



## Software Release Note

CTT v2.6.3

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### Approved by:

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|------------|----------|----------|----------------------|---------------|
| 2018-03-07 | 14:31:42 | NTJ      | Niels Thybo Johansen |               |

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**REVISION RECORD**

| <b>Doc. Rev</b> | <b>Date</b> | <b>By</b> | <b>Pages affected</b> | <b>Brief description of changes</b> |
|-----------------|-------------|-----------|-----------------------|-------------------------------------|
| 1               | 20161129    | BBR       | ALL                   | Initial version                     |
| 2               | 20180307    | BBR       | All                   | Added Silicon Labs template         |

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## 1 ABBREVIATIONS

| Abbreviation | Explanation          |
|--------------|----------------------|
| CTT          | Compliance Test Tool |

## 2 INTRODUCTION

The Z-Wave Compliance Test Tool (CTT) Version 2 is Microsoft Windows based application for automated testing of Z-Wave application commands. The CTT is designed to reduce the OEMs effort for self-verification testing in connection with a Z-Wave Certification. From version 2.6.x the CTT is released and maintained by Sigma Designs.

### 2.1 Audience and prerequisites

The audience of this document is Z-Wave Partners.

## 3 Z-WAVE COMPLIANCE TEST TOOL 2.6.X

### **IMPORTANT INFORMATION FOR 2.6.x**

The 2.6.x CTT version branch makes use of the V5 PC Controller libraries and with this update the CTT is also able to use S2 encryption. Please note the following:

- If the Add Node Secure button is used the CTT will include another node with its highest possible security scheme by default. During the Inclusion process a dialog allows to configure the security keys that are exchanged with the included node.
- With the Start Learn Mode button it is possible to include the CTT into another network as an S2 device.
- When selecting a Device Under Test in the Project Properties screen the CTT will always determine the highest possible security scheme which is supported by the selected node. This may take a few seconds.
- It is possible to manually change the security scheme to other values by changing the value in the Security Scheme combo box (Project Properties -> Device Under Test).
- The selected scheme is used for all communication with the DUT (in script runs and Z-Wave Plus Tester test). In order to use encrypted frames in script tests the Enable Security checkbox in the encapsulation toolbar must be checked as well.
- When the Controller connected to the CTT is reset in the Included Devices dialog the CTT will create a new set of Network Keys. These keys will be saved in the Key storage folder that can be configured in the CTT options (Tools -> Options...).
- When a Controller is selected in Project Properties -> Static Controller -> Serial Port the CTT tries to find a key file in the key storage folder for the Home Id of the selected Controller.
- The format of the key files is the same as in the PC Controller. So if the PC Controller and the CTT are both using the same key storage folder it is possible to setup a secure Z-Wave network in the PC Controller and continue to use the same network in the CTT at a later time, still being able to communicate to secure nodes.
- Same as for the PC Controller the key storage folder can be set in the Ziffer to decrypt secure messages.

In order to use new or updated Command Class scripts a new Project must be created. Projects created with older CTT version will not be updated automatically.

### 3.1 NEW FEATURES IN 2.6.3

- The security scheme the CTT uses is now changeable while a Z-Wave Plus tester run is active
- Command Class responses have been fixed for all Z-Wave Plus test cases where the CTT emulates a slave
- The runtime reporting test case now fails if a non-secure report is received but the CC is only supported securely
- Error log message added if the secure Inclusion part fails
- The server location for CTT version file has been changed to a sub directory on the cert portal live server
- CTT is prevented from crashing if the Controller is not accessible
- Minor adjustment in the Basic CC mapping test scripts (see change log in script for details)

- Show leading zeros in DSK input dialog
- Several bug fixes and minor modifications in the emulator
- Adding note to start page about what CTT does and what not. Attached is a screen shot that shows the message. Let me know if you need modifications on the text
- Updating Command Classes XML file to latest version
- Updated/Added Script Files:
  - Association Group Info Version 1 – 3
  - Firmware Update Meta Data Version 1 – 4
  - Multi Command Version 1
  - Notification Version 3 - 8

### 3.2 NEW FEATURES IN 2.6.2

- Hotfixing a library bug that happens when the CTT parses an incoming Meter Supported Report version 1 - 3
- Remove Central Scene CC from mandatory controlled CCs for the Wall Controller device type
- Fix text on Disable SIS button in Secondary Controller test case
- Emulated device in PollRequirements test case will now answer Basic and Binary Switch Get commands directly after Inclusion
- Fix Association Get command in Lifeline Support test case. It will now send a Get for group 1
- Updated/Added Script Files:
  - Firmware Update Meta Data Version 1 - 4
  - Language Version 1
  - Multi Channel 3 & 4
  - Notification Version 3 – 8
  - Simple AV Control 1 - 4
  - Wake Up Version 2

