MCAL_AM261_10.01.00 Release Notes

MCAL Release Notes

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Introduction

This is the release notes for **MCAL_AM261_10.01.00** release, done on 2025-01-30.

The MCAL package consists of MCAL Driver & Applications for **AM261x family of devices**.
The MCAL modules are compliant to AUTOSAR specification versioned **4.3.1**.

Licensing

Refer to AM261x manifest at top level for MCAL_AM261_10.01.00_manifest.html

Getting Started

The AM261x [HTML] User Guide provides the documentation and references necessary to begin development on TI's platforms using AM261x.

Datasheet

The AM261x [HTML] User Guide provides the Memory footprint details.

Documentation

The AM261x [HTML] User Guide provides the documentation and references necessary to begin development on TI's platforms using AM261x.

This document details about supported driver, installation, dependencies, build instructions, steps to run example applications. This release package also includes module specific User Guides, test reports, configurator User Guide and others.

Dependencies

NA

What's New

1. New in this Release:

- Support AM261 ZCZQ1 Package
- MCELF Build format support added
- MCU PLL support is added
- Added BSWMD Arxml files for all the module configurator Plugins.
- CCS Based Project for MCAL Examples
- DataSheet (Memory Foot-Print)
- User Guide (along with the multi versioning feature supported)

1. Example testing is performed for all the MCAL drivers mentioned in below table.
2. Drivers Supported:

Drivers	**Modules**
Micro controller Drivers	GPT, WDG, MCU
Memory Driver	FLS
Communication Driver	SPI, CAN, LIN
I/O Drivers	ADC, DIO, PORT, PWM, ICU
CDD	IPC, UART, I2C, DMA, PWM, FSI

Device Support

SoC	HOST (OS)	Target (OS)	Supported CPU	Test Platform
AM261x	Windows / Linux, EB configurator only on Windows	Baremetal	R5F	am261x

Tools and Compilers

1. Code Composer Studio: 12.8.0 or later. (**Note**: Please refer `CCS Setup` present as part of `getting_started`)
2. TI ARM CLANG Compiler Version: 4.0.0
3. Elektrobit Tresos Studio: 24.0 (**EB_Tresos_ACG8.5.0_Installer.zip**). Please use link to request access to EB Tresos Studio and License: Click Here

Compatibility

Driver	Compatibility Information	Comments	Recommended update for Customer Application
Cdd Ipc	Ipc driver is compatible with MCU_SDK 10.01.00	MCU+SDK version 10.01.00 available at ti.com	None
Can	BSWMD Template updated, previously missing template for main functions	None	Customer to take the latest BSWMD from the release
Common	MCELF Build format is included	None	Customer to refer Readme or UserGuide for the dependency installation in order to build MCAL

*Internal Files are organized in V0, V1, V2 and V3 folders. The below table lists the associated V0/V1/V2/V3 files to be used as per device.

#	Modules	AM263x	AM273	AM263Px	AM261x
1.	**ADC**	**V0**	**V1**	**V0**	**V0**
2.	**CAN**	**V0**	**V0**	**V0**	**V0**
3.	**CDD I2C**	**V0**	**V0**	**V0**	**V0**

4.	**CDD IPC**	**V0**	**V1**	**V0**	**V2**
5.	**CDD UART**	**V0**	**V1**	**V0**	**V0**
6.	**CDD DMA**	**V0**	**V1**	**V0**	**V0**
7.	**CDD PWM**	**V0**	**NA**	**V0**	**V0**
8.	**DIO**	**V0**	**V1**	**V0**	**V0**
9.	**ETH**	**V0**	**V1**	**V0**	**NA**
10.	**ETHTRCV**	**V0**	**V1**	**V0**	**NA**
11.	**FLS**	**V0**	**V1**	**V2**	**V2**
12.	**FSI**	**V0**	**NA**	**V0**	**V0**
13.	**GPT**	**V0**	**V0**	**V0**	**V0**
14.	**ICU**	**V0**	**V1**	**V0**	**V0**
15.	**LIN**	**V0**	**NA**	**V0**	**V0**
16.	**MCU**	**V0**	**V1**	**V2**	**V3**
17.	**PORT**	**V0**	**V1**	**V0**	**V0**
18.	**PWM**	**V0**	**V1**	**V0**	**V0**
19.	**SPI**	**V0**	**V1**	**V0**	**V0**
20.	**WDG**	**V0**	**V0**	**V0**	**V0**

Validation

#	Module	Validation Scope	Remarks (Refer to *Open Defects* for details)
1.	ADC	Example Functional Testing	None
2.	CAN	Example Functional Testing	None
3.	CDD I2C	Example Functional Testing	None
4.	CDD IPC	Example Functional Testing	None

5.	CDD UART	Example Functional Testing	None
6.	DIO	Example Functional Testing	None
7.	DMA	Example Functional Testing	None
8.	FLS	Example Functional Testing	None
9.	GPT	Example Functional Testing	None
10.	ICU	Example Functional Testing	None
11.	MCU	Example Functional Testing	Reset Reason tested only for Power on Reset, SW Warm Reset and Watchdog reset
12.	PORT	Example Functional Testing	None
13.	PWM	Example Functional Testing	None
14.	SPI	Example Functional Testing	None
15.	WDG	Example Functional Testing	None
16.	LIN	Example Functional Testing	None
17.	CDD PWM	Example Functional Testing	None
18.	CDD FSI	Example Functional Testing	None

Fixed Defects

ID	**Summary**
MCAL-28415	DMA: Redefinition of CSL MACROs
MCAL-28414	DIO: DioChannelGroup had REQUIRED-INDEX 2 times (in XDM)
MCAL-27350	AM26x: CAN: BSWMD file template missing for main function

MCAL-27081	CDD_I2C: Example stucks when write and read is called in loop
MCAL-27008	MCU: MCU PLL is not supported

Open Defects

ID	Summary	Workaround
MCAL-28584	AM26xx: I2c: Feature of Multiple channel support in a sequence is not supported	User to use a sequence with only one channel
MCAL-28236	Issues in Fsi CDD based on code review	Will not effect functionality
MCAL-28235	Issues in I2c CDD based on code review	Will not effect functionality
MCAL-27722	UART: Multiple UART instance are not working	User to use one configured instance
MCAL-27009	[AM261]: I2C: Temperature sensor testing issue	None
MCAL-27007	[AM261]: UART(DMA) : Uart read/write with DMA enabled is not working	Interrupt mode can be used instead
MCAL-25969	Connecting Multiple Interrupt sources to single Interrupt Xbar line is not supported	None
MCAL-21653	Fls Example App is not working in SBL OSPI mode	Use no-boot mode
MCAL-13434	[Spi]Dma mode is not working with Cache Writeback enabled	Enable Cachewrite through mode

Known Limitations

ID	Description	Workaround	Comments
NA	NA	NA	NA

Support

For technical support and additional assistance, visit E2E or contact local TI Field Application Engineer.