



## **Application Note: Upgrading To Z-Stack v2.5**

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Version	Description	Date
1.0	Initial release	07/21/2011
1.1	Updated for ZStack-2.5.1 release	03/10/2012

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## 1. Purpose

This document describes considerations to make when upgrading to Texas Instruments' Z-Stack™ version 2.5.0 or 2.5.1, discussing changes made since the 2.4.0 release of Z-Stack. New additions to Z-Stack include support of selected Smart Energy 1.1 features, Smart Energy UK Extensions, and the ZCL Commissioning Cluster with a ZBA Server sample application.

This document deals with four Z-Stack installation packages, designated below as 2.5.X (2.5.0 or 2.5.1). Each of these packages includes the latest Z-Stack files and libraries, along with sample applications, documentation, and PC-based tools:

- **ZStack-CC2530-2.5.X.exe** - for SmartRF05EB + CC2530EM
- **ZStack-EXP430F5438-2.5.X.exe** - for MSP-EXP430F5438 + CC2520EM
- **ZStack-LM9B96-2.5.X.exe** - for LM3S9B96 + CC2520EM
- **ZStack-MSP2618-2.5.X.exe** - for SmartRF05EB + MSP2618 + CC2520EM

## 2. Summary of Changes

### 2.1 ZStack-2.5.0 Changes

This section summarizes changes to Z-Stack that are observed when upgrading from version 2.4.0 to 2.5.0. Refer to the README document supplied with each Z-Stack installation for a detailed list of changes in version 2.5.0.

#### 2.1.1 ZCL Commissioning Cluster

Z-Stack now supports the ZigBee ZCL Commissioning Cluster. This feature permits interoperable commissioning and management of commercial building automation (CBA) products from different vendors. Refer to the “Z-Stack Commissioning Cluster API” document for API details. Refer to Section 6 of the “Z-Stack Sample Applications” document for details on the *CCServer* sample application to demonstrate use of the commissioning cluster in ZigBee Building Automation (ZBA) devices.

#### 2.1.2 Smart Energy 1.1 Features

Z-Stack has added support for key Smart Energy 1.1 features, including: Fast Polling, Price Acknowledgement, Prepayment, Block Tariffs, and Multi ESI. Refer to the “Z-Stack Smart Energy Developer’s Guide” for information on these new features. Also see the “Smart Energy Sample Application User’s Guide” for details on Fast Polling, Prepayment and Price Acknowledgement testing.

#### 2.1.3 OSAL Enhancements

Enhancements have been made to OSAL functionality as described below. These new features were developed for use in Z-Stack and ZNP systems. Refer to the “OSAL API” document for details on use of OSAL features.

##### 2.1.3.1 NV Item Deletion

Previous versions of Z-Stack did not support the deletion of an item from Non-Volatile (NV) memory. This could be a problem when upgrading an application in a deployed device if the NV item has changed size or content. Z-Stack now supports creation and deletion of NV items from the MT interface. Use of this feature is intended for user defined NV items (0x0400-0xFFFF) – deletion of Z-Stack system NV items (0x0000-0x03FF) is permitted but not recommended. Refer to the “OSAL API” document for details on the *osal\_nv\_delete()* and *osal\_nv\_len()*. See the “Z-Stack Monitor and Test API” document for details on using these features with serial I/O (ZNP and Z-Tool).

##### 2.1.3.2 Task Identification

The *osal\_self()* function has been re-introduced to permit an application to determine which OSAL task is currently active. This can be useful in Z-Stack systems which have more than one application task that share code that needs to use the task ID (for example, setting an OSAL timer). Refer to the “OSAL API” document for the use of *osal\_self()*.

#### 2.1.4 Compiler Changes

IAR toolsets for the CC2530, MSP430, and LM9B96 platforms have been changed since the ZStack-2.4.0 release to take advantage of the latest improvements in the IDE, compilers, linkers, debuggers, etc. All ZStack-2.5.0 development and testing was performed with these newer tools, so it is recommended that users do an upgrade to these versions.

#### 2.1.4.1 CC2530

Z-Stack-2.5.0 packages that support CC2530-based platforms have been upgraded to use the IAR EW8051 v8.10 Embedded Workbench toolset. The Z-Stack-2.4.0 release used v7.60 - note that ZStack-2.5.0 projects will not build properly with the v7.60 toolset – developers should upgrade to the v8.10 version.

#### 2.1.4.2 MSP430

Z-Stack-2.5.0 packages that support MSP430-based platforms (MSP2618 and EXP5438) have been upgraded to use the IAR EW430 v5.20.4 Embedded Workbench toolset. The Z-Stack-2.4.0 release used v5.10.6 - note that ZStack-2.5.0 projects will build properly with the v5.10.6 toolset, but developers are encouraged to upgrade to v5.20.4.

#### 2.1.4.3 LM9B96

Z-Stack-2.5.0 packages that support LM9B96-based platforms have been upgraded to use the IAR EW430 v6.20.4 Embedded Workbench toolset. The Z-Stack-2.4.0 release used v5.50 - note that ZStack-2.5.0 projects will not build properly with the v5.50 toolset – developers should upgrade to the v6.20 version.

### 2.2 ZStack-2.5.1 Changes

This section summarizes changes to Z-Stack that are observed when upgrading from version 2.5.0 to 2.5.1. Refer to the README document supplied with each Z-Stack installation for a detailed list of changes in version 2.5.1.

#### 2.2.1 Smart Energy 1.1 Tunneling

Support for the Smart Energy 1.1 Tunneling feature has been added to Z-Stack. Refer to the “Z-Stack Smart Energy Developer’s Guide” for information on this feature.

#### 2.2.2 Smart Energy UK Extensions

Z-Stack has added support for Smart Energy UK extension features, including: Message, Alarms, Metering, Price, Prepayment, Mirroring, Device Management, and TOU. These features are provided at “Beta” level to permit early development in anticipation of the upcoming Smart Energy 1.2 specification. Refer to the README document for more information on usage of these features.

