

EDMA3 Resource Manager

Release version 02.11.04.XX

Release Notes

Jan 27, 2012

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.

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1 In This Release

This is the version 02.11.04.XX release of EDMA3 Resource Manager and contains libraries, sample initialization 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) SDOCM00088699 – Appleton (TCI6614) support in EDMA3 LLD

2 Out-of-Box Contents

edma3_ild_02_11_04_01.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_ild_02_11_04_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 work 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 EDMA3 Example fails for following Big Endian Simulators: tci6608-sim/tci6616-sim | |
| Workaround | |
| None | |

4 Limitations

None.

5 Fixed In This Release

| IR | Description |
|---------------|--------------------------------|
| SDOCM00088023 | Warnings in building edma libs |

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, 2010 | Imtiaz SMA | Support for the C6748 and OMAPL138 (DSP only) is added. See section 1 for more details. | 02.10.01.xx |
| May 12, 2010 | Vinay K Nooji | Support for the OMAPL138 ARM has been added. | 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 Sundaram Raju | Support for C66x target for all the libraries and sample applications | 02.11.01.XX |
| May 24, 2011 | Prasad Konnur | Addition of TI816x-m3vpss and TI816x-m3video platforms to EDMA3LLD | 02.11.02.XX |
| Nov 15, 2011 | Prasad Konnur | Addition of M3 support for Centaurus and A8 support for Netra | 02.11.03.XX |
| Jan 27, 2011 | Murtaza Gaadiwala | Addition of Appleton (TCI6614) support | 02.11.04.XX |

Appendix: Changes from last release

Changes from 02.11.03 Release to 02.11.04 Releases:

- i. New Features in this release
 - 1. SDOCM00088699 – Appleton (TCI6614) support in EDMA3 LLD.
- ii. Fixed following IRs:
 - 1. SDOCM00088023 – Warnings in building edma libs.

Changes from 02.11.02 Release to 02.11.03 Releases:

- i. New Features in this release
 - 2. TIDSP00012765 – Addition of TI816x-m3vpss and TI816x-m3video platform to EDMA3LLD.
 - 3. TIDSP00012766 – Addition of A8 support for Netra in EDMA3 LLD
- ii. Fixed following IRs:
 - 1. SDOCM00084073: SYS/BIOS version of LLD package should not require ti.sysbios.ipc which is deprecated and will be removed in SYS/BIOS 6.33
 - 2. SDOCM00086386: getlibs in package.xs should search library based on device name
 - 3. SDOCM00086391: Thread safety issue with EDMA
 - 4. SDOCM00084227: Enhancement - provide PLATFORM specific libs: examples: targets
 - 5. SDOCM00086397: Single default cfg file for multile cores in Netra and Centaurus in drv sample
 - 6. SDOCM00086492: EMRH access done in edma3CCErrorHandler() for devices not having high register for EMR
 - 7. SDOCM00086496: In EDMA3_RM_unregisterTccCb() driver tries to update array at invalid position
 - 8. SDOCM00086934: same interrupt number is used for all TC error

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.
- 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 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. 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.

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 CCSv4

Changes from 02.00.00 Release to 02.00.01 Releases:

Patch release fixing IRs and implementing ECNs in EDMA3 Driver.