

29 MAY, 2020

SmartSnippets Toolbox Release Notes for version 5.0.14

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1.0 Introduction

1.1 Scope

This document describes the release of SmartSnippets Toolbox application from Dialog Semiconductor.

1.2 Terms and abbreviations

- BLE Bluetooth Low Energy
- CLI Command-Line Interface
- FW Firmware
- OTP One-Time Programmable memory

SPotA Software Patch over the Air

SUotA Software Update over the Air

1.3 Release Data

| PROJECT | SmartSnippets Toolbox |
|---------------------------|-----------------------|
| RELEASE DATE | 29 May 2020 |
| VERSION NR. | 5.0.14 |
| RELEASE TYPE ¹ | FULL (GA) |
| RELEASE MASTER | Evaggelinos Mariatos |

1.4 License

Licenses covering this SmartSnippets Toolbox release are displayed as part of the installation process.

1.5 History

| VERSION | RELEASE MASTER | DATE |
|---------|----------------------|-------------|
| 5.0.14 | Evaggelinos Mariatos | 29 May 2020 |
| 5.0.12 | Evaggelinos Mariatos | 28 Feb 2020 |
| 5.0.10 | Gerard Wolters | 25 Sep 2019 |
| 5.0.9 | Gerard Wolters | 21 Jun 2019 |
| 5.0.8 | Gerard Wolters | 3 Apr 2019 |
| 5.0.7 | Gerard Wolters | 8 Feb 2019 |
| 5.0.6 | Gerard Wolters | 7 Nov 2018 |
| 5.0.5 | Gerard Wolters | 18 May 2018 |
| 5.0.3 | Gerard Wolters | 02 Feb 2018 |
| 4.8 | Gerard Wolters | 23 Jun 2017 |
| 4.7 | Gerard Wolters | 24 Mar 2017 |
| 4.6 | Gerard Wolters | 22 Dec 2016 |
| 4.5 | Gerard Wolters | 18 Nov 2016 |
| 4.4 | Gerard Wolters | 24 Aug 2016 |
| 4.3 | Gerard Wolters | 17 Jun 2016 |
| 4.2 | Gerard Wolters | 28 Apr 2016 |
| 4.1 | Gerard Wolters | 16 Nov 2015 |
| 4.0 | Gerard Wolters | 30 Oct 2015 |
| 3.10 | Gerard Wolters | 3 Dec 2015 |
| 3.9 | Gerard Wolters | 18 Nov 2015 |

¹ Releases can be of the following types: FULL (GA), FULL (LA), RELEASE CANDIDATE, ENGINEERING, PATCH or BINARY

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| 3.8 | Gerard Wolters | 27 Jul 2015 |
|---------|----------------|-------------|
| 1.0.2.0 | Gerard Wolters | 21 Jul 2015 |
| 1.0.1.4 | Gerard Wolters | 15 Jul 2015 |
| 1.0.1.3 | Gerard Wolters | 26 Jun 2015 |
| 1.0.0.2 | Gerard Wolters | 12 Jun 2015 |
| 3.7 | Gerard Wolters | 20 Feb 2015 |
| 3.6 | Gerard Wolters | 3 Nov 2014 |
| 3.5 | Gerard Wolters | 