#### 2.2.3 Monitor-Test Extensions

Additions have been made to the Monitor-Test (MT) API to expand command/response capability for serial control of Z-Stack devices. Read the “Z-Stack Monitor and Test API” document for details on the SYS\_SET\_TX\_POWER command and ZDO\_LEAVE\_IND indication.

#### 2.2.4 Compiler Changes

IAR toolsets for the MSP430 and LM9B96 platforms have been changed since the ZStack-2.5.0 release to take advantage of the latest improvements in the IDE, compilers, linkers, debuggers, etc. All ZStack-2.5.1 development and testing was performed with these newer tools, so it is recommended that users do an upgrade to these versions.

##### 2.2.4.1 MSP430

Z-Stack-2.5.1 packages that support MSP430-based platforms (MSP2618 and EXP5438) have been upgraded to use the IAR EW430 v5.40.3 Embedded Workbench toolset. The ZStack-2.5.0 release used v5.20.4 - note that ZStack-2.5.1 projects will build properly with the v5.20.4 toolset, but developers are encouraged to upgrade to v5.40.3.

##### 2.2.4.2 LM9B96

Z-Stack-2.5.1 packages that support LM9B96-based platforms have been upgraded to use the IAR EW430 v6.30.4 Embedded Workbench toolset. The ZStack-2.5.0 release used v6.20.4 - note that ZStack-2.5.1 projects may not build properly with the v6.20.4 toolset – developers are encouraged to upgrade to the v6.30.4 version.

### 2.2.5 Future Deprecation

#### 2.2.5.1 MSP2618

This is the final planned release of Z-Stack with support for the MSP2618 platform.

#### 2.2.5.2 ZigBee Non-Pro

This is the final planned release of Z-Stack with support for ZigBee “non-Pro” libraries.

#### 2.2.5.3 Sample Applications

This is the final planned release of Z-Stack with support for the following sample applications: SampleApp, SimpleApp, SerialApp, and TrasmitApp.

### 3. Changes to Installed Files

This section lists file changes to Z-Stack installations that result when upgrading from version 2.4.0 to 2.5.1. Refer to the following table for changes to the Z-Stack installers. Pay particular attention to items listed with **New** or **Removed** in the **Change** column. Italicized items in the **Change** column (*Modified*, *New* or *Removed*) occurred with the 2.5.1 release. File folder updates are indicated when there is no entry in the **File** column. Making changes to existing project files (\*.ewp,\*.ewd,\*.eww) can be done with the Embedded Workbench IDE or by editing the XML files directly. The following Z-Stack files have been changed since the v2.4.0 release:

File	Location	Change
hal_sleep.h	...\Components\hal\include	<i>Modified</i>
hal_dma.h	...\Components\hal\target\CC2530EB	Modified
hal_led.c	...\Components\hal\target\CC2530EB	<i>Modified</i>
hal_sleep.c	...\Components\hal\target\CC2530EB	<i>Modified</i>
hal_dma.h	...\Components\hal\target\CC2530USB	Modified
hal_led.c	...\Components\hal\target\CC2530USB	<i>Modified</i>
hal_sleep.c	...\Components\hal\target\CC2530USB	<i>Modified</i>
usb_descriptor_parser.c	...\Components\hal\target\CC2530USB\usb\library	Modified
hal_dma.h	...\Components\hal\target\CC2530ZNP	Modified
hal_led.c	...\Components\hal\target\CC2530ZNP	<i>Modified</i>
hal_sleep.c	...\Components\hal\target\CC2530ZNP	<i>Modified</i>
	...\Components\hal\target\LM3S8962CC2520	<b>Removed</b>
hal_lcd.c	...\Components\hal\target\LM3S9B96CC2520	<i>Modified</i>
hal_led.c	...\Components\hal\target\LM3S9B96CC2520	<i>Modified</i>
hal_mac_cfg.c	...\Components\hal\target\LM3S9B96CC2520	Modified
hal_mac_cfg.h	...\Components\hal\target\LM3S9B96CC2520	Modified
hal_mcu.h	...\Components\hal\target\LM3S9B96CC2520	Modified
hal_sleep.c	...\Components\hal\target\LM3S9B96CC2520	Modified
hal_led.c	...\Components\hal\target\MSP2618CC2520	<i>Modified</i>
hal_mac_cfg.c	...\Components\hal\target\MSP2618CC2520	Modified
hal_mac_cfg.h	...\Components\hal\target\MSP2618CC2520	Modified
hal_mcu.h	...\Components\hal\target\MSP2618CC2520	Modified
hal_sleep.c	...\Components\hal\target\MSP2618CC2520	<i>Modified</i>
hal_adc.c	...\Components\hal\target\MSP5438CC2520	Modified
hal_led.c	...\Components\hal\target\MSP5438CC2520	<i>Modified</i>
hal_mac_cfg.c	...\Components\hal\target\MSP5438CC2520	Modified
hal_mac_cfg.h	...\Components\hal\target\MSP5438CC2520	Modified
hal_mcu.h	...\Components\hal\target\MSP5438CC2520	Modified
hal_sleep.c	...\Components\hal\target\MSP5438CC2520	<i>Modified</i>
mac_high_level.h	...\Components\mac\high_level	Modified
mac_pib.c	...\Components\mac\high_level	<i>Modified</i>
mac_security.h	...\Components\mac\high_level	<b>New</b>
mac_spec.h	...\Components\mac\high_level	Modified
mac_api.h	...\Components\mac\include	Modified
mac_backoff_timer.c	...\Components\mac\low_level\srf04	<i>Modified</i>
mac_backoff_timer.h	...\Components\mac\low_level\srf04	<i>Modified</i>
mac_low_level.h	...\Components\mac\low_level\srf04	<i>Modified</i>
mac_radio.c	...\Components\mac\low_level\srf04	<i>Modified</i>
mac_rx.c	...\Components\mac\low_level\srf04	<i>Modified</i>
mac_dualchip.c	...\Components\mac\low_level\srf04\dual_chip	Modified
mac_dualchip_tx.c	...\Components\mac\low_level\srf04\dual_chip	Modified
mac_mcu_timer.c	...\Components\mac\low_level\srf04\dual_chip	<i>Modified</i>
mac_mcu_timer.h	...\Components\mac\low_level\srf04\dual_chip	<i>Modified</i>
mac_radio_defs.c	...\Components\mac\low_level\srf04\dual_chip	Modified