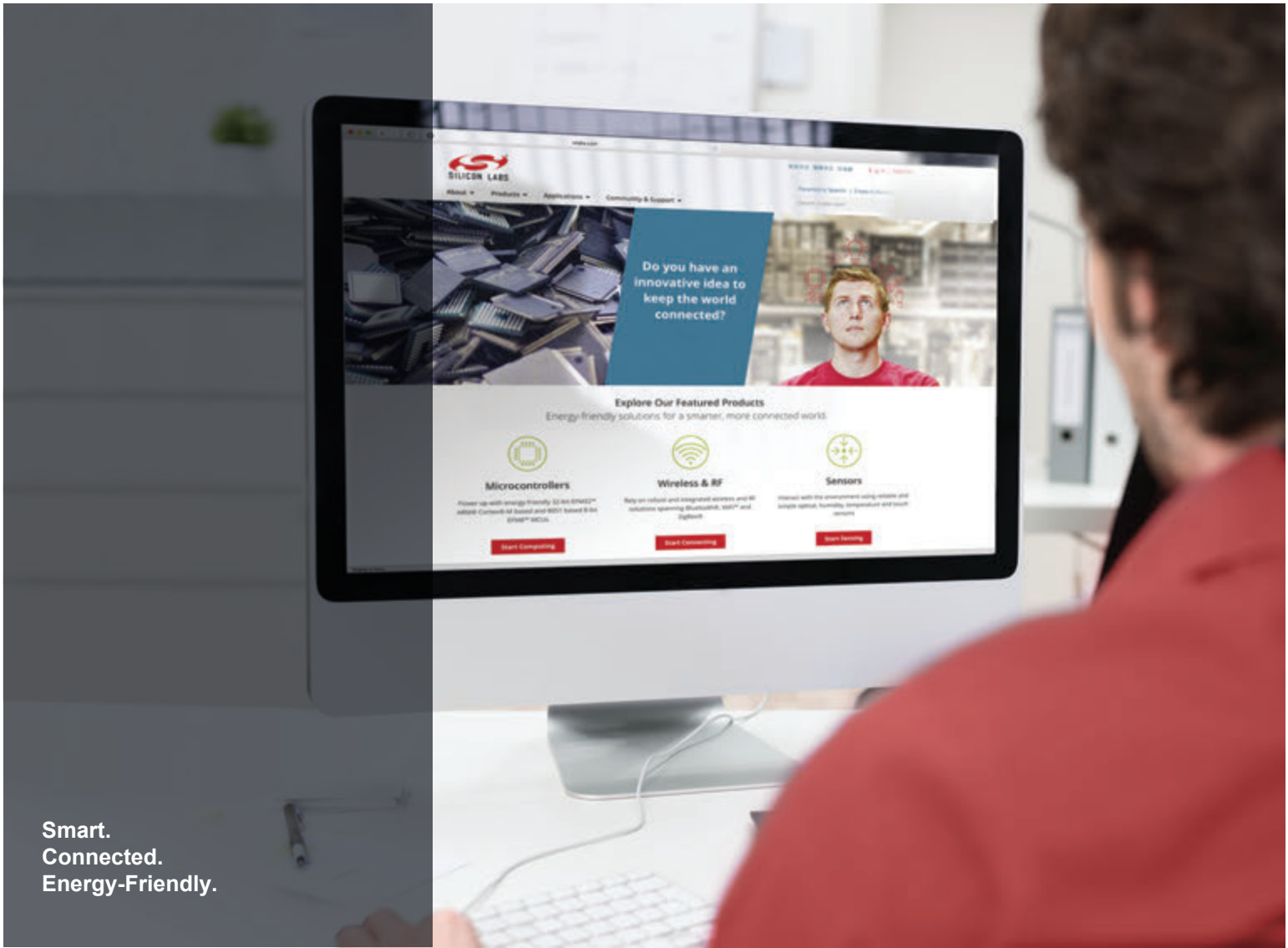
### 3.3 NEW FEATURES IN 2.6.1

- Add dialog for selecting security classes during inclusion
- Add dialog for displaying CSA pin
- Add dialog for displaying CSA and DSK pins
- Correctly update Controller and DUT property grid if Controller is reset or DUT is excluded
- Activate Multi Channel and CRC16 encapsulation modes
-

- Fix exception when static controller dialog is closed
- Focus text input field when DSK dialog is opened
- Don't configure the active security scheme if the configure DUT Node Id does not exist in the Controllers node list (ensures DUT is included securely)
- Show leading zeros in CSA dialog
- Fix VG parameters in SEND statements
- Fix parameter parsing bug (User Code parameter in a User Code Report, for parameters that have the Size field specified no 0x00 bytes are appended for non existing payload bytes anymore)
- Fail Device Reset Notification Test if Device Reset Locally CC is only supported securely but the Reset Notification was sent unsecurely.
- Activate configuration of lifeline and wake up node ids when DUT is included securely
- Fix command template function when used with bitset parameters (like Multi Channel Capabilities Get)
- Fix send function when used with bitset parameters (like Multi Channel Capabilities Get)
- Align behaviour of static controller dialogs
- Hot fix for parameter definition problem in Multichannel Endpoint Find command
- Updated Script Files:
  - Meter Version 4
  - Notification Version 3 – 8
  - Wake Up Version 2

### 3.4 NEW FEATURES IN 2.6.0

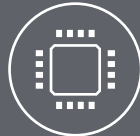
- CTT has been adapted to the new V5 PC Controller libraries
- S2 support has been added



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Silicon Laboratories Inc.  
400 West Cesar Chavez  
Austin, TX 78701  
USA

<http://www.silabs.com>