30.02.42
 - 4. SDOCM00074184 Warnings appear while building the libraires and example projects of EDMA3LLD with BIOS 6.30.02.42

Changes from 02.10.01 Release to 02.10.02 Releases:

- i. Implemented the following ECNs:
 - 1. TIDSP00012328 Support for the OMAPL138 ARM platforms.

TEXAS INSTRUMENTS

Changes from 02.10.00 Release to 02.10.01 Releases:

- i. Implemented the following ECNs:
 - 1. TIDSP00000000 Support for the C6748 and OMAPL138 platforms.
- ii. Fixed the following IRs:
 - 1. SDOCM00068784 The package.xs files should get the library extension from the xdc variable and should not be hard coded.

Changes from 02.00.00 Release to 02.10.00 Releases:

- i. Implemented the following ECNs:
 - 1. TIDSP00012004 Migration to new BSD license has been implemented.
 - 2. TIDSP00012060 Add TCI6498 support on BIOS6 has been implemented.
 - 3. TIDSP00012061 Support for Big Endian platforms has been implemented.
 - 4. TIDSP00012094 Linux installer of EDMA3 LLD has been implemented.
- ii. Fixed the following IRs:
 - 1. SDOCM00060737 EDMA3 needs to show up as RTSC product in $\ensuremath{\mathsf{CCSv4}}$

Changes from 02.00.00 Release to 02.00.01 Releases:

Patch release fixing IRs and implementing ECNs in EDMA3 Driver.