mac_radio_defs.h	...\Components\mac\low_level\srf04\dual_chip	Modified
mac_mcu.c	...\Components\mac\low_level\srf04\single_chip	Modified
mac_mcu.h	...\Components\mac\low_level\srf04\single_chip	Modified
mac_radio_defs.c	...\Components\mac\low_level\srf04\single_chip	Modified
mac_radio_defs.h	...\Components\mac\low_level\srf04\single_chip	Modified
mac_rffrontend.c	...\Components\mac\low_level\srf04\single_chip	Modified
MT.c	...\Components\mt	Modified
MT.h	...\Components\mt	Modified
MT_AF.c	...\Components\mt	Modified
MT_APP.c	...\Components\mt	Modified
MT_DEBUG.c	...\Components\mt	Modified
MT_DEBUG.h	...\Components\mt	Modified
MT_MAC.c	...\Components\mt	Modified
MT_SYS.c	...\Components\mt	Modified
MT_TASK.c	...\Components\mt	Modified
MT_UTIL.c	...\Components\mt	Modified
MT_VERSION.c	...\Components\mt	Modified
MT_ZDO.c	...\Components\mt	Modified
MT_ZDO.h	...\Components\mt	Modified
OSAL.c	...\Components\osal\common	Modified
OSAL_Clock.c	...\Components\osal\common	Modified
OSAL_Clock.h	...\Components\osal\include	Modified
OSAL_Nv.h	...\Components\osal\include	Modified
ZComDef.h	...\Components\osal\include	Modified
OSAL_Nv.c	...\Components\osal\mcu\arm_cm3	Modified
OSAL_Nv.c	...\Components\osal\mcu\cc2530	Modified
OSAL_Nv.c	...\Components\osal\mcu\msp430	Modified
AF.c	...\Components\stack\af	Modified
AF.h	...\Components\stack\af	Modified
AddrMgr.h	...\Components\stack\nwk	Modified
APS.h	...\Components\stack\nwk	Modified
aps_frag.h	...\Components\stack\nwk	Modified
APSMED.h	...\Components\stack\nwk	Modified
AssocList.h	...\Components\stack\nwk	Modified
BindingTable.c	...\Components\stack\nwk	Modified
NLMEDE.h	...\Components\stack\nwk	Modified
nwk_globals.c	...\Components\stack\nwk	Modified
nwk_globals.h	...\Components\stack\nwk	Modified
nwk_util.h	...\Components\stack\nwk	Modified
stub_aps.c	...\Components\stack\nwk	Modified
stub_aps.h	...\Components\stack\nwk	Modified
ZGlobals.c	...\Components\stack\sys	Modified
ZGlobals.h	...\Components\stack\sys	Modified
zcl.c	...\Components\stack\zcl	Modified
zcl.h	...\Components\stack\zcl	Modified
zcl_cc.c	...\Components\stack\zcl	New
zcl_cc.h	...\Components\stack\zcl	New
zcl_cert_data.c	...\Components\stack\zcl	Modified
zcl_closures.c	...\Components\stack\zcl	Modified
zcl_closures.h	...\Components\stack\zcl	Modified
zcl_general.c	...\Components\stack\zcl	Modified
zcl_general.h	...\Components\stack\zcl	Modified
zcl_gp.h	...\Components\stack\zcl	New
zcl_hvac.c	...\Components\stack\zcl	Modified

