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**I2C LLD**

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## **Release Notes**

Applies to Product Release: 01.00.00.02  
Publication Date: March 30, 2016

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### **Contributors to this document**

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# Contents

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- Overview..... 1
- LLD Dependencies ..... 1
- New/Updated Features and Quality ..... 1
- Resolved Incident Reports (IR) ..... 2
- Known Issues/Limitations..... 2
- Licensing ..... 2
- Delivery Package ..... 3
- Installation Instructions..... 3
  - Directory structure..... 3
- Customer Documentation List ..... 4

# I2C LLD version 01.00.00.02

## Overview

This document provides the release information for the latest I2C Low Level Driver which should be used by drivers and application that interface with I2C IP.

I2C LLD module includes:

- Compiled library of I2C LLD.
- Source code.
- API reference guide
- User Guide

## LLD Dependencies

LLD is dependent on following external components delivered in PDK package:

- CSL

## New/Updated Features and Quality

### Release 1.0.0.2

- Added SoC I2C probe IOCTL command in IP v1 driver
- Added I2C bus frequency configuration IOCTL command in IP v1 driver
- Added SoC driver and test/example support for K2G
- Added A15 test/example support for K2L/K2E
- Added SoC driver and test/example support for TDA2ex/TDA2xx/TDA3xx
- Added temperature sensor application for AM572x GP EVM
- Cleaned up bios config file for AM572x/AM571x/AM437x/AM335x
- Fixed Klocwork/Misra-C compilation warnings

### Release 1.0.0.1

- Added C66 lib and test/example support for Keystone II
- Added A15 lib and test/example support for K2HK

- Added lib and test/example support for Keystone I
- Added M4 support for AM571x and AM572x
- Fixed Klocwork/Misra-C compilation warnings
- Added benchmarking support

This is an **engineering release**, tested by the development team for early integration effort  
**Release 1.0.0.0**

- Initial release of low level driver
- Following IRs have been raised
  - IR1 – **SDOCM00114522** – EDMA Support for I2C Driver to be added.
  - IR2 – **SDOCM00114523** - Temperature Sensor application for the I2C Driver to be added.
  - IR3 - **SDOCM00114857** - Call back mode is not working in I2C Driver.

## Resolved Incident Reports (IR)

Table 1 provides information on IR resolutions incorporated into this release.

**Table 1 Resolved IRs for this Release**

| IR Parent/<br>Child Number | Severity<br>Level | IR Description   |
|----------------------------|-------------------|--|
| SDOCM00120555              | Major             | k2E/K2L ARM test/examples not supported                        |
| SDOCM00114523              | Minor             | Temperature Sensor application for the I2C Driver to be added. |

## Known Issues/Limitations

| IR Parent/<br>Child<br>Number | Severity<br>Level | IR Description                          |
|-------------------------------|-------------------|---|
| <b>SDOCM001<br/>14522</b>     | Major             | EDMA Support for I2C Driver to be added |

## Licensing

Please refer to the software Manifest document for the details.

## Delivery Package

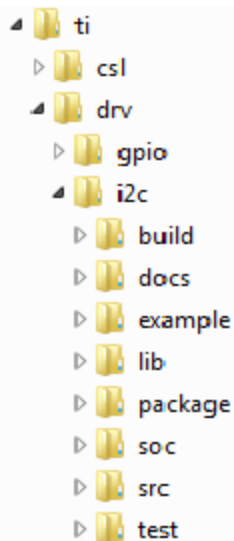
There is no separate delivery package. The I2C LLD is being delivered as part of PDK.

## Installation Instructions

The LLD is currently bundled as part of Platform Development Kit (PDK). Refer installation instruction to the release notes provided for PDK.

## Directory structure

The following is the directory structure after the I2C LLD package has been installed:



The following table explains each individual directory:

| Directory Name   | Description   |
|------------------|---|
| ti/drv/i2c       | The top level directory contains the following:- <ol style="list-style-type: none"><li><u>XDC Build and Package files</u><br/>These files (<code>config.bld</code>, <code>package.xdc</code> etc) are the XDC build files which are used to create the I2C package.</li><li><u>Exported Driver header file</u><br/>Header files which are provided by the I2C low level driver and should be used by the application developers for driver customization and usage.</li></ol> |
| ti/drv/i2c/build | The directory contains internal XDC build related files which are used to   |

|                    |  |
|--------------------|--|
|                    | create the I2C low level driver package.   |
| ti/drv/i2c/docs    | The directory contains the I2C low level driver documentation.   |
| ti/drv/i2c/example | The “example” directory in the I2C low level driver has the examples demonstrating the usage of I2C driver.                                      |
| ti/drv/i2c/lib     | The “lib” folder has pre-built Big and Little Endian libraries for the I2C low level driver along with their <u>code/data size information</u> . |
| ti/drv/i2c/package | Internal I2C low level driver package files.   |
| ti/drv/i2c/soc     | This directory contains SoC specific files.  |
| ti/drv/i2c/src     | Source code for the I2C low level driver.  |
| ti/drv/i2c/test    | The “test” directory in the I2C low level driver has test application which is used by the development team to test the I2C low level driver.    |

## Customer Documentation List

Table 2 lists the documents that are accessible through the /docs folder on the product installation CD or in the delivery package.

**Table 2 Product Documentation included with this Release**

| Document # | Document Title                           | File Name                          |
|------------|--|------------------------------------|
| 1          | API documentation (generated by Doxygen) | docs/i2cIldDocs.chm                |
| 2          | Release Notes                            | docs/ReleaseNotes_I2C_LLD.pdf      |
| 3          | Software Manifest                        | docs/I2C_LLD_SoftwareManifest.html |