

EDMA3 Driver

Release version 02.10.00.XX

Release Notes

December 7, 2009

The product release notes in this document are for EDMA3 Driver, which is a part of the EDMA3 Low Level Driver package. EDMA3 Driver is a functional library providing APIs for programming, scheduling and synchronizing with EDMA transfers and many more. The EDMA3 Driver 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 02.10.00.XX release of EDMA3 Driver and contains libraries, sample initialization libraries, standalone sample applications 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) ECN# TIDSP00012004 (Migration to new BSD license) has been implemented.
- 2) ECN# TIDSP00012060 (Add TCI6498 support on BIOS6) has been implemented.
- 3) ECN# TIDSP00012061 (Support for Big Endian platforms) has been implemented.
- 4) ECN# TIDSP00012062 (Specific link channel can be requested using requestChannel API) has been implemented.
- 5) ECN# TIDSP00012063 (Link channels can have TCC code) has been implemented.
- 6) ECN# TIDSP00012064 (New API to register callback function in EDMA3 driver) has been implemented.
- 7) ECN# TIDSP00012065 (New API to check the status of a given DMA/QDMA channel) has been implemented.
- 8) ECN# TIDSP00012079 (Signature change for EDMA3 initialization API present in the sample example) has been implemented.
- 9) ECN# TIDSP00012080 (API required to enable error interrupts for EDMA3 Transfer Controller) has been implemented.
- 10) ECN# TIDSP00012081 (DRAE registers programmed for TCCs while registering callback functions) has been implemented.
- 11) ECN# TIDSP00012094 (Linux installer of EDMA3 LLD) has been implemented.

2 Out-of-Box Contents

EDMA3_LLD_setupwin32_02_10_00_XX.exe contains following:

1.
 - Source code for EDMA3 Resource Manager, Driver and other necessary abstractions.
 - Project files (DSP/BIOS™), CCS4 build files and XDC package.bld files, to build EDMA3 package in host environment. Please note that at this point of time, CCSv4 does not support building XDC based libraries. Hence libraries need to be built through command prompt using *xdc* 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_10_00_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 Driver 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 Limitations

None.

5 Fixed In This Release

Following IRs have been fixed as a part of this release:

IR	Description
SDOCM00060737	EDMA3 needs to show up as RTSC product in CCSv4

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

7 Appendix: Changes from last release

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. TIDSP00012062 - Specific link channel can be requested using requestChannel API has been implemented.
 5. TIDSP00012063 - Link channels can have TCC code has been implemented.
 6. TIDSP00012064 - New API to register callback function in EDMA3 driver has been implemented.
 7. TIDSP00012065 - New API to check the status of a given DMA/QDMA channel has been implemented.
 8. TIDSP00012079 - Signature change for EDMA3 initialization API present in the sample example has been implemented.
 9. TIDSP00012080 - API required to enable error interrupts for EDMA3 Transfer Controller has been implemented.
 10. TIDSP00012081 - DRAE registers programmed for TCCs while registering callback functions has been implemented.
 11. 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.