zcl_hvac.h	...\Components\stack\zcl	Modified
zcl_key_establish.c	...\Components\stack\zcl	Modified
zcl_key_establish.h	...\Components\stack\zcl	Modified
zcl_ota.c	...\Components\stack\zcl	Modified
zcl_ota.h	...\Components\stack\zcl	Modified
zcl_se.c	...\Components\stack\zcl	Modified
zcl_se.h	...\Components\stack\zcl	Modified
ZDApp.c	...\Components\stack\zdo	Modified
ZDApp.h	...\Components\stack\zdo	Modified
ZDConfig.h	...\Components\stack\zdo	Modified
ZDObject.c	...\Components\stack\zdo	Modified
ZDSecMgr.c	...\Components\stack\zdo	Modified
ZDSecMgr.h	...\Components\stack\zdo	Modified
ZMAC.h	...\Components\stack\zmac	Modified
zmac.c	...\Components\stack\zmac\f8w	Modified
zmac_cb.c	...\Components\stack\zmac\f8w	Modified
zmac_internal.h	...\Components\stack\zmac\f8w	Modified
Heap Memory Management	...\Documents	Modified
OSAL API	...\Documents	Modified
Smart Energy Sample Application User's Guide	...\Documents	Modified
Upgrading To Z-Stack v2.5	...\Documents	Modified
Z-Stack API	...\Documents	Modified
Z-Stack Commissioning Cluster API	...\Documents	New
Z-Stack Developer's Guide	...\Documents	Modified
Z-Stack Monitor and Test API	...\Documents	Modified
Z-Stack Sample Applications	...\Documents	Modified
Z-Stack Smart Energy Developer's Guide	...\Documents	Modified
Z-Stack ZCL API	...\Documents	Modified
CC2530ZNP Interface Specification	...\Documents\CC2530	Modified
README CC2530	...\Documents\CC2530	Modified
Z-Stack User's Guide – CC2530DB	...\Documents\CC2530	Modified
README EXP5438	...\Documents\EXP5438	Modified
Z-Stack User's Guide – EXP5438	...\Documents\EXP5438	Modified
README LM3S9B96	...\Documents\LM9B96	Modified
Z-Stack User's Guide – LM9B96	...\Documents\LM9B96	Modified
README MSP2618	...\Documents\MSP2618	Modified
Z-Stack User's Guide – CC2520	...\Documents\MSP2618	Modified
SampleLight.ewd	...\Projects\zstack\HomeAutomation\SampleLight\CC2520DB	Modified
SampleLight.ewp	...\Projects\zstack\HomeAutomation\SampleLight\CC2520DB	Modified
SampleLight.ewd	...\Projects\zstack\HomeAutomation\SampleLight\CC2530DB	Modified
SampleLight.ewp	...\Projects\zstack\HomeAutomation\SampleLight\CC2530DB	Modified
SampleLight.ewd	...\Projects\zstack\HomeAutomation\SampleLight\EXP5438	Modified
SampleLight.ewp	...\Projects\zstack\HomeAutomation\SampleLight\EXP5438	Modified
SampleLight.eww	...\Projects\zstack\HomeAutomation\SampleLight\EXP5438	Modified
SampleSwitch.ewd	...\Projects\zstack\HomeAutomation\SampleSwitch\CC2520DB	Modified
SampleSwitch.ewp	...\Projects\zstack\HomeAutomation\SampleSwitch\CC2520DB	Modified
SampleSwitch.eww	...\Projects\zstack\HomeAutomation\SampleSwitch\CC2520DB	Modified
SampleSwitch.ewd	...\Projects\zstack\HomeAutomation\SampleSwitch\CC2530DB	Modified
SampleSwitch.ewp	...\Projects\zstack\HomeAutomation\SampleSwitch\CC2530DB	Modified
SampleSwitch.ewd	...\Projects\zstack\HomeAutomation\SampleSwitch\EXP5438	Modified
SampleSwitch.ewp	...\Projects\zstack\HomeAutomation\SampleSwitch\EXP5438	Modified
SampleSwitch.eww	...\Projects\zstack\HomeAutomation\SampleSwitch\EXP5438	Modified
SampleSwitch.ewd	...\Projects\zstack\HomeAutomation\SampleSwitchOta\CC2520DB	Modified
SampleSwitch.ewp	...\Projects\zstack\HomeAutomation\SampleSwitchOta\CC2520DB	Modified



SampleSwitch.eww	...\Projects\zstack\HomeAutomation\SampleSwitchOta\CC2520DB	Modified
SampleSwitch.ewd	...\Projects\zstack\HomeAutomation\SampleSwitchOta\CC2530DB	Modified
SampleSwitch.ewp	...\Projects\zstack\HomeAutomation\SampleSwitchOta\CC2530DB	Modified
SampleSwitch.ewd	...\Projects\zstack\HomeAutomation\SampleSwitchOta\EXP5438	Modified
SampleSwitch.ewp	...\Projects\zstack\HomeAutomation\SampleSwitchOta\EXP5438	Modified
SampleSwitch.eww	...\Projects\zstack\HomeAutomation\SampleSwitchOta\EXP5438	Modified
AllDevice-Pro.a	...\Projects\zstack\Libraries\LM3Sxxx\bin	Modified
Ecc.a	...\Projects\zstack\Libraries\LM3Sxxx\bin	Modified
EndDevice.a	...\Projects\zstack\Libraries\LM3Sxxx\bin	Modified
EndDevice-Pro.a	...\Projects\zstack\Libraries\LM3Sxxx\bin	Modified
EndDeviceMt.a	...\Projects\zstack\Libraries\LM3Sxxx\bin	Modified
EndDeviceMt-Pro.a	...\Projects\zstack\Libraries\LM3Sxxx\bin	Modified
Router.a	...\Projects\zstack\Libraries\LM3Sxxx\bin	Modified
Router-Pro.a	...\Projects\zstack\Libraries\LM3Sxxx\bin	Modified
RouterMt.a	...\Projects\zstack\Libraries\LM3Sxxx\bin	Modified
RouterMt-Pro.a	...\Projects\zstack\Libraries\LM3Sxxx\bin	Modified
Security.a	...\Projects\zstack\Libraries\LM3Sxxx\bin	Modified
ecc.r43	...\Projects\zstack\Libraries\MSP2618\bin	Modified
EndDevice2618.lib	...\Projects\zstack\Libraries\MSP2618\bin	Modified
EndDevice2618-Pro.lib	...\Projects\zstack\Libraries\MSP2618\bin	Modified
EndDevice2618MT.lib	...\Projects\zstack\Libraries\MSP2618\bin	Modified
EndDevice2618MT-Pro.lib	...\Projects\zstack\Libraries\MSP2618\bin	Modified
Router2618.lib	...\Projects\zstack\Libraries\MSP2618\bin	Modified
Router2618-Pro.lib	...\Projects\zstack\Libraries\MSP2618\bin	Modified
Router2618MT.lib	...\Projects\zstack\Libraries\MSP2618\bin	Modified
Router2618MT-Pro.lib	...\Projects\zstack\Libraries\MSP2618\bin	Modified
Security2618.lib	...\Projects\zstack\Libraries\MSP2618\bin	Modified
ecc.r43	...\Projects\zstack\Libraries\MSP54xx\bin	Modified
EndDevice54xx.lib	...\Projects\zstack\Libraries\MSP54xx\bin	Modified
EndDevice54xx-Pro.lib	...\Projects\zstack\Libraries\MSP54xx\bin	Modified
EndDevice54xxMT.lib	...\Projects\zstack\Libraries\MSP54xx\bin	Modified
EndDevice54xxMT-Pro.lib	...\Projects\zstack\Libraries\MSP54xx\bin	Modified
Router54xx.lib	...\Projects\zstack\Libraries\MSP54xx\bin	Modified
Router54xx-Pro.lib	...\Projects\zstack\Libraries\MSP54xx\bin	Modified
Router54xxMT.lib	...\Projects\zstack\Libraries\MSP54xx\bin	Modified
Router54xxMT-Pro.lib	...\Projects\zstack\Libraries\MSP54xx\bin	Modified
Security54xx.lib	...\Projects\zstack\Libraries\MSP54xx\bin	Modified
AllDevice-Pro.lib	...\Projects\zstack\Libraries\TI2530DB\bin	Modified
ecc.r51	...\Projects\zstack\Libraries\TI2530DB\bin	Modified
EndDevice.lib	...\Projects\zstack\Libraries\TI2530DB\bin	Modified
EndDevice-Pro.lib	...\Projects\zstack\Libraries\TI2530DB\bin	Modified
EndDeviceMt.lib	...\Projects\zstack\Libraries\TI2530DB\bin	Modified
EndDeviceMt-Pro.lib	...\Projects\zstack\Libraries\TI2530DB\bin	Modified
Router.lib	...\Projects\zstack\Libraries\TI2530DB\bin	Modified
Router-Pro.lib	...\Projects\zstack\Libraries\TI2530DB\bin	Modified
RouterMt.lib	...\Projects\zstack\Libraries\TI2530DB\bin	Modified
RouterMt-Pro.lib	...\Projects\zstack\Libraries\TI2530DB\bin	Modified
Security.lib	...\Projects\zstack\Libraries\TI2530DB\bin	Modified
TIMAC-CC2530.lib	...\Projects\zstack\Libraries\TIMAC\bin	Modified
TIMAC-LM3Sxx.a	...\Projects\zstack\Libraries\TIMAC\bin	Modified
TIMAC-MSP2618.lib	...\Projects\zstack\Libraries\TIMAC\bin	Modified
TIMAC-MSP54xx.lib	...\Projects\zstack\Libraries\TIMAC\bin	Modified
Boot.ewd	...\Projects\zstack\OTA\Boot\CC2530DB	Modified
Boot.ewp	...\Projects\zstack\OTA\Boot\CC2530DB	Modified

