
SPI LLD

Release Notes

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

Document License

This work is licensed under the Creative Commons Attribution-NoDerivs 3.0 Unported License. To view a copy of this license, visit <http://creativecommons.org/licenses/by-nd/3.0/> or send a letter to Creative Commons, 171 Second Street, Suite 300, San Francisco, California, 94105, USA.

Contributors to this document

Copyright (C) 2013-2014 Texas Instruments Incorporated - <http://www.ti.com/>



Texas Instruments, Incorporated
20450 Century Boulevard
Germantown, MD 20874 USA

Contents

- 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

SPI LLD version 01.00.00.02

Overview

This document provides the release information for the latest SPI Low Level Driver which should be used by drivers and application that interface with MCSPI/QSPI IPs.

SPI LLD module includes:

- Compiled library of SPI LLD.
- Source code.
- API reference 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 LLD support for K2G
- Added A15 test/example support for K2L/K2E
- Added LLD support TDA2ex/TDA2xx/TDA3xx and mcspi master mode transfer example
- Cleaned up bios config file for AM572x/AM571x/AM437x/AM335x
- Fixed Klocwork/Misra-C compilation warnings
- Added edma support for MCSPI in IP v1 driver
- Added slave mode support for MCSPI in IP v1 driver

Release 1.0.0.1

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

- Added SPI lib and test/example support for Keystone I
- Added QSPI test/example for SK AM437x
- 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
 - **SDOCM00114858 - EDMA Support for SPI Driver to be added.**

Resolved Incident Reports (IR)

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

Table 1 Resolved IRs for this Release

IR Parent/ Child Number	Severity Level	IR Description
SDOCM00120555	Major	k2E/K2L ARM test/examples not supported
SDOCM00114858	Major	EDMA Support for SPI Driver to be added.
SDOCM00113450	Minor	MCSPi Slave mode support

Known Issues/Limitations

IR Parent/ Child Number	Severity Level	IR Description

Licensing

Please refer to the software Manifest document for the details.

Delivery Package

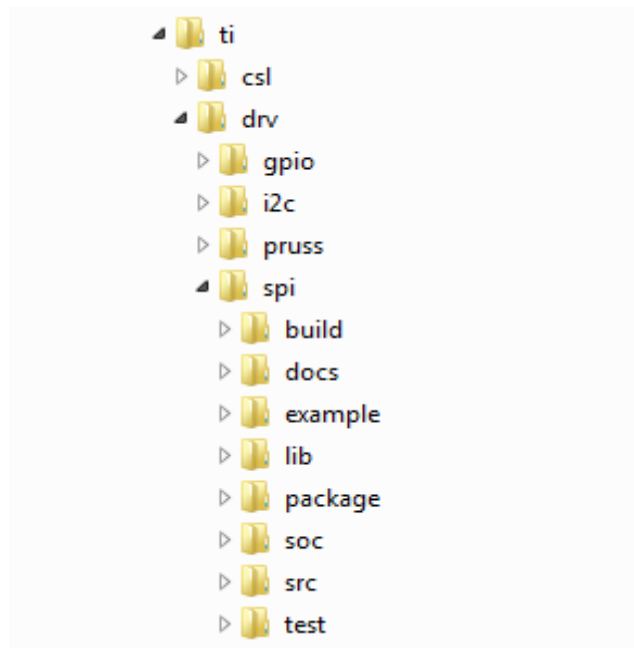
There is no separate delivery package. The SPI LLD is being delivered as part of PDK.

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 SPI LLD package has been installed:



The following table explains each individual directory:

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

	customization and usage.
ti/drv/spi/build	The directory contains internal XDC build related files which are used to create the SPI low level driver package.
ti/drv/spi/docs	The directory contains the SPI low level driver documentation.
ti/drv/spi/example	The “example” directory in the SPI low level driver has the examples demonstrating the usage of SPI driver.
ti/drv/spi/lib	The “lib” folder has pre-built Big and Little Endian libraries for the SPI low level driver along with their <i>code/data size information</i> .
ti/drv/spi/package	Internal SPI low level driver package files.
ti/drv/spi/soc	This directory contains SoC specific files.
ti/drv/spi/src	Source code for the SPI low level driver.
ti/drv/spi/test	The “test” directory in the SPI low level driver has test application which is used by the development team to test the SPI 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/spilldDocs.chm
2	Release Notes	docs/ReleaseNotes_SPI_LLD.pdf
3	Software Manifest	docs/SPI_LLD_SoftwareManifest.html