OTA_Dongle.ewd	...\Projects\zstack\OTA\Dongle\CC2520DB	Modified
OTA_Dongle.ewp	...\Projects\zstack\OTA\Dongle\CC2520DB	Modified
OTA_Dongle.eww	...\Projects\zstack\OTA\Dongle\CC2520DB	Modified
OTA_Dongle.ewd	...\Projects\zstack\OTA\Dongle\CC2530DB	Modified
OTA_Dongle.ewp	...\Projects\zstack\OTA\Dongle\CC2530DB	Modified
OTA_Dongle.ewd	...\Projects\zstack\OTA\Dongle\EXP5438	Modified
OTA_Dongle.ewp	...\Projects\zstack\OTA\Dongle\EXP5438	Modified
OTA_Dongle.eww	...\Projects\zstack\OTA\Dongle\EXP5438	Modified
OSAL_OTA_Dongle.c	...\Projects\zstack\OTA\Dongle\Source	Modified
OTA_Dongle.c	...\Projects\zstack\OTA\Dongle\Source	Modified
OTA_Dongle.h	...\Projects\zstack\OTA\Dongle\Source	Modified
OTA_Dongle_data.c	...\Projects\zstack\OTA\Dongle\Source	Modified
ota_common.c	...\Projects\zstack\OTA\Source	Modified
ota_common.h	...\Projects\zstack\OTA\Source	Modified
ota_signature.c	...\Projects\zstack\OTA\Source	Modified
ota_signature.h	...\Projects\zstack\OTA\Source	Modified
GenericApp.ewd	...\Projects\zstack\Samples\GenericApp\CC2520DB	Modified
GenericApp.ewp	...\Projects\zstack\Samples\GenericApp\CC2520DB	Modified
GenericApp.eww	...\Projects\zstack\Samples\GenericApp\CC2520DB	Modified
GenericApp.ewd	...\Projects\zstack\Samples\GenericApp\CC2530DB	Modified
GenericApp.ewp	...\Projects\zstack\Samples\GenericApp\CC2530DB	Modified
GenericApp.ewd	...\Projects\zstack\Samples\GenericApp\EXP5438	Modified
GenericApp.ewp	...\Projects\zstack\Samples\GenericApp\EXP5438	Modified
GenericApp.eww	...\Projects\zstack\Samples\GenericApp\EXP5438	Modified
	...\Projects\zstack\Samples\GenericApp\LM3S8962	Removed
GenericApp.ewd	...\Projects\zstack\Samples\GenericApp\LM3S9B96	Modified
GenericApp.ewp	...\Projects\zstack\Samples\GenericApp\LM3S9B96	Modified
GenericApp.eww	...\Projects\zstack\Samples\GenericApp\LM3S9B96	Modified
FreeRTOSConfig.h	...\Projects\zstack\Samples\GenericApp\LM3S9B96	Removed
	...\Projects\zstack\Samples\GenericApp\LM3S9B96\Source	New
FreeRTOSConfig.h	...\Projects\zstack\Samples\GenericApp\LM3S9B96\Source	New
RTOS_App.c	...\Projects\zstack\Samples\GenericApp\LM3S9B96\Source	New
RTOS_App.h	...\Projects\zstack\Samples\GenericApp\LM3S9B96\Source	New
GenericApp.c	...\Projects\zstack\Samples\GenericApp\Source	Modified
GenericApp.h	...\Projects\zstack\Samples\GenericApp\Source	Modified
SampleApp.ewd	...\Projects\zstack\Samples\SampleApp\CC2520DB	Modified
SampleApp.ewp	...\Projects\zstack\Samples\SampleApp\CC2520DB	Modified
SampleApp.eww	...\Projects\zstack\Samples\SampleApp\CC2520DB	Modified
SampleApp.ewd	...\Projects\zstack\Samples\SampleApp\CC2530DB	Modified
SampleApp.ewp	...\Projects\zstack\Samples\SampleApp\CC2530DB	Modified
SampleApp.ewd	...\Projects\zstack\Samples\SampleApp\EXP5438	Modified
SampleApp.ewp	...\Projects\zstack\Samples\SampleApp\EXP5438	Modified
SampleApp.eww	...\Projects\zstack\Samples\SampleApp\EXP5438	Modified
	...\Projects\zstack\Samples\SampleApp\LM3S8962	Removed
SampleApp.ewd	...\Projects\zstack\Samples\SampleApp\LM3S9B96	Modified
SampleApp.ewp	...\Projects\zstack\Samples\SampleApp\LM3S9B96	Modified
SampleApp.eww	...\Projects\zstack\Samples\SampleApp\LM3S9B96	Modified
FreeRTOSConfig.h	...\Projects\zstack\Samples\SampleApp\LM3S9B96	Removed
	...\Projects\zstack\Samples\SampleApp\LM3S9B96\Source	New
FreeRTOSConfig.h	...\Projects\zstack\Samples\SampleApp\LM3S9B96\Source	New
RTOS_App.c	...\Projects\zstack\Samples\SampleApp\LM3S9B96\Source	New
RTOS_App.h	...\Projects\zstack\Samples\SampleApp\LM3S9B96\Source	New
SimpleApp.ewd	...\Projects\zstack\Samples\SimpleApp\CC2520DB	Modified
SimpleApp.ewp	...\Projects\zstack\Samples\SimpleApp\CC2520DB	Modified

SimpleApp.eww	...\\Projects\\zstack\\Samples\\SimpleApp\\CC2520DB	Modified
SimpleApp.ewd	...\\Projects\\zstack\\Samples\\SimpleApp\\CC2530DB	Modified
SimpleApp.ewp	...\\Projects\\zstack\\Samples\\SimpleApp\\CC2530DB	Modified
SimpleApp.ewd	...\\Projects\\zstack\\Samples\\SimpleApp\\EXP5438	Modified
SimpleApp.ewp	...\\Projects\\zstack\\Samples\\SimpleApp\\EXP5438	Modified
SimpleApp.eww	...\\Projects\\zstack\\Samples\\SimpleApp\\EXP5438	Modified
SampleApp.ewd	...\\Projects\\zstack\\SE\\SampleApp\\CC2520DB	Modified
SampleApp.ewp	...\\Projects\\zstack\\SE\\SampleApp\\CC2520DB	Modified
SampleApp.ewd	...\\Projects\\zstack\\SE\\SampleApp\\CC2530DB	Modified
SampleApp.ewp	...\\Projects\\zstack\\SE\\SampleApp\\CC2530DB	Modified
SampleApp.ewd	...\\Projects\\zstack\\SE\\SampleApp\\EXP5438	Modified
SampleApp.ewp	...\\Projects\\zstack\\SE\\SampleApp\\EXP5438	Modified
	...\\Projects\\zstack\\SE\\SampleApp\\LM3S8962	Removed
SampleApp.ewd	...\\Projects\\zstack\\SE\\SampleApp\\LM3S9B96	Modified
SampleApp.ewp	...\\Projects\\zstack\\SE\\SampleApp\\LM3S9B96	Modified
SampleApp.eww	...\\Projects\\zstack\\SE\\SampleApp\\LM3S9B96	Modified
FreeRTOSConfig.h	...\\Projects\\zstack\\SE\\SampleApp\\LM3S9B96	Removed
	...\\Projects\\zstack\\SE\\SampleApp\\LM3S9B96\\Source	New
	...\\Projects\\zstack\\SE\\SampleApp\\LM3S9B96\\Source\\ESP	New
FreeRTOSConfig.h	...\\Projects\\zstack\\SE\\SampleApp\\LM3S9B96\\Source\\ESP	New
RTOS_App.c	...\\Projects\\zstack\\SE\\SampleApp\\LM3S9B96\\Source\\ESP	New
RTOS_App.h	...\\Projects\\zstack\\SE\\SampleApp\\LM3S9B96\\Source\\ESP	New
	...\\Projects\\zstack\\SE\\SampleApp\\LM3S9B96\\Source\\IPD	New
FreeRTOSConfig.h	...\\Projects\\zstack\\SE\\SampleApp\\LM3S9B96\\Source\\IPD	New
RTOS_App.c	...\\Projects\\zstack\\SE\\SampleApp\\LM3S9B96\\Source\\IPD	New
RTOS_App.h	...\\Projects\\zstack\\SE\\SampleApp\\LM3S9B96\\Source\\IPD	New
	...\\Projects\\zstack\\SE\\SampleApp\\LM3S9B96\\Source\\LoadControl	New
FreeRTOSConfig.h	...\\Projects\\zstack\\SE\\SampleApp\\LM3S9B96\\Source\\LoadControl	New
RTOS_App.c	...\\Projects\\zstack\\SE\\SampleApp\\LM3S9B96\\Source\\LoadControl	New
RTOS_App.h	...\\Projects\\zstack\\SE\\SampleApp\\LM3S9B96\\Source\\LoadControl	New
	...\\Projects\\zstack\\SE\\SampleApp\\LM3S9B96\\Source\\PCT	New
FreeRTOSConfig.h	...\\Projects\\zstack\\SE\\SampleApp\\LM3S9B96\\Source\\PCT	New
RTOS_App.c	...\\Projects\\zstack\\SE\\SampleApp\\LM3S9B96\\Source\\PCT	New
RTOS_App.h	...\\Projects\\zstack\\SE\\SampleApp\\LM3S9B96\\Source\\PCT	New
	...\\Projects\\zstack\\SE\\SampleApp\\LM3S9B96\\Source\\RangeExt	New
FreeRTOSConfig.h	...\\Projects\\zstack\\SE\\SampleApp\\LM3S9B96\\Source\\RangeExt	New
RTOS_App.c	...\\Projects\\zstack\\SE\\SampleApp\\LM3S9B96\\Source\\RangeExt	New
RTOS_App.h	...\\Projects\\zstack\\SE\\SampleApp\\LM3S9B96\\Source\\RangeExt	New
	...\\Projects\\zstack\\SE\\SampleApp\\LM3S9B96\\Source\\SimpleMeter	New
FreeRTOSConfig.h	...\\Projects\\zstack\\SE\\SampleApp\\LM3S9B96\\Source\\SimpleMeter	New
RTOS_App.c	...\\Projects\\zstack\\SE\\SampleApp\\LM3S9B96\\Source\\SimpleMeter	New
RTOS_App.h	...\\Projects\\zstack\\SE\\SampleApp\\LM3S9B96\\Source\\SimpleMeter	New
esp.c	...\\Projects\\zstack\\SE\\SampleApp\\Source\\ESP	Modified
esp.h	...\\Projects\\zstack\\SE\\SampleApp\\Source\\ESP	Modified
esp_data.c	...\\Projects\\zstack\\SE\\SampleApp\\Source\\ESP	Modified
ipd.c	...\\Projects\\zstack\\SE\\SampleApp\\Source\\IPD	Modified
ipd.h	...\\Projects\\zstack\\SE\\SampleApp\\Source\\IPD	Modified
ipd_data.c	...\\Projects\\zstack\\SE\\SampleApp\\Source\\IPD	Modified
ipd.c	...\\Projects\\zstack\\SE\\SampleApp\\Source\\IPD_OTA	Modified
loadcontrol.c	...\\Projects\\zstack\\SE\\SampleApp\\Source\\LoadControl	Modified
loadcontrol.h	...\\Projects\\zstack\\SE\\SampleApp\\Source\\LoadControl	Modified
pct.c	...\\Projects\\zstack\\SE\\SampleApp\\Source\\PCT	Modified
pct.h	...\\Projects\\zstack\\SE\\SampleApp\\Source\\PCT	Modified
rangeext.c	...\\Projects\\zstack\\SE\\SampleApp\\Source\\RangeExt	Modified

rangeext.h	...\Projects\zstack\SE\SampleApp\Source\RangeExt	Modified
simplemeter.c	...\Projects\zstack\SE\SampleApp\Source\SimpleMeter	Modified
simplemeter.h	...\Projects\zstack\SE\SampleApp\Source\SimpleMeter	Modified
simplemeter_data.c	...\Projects\zstack\SE\SampleApp\Source\SimpleMeter	Modified
se.c	...\Projects\zstack\SE\Source\	Modified
se.h	...\Projects\zstack\SE\Source\	Modified
cc2530-sb.xcl	...\Projects\zstack\Tools\CC2530DB	Modified
f8wConfig.cfg	...\Projects\zstack\Tools\CC2530DB	Modified
f8wZCL.cfg	...\Projects\zstack\Tools\CC2530DB	Modified
OtaConverter.exe	...\Projects\zstack\Tools\CC2530DB	Modified
f8wConfig.cfg	...\Projects\zstack\Tools\LM3Sxxx	Modified
f8wZCL.cfg	...\Projects\zstack\Tools\LM3Sxxx	Modified
lm3s8962.icf	...\Projects\zstack\Tools\LM3Sxxx	Removed
f8wConfig.cfg	...\Projects\zstack\Tools\MSP2618	Modified
f8wZCL.cfg	...\Projects\zstack\Tools\MSP2618	Modified
OtaConverter.exe	...\Projects\zstack\Tools\MSP2618	Modified
f8wConfig.cfg	...\Projects\zstack\Tools\MSP438	Modified
f8wZCL.cfg	...\Projects\zstack\Tools\MSP438	Modified
OtaConverter.exe	...\Projects\zstack\Tools\MSP438	Modified
Boot.ewd	...\Projects\zstack\Utilities\BootLoad\CC2530	Modified
Boot.ewp	...\Projects\zstack\Utilities\BootLoad\CC2530	Modified
sb_main.c	...\Projects\zstack\Utilities\BootLoad\CC2530\source	Modified
Boot.ewd	...\Projects\zstack\Utilities\BootLoad\CC2530ZNP	Modified
Boot.ewp	...\Projects\zstack\Utilities\BootLoad\CC2530ZNP	Modified
sb_main.c	...\Projects\zstack\Utilities\BootLoad\CC2530ZNP\source	Modified
Boot.ewd	...\Projects\zstack\Utilities\BootLoad\CC2531	Modified
Boot.ewp	...\Projects\zstack\Utilities\BootLoad\CC2531	Modified
sb_main.c	...\Projects\zstack\Utilities\BootLoad\CC2531\source	Modified
MT_TASK.c	...\Projects\zstack\Utilities\OAD\Source	Modified
oad_app.c	...\Projects\zstack\Utilities\OAD\Source	Modified
Dongle.ewd	...\Projects\zstack\Utilities\OAD\CC2520DB	Modified
Dongle.ewp	...\Projects\zstack\Utilities\OAD\CC2520DB	Modified
Dongle.eww	...\Projects\zstack\Utilities\OAD\CC2520DB	Modified
Boot.ewd	...\Projects\zstack\Utilities\OAD\CC2530DB	Modified
Boot.ewp	...\Projects\zstack\Utilities\OAD\CC2530DB	Modified
Dongle.ewd	...\Projects\zstack\Utilities\OAD\CC2530DB	Modified
Dongle.ewp	...\Projects\zstack\Utilities\OAD\CC2530DB	Modified
Dongle.eww	...\Projects\zstack\Utilities\OAD\CC2530DB	Modified
Dongle.ewd	...\Projects\zstack\Utilities\OAD\EXP5438	Modified
Dongle.ewp	...\Projects\zstack\Utilities\OAD\EXP5438	Modified
SerialApp.ewd	...\Projects\zstack\Utilities\SerialApp\CC2520DB	Modified
SerialApp.ewp	...\Projects\zstack\Utilities\SerialApp\CC2520DB	Modified
SerialApp.ewd	...\Projects\zstack\Utilities\SerialApp\CC2530DB	Modified
SerialApp.ewp	...\Projects\zstack\Utilities\SerialApp\CC2530DB	Modified
SerialApp.ewd	...\Projects\zstack\Utilities\SerialApp\EXP5438	Modified
SerialApp.ewp	...\Projects\zstack\Utilities\SerialApp\EXP5438	Modified
SerialApp.eww	...\Projects\zstack\Utilities\SerialApp\EXP5438	Modified
TransmitApp.ewd	...\Projects\zstack\Utilities\Transmit\CC2520DB	Modified
TransmitApp.ewp	...\Projects\zstack\Utilities\Transmit\CC2520DB	Modified
TransmitApp.eww	...\Projects\zstack\Utilities\Transmit\CC2520DB	Modified
TransmitApp.ewd	...\Projects\zstack\Utilities\Transmit\CC2530DB	Modified
TransmitApp.ewp	...\Projects\zstack\Utilities\Transmit\CC2530DB	Modified
TransmitApp.ewd	...\Projects\zstack\Utilities\Transmit\EXP5438	Modified
TransmitApp.ewp	...\Projects\zstack\Utilities\Transmit\EXP5438	Modified

TransmitApp.eww	...\Projects\zstack\Utilities\Transmit\EXP5438	Modified
TransmitApp.c	...\Projects\zstack\Utilities\Transmit\Source	Modified
	...\Projects\zstack\ZBA	New
	...\Projects\zstack\ZBA\CCServer	New
	...\Projects\zstack\ZBA\CCServer\CC2520DB	New
CCServer.ewd	...\Projects\zstack\ZBA\CCServer\CC2520DB	Modified
CCServer.ewp	...\Projects\zstack\ZBA\CCServer\CC2520DB	Modified
CCServer.eww	...\Projects\zstack\ZBA\CCServer\CC2520DB	Modified
	...\Projects\zstack\ZBA\CCServer\CC2530DB	New
CCServer.ewd	...\Projects\zstack\ZBA\CCServer\CC2530DB	New
CCServer.ewp	...\Projects\zstack\ZBA\CCServer\CC2530DB	New
CCServer.eww	...\Projects\zstack\ZBA\CCServer\CC2530DB	New
	...\Projects\zstack\ZBA\CCServer\EXP5438	New
CCServer.ewd	...\Projects\zstack\ZBA\CCServer\EXP5438	Modified
CCServer.ewp	...\Projects\zstack\ZBA\CCServer\EXP5438	Modified
CCServer.eww	...\Projects\zstack\ZBA\CCServer\EXP5438	Modified
	...\Projects\zstack\ZBA\CCServer\Source	New
OSAL_CCServer.c	...\Projects\zstack\ZBA\CCServer\Source	New
zcl_ccserver.c	...\Projects\zstack\ZBA\CCServer\Source	New
zcl_ccserver.h	...\Projects\zstack\ZBA\CCServer\Source	New
zcl_ccserver_data.c	...\Projects\zstack\ZBA\CCServer\Source	New
	...\Projects\zstack\ZBA\Source	New
zba.c	...\Projects\zstack\ZBA\Source	New
zba.h	...\Projects\zstack\ZBA\Source	New
OnBoard.h	...\Projects\zstack\ZMain\LM3Sxxx	Modified
ZMain.c	...\Projects\zstack\ZMain\LM3Sxxx	Modified
OnBoard.h	...\Projects\zstack\ZMain\TI2530ZNP	Modified
CC2530.ewd	...\Projects\zstack\ZNP\CC253x	Modified
CC2530.ewp	...\Projects\zstack\ZNP\CC253x	Modified
CC2531.ewd	...\Projects\zstack\ZNP\CC253x	Modified
CC2531.ewp	...\Projects\zstack\ZNP\CC253x	Modified
znp.eww	...\Projects\zstack\ZNP\CC253x	Modified
CC2530ZNP-SB.hex	...\Projects\zstack\ZNP\CC253x\bin	Modified
CC2531SB.hex	...\Projects\zstack\ZNP\CC253x\bin	Modified
znp_app.c	...\Projects\zstack\ZNP\Source	Modified
znp_app.h	...\Projects\zstack\ZNP\Source	Modified
znp_cfg	...\Projects\zstack\ZNP\Source	Modified
OtaServer.exe	...\Tools\OTA\Console	Modified
Converter.exe	...\Tools\OTA\Converter	Modified
SBDemo.exe	...\Tools\SBL Tool	Modified
TI.CommonLib.dll	...\Tools\Z-Tool	Modified
TI.ZCmdMatchings.dll	...\Tools\Z-Tool	Modified
TI.ZPI.dll	...\Tools\Z-Tool	Modified
TI.ZPI.xml	...\Tools\Z-Tool	Modified
TI.ZPortLib.dll	...\Tools\Z-Tool	Modified
TI.ZScript.dll	...\Tools\Z-Tool	Modified
Z-Tool 2.0.exe	...\Tools\Z-Tool	Modified
ZPI Help.chm	...\Tools\Z-Tool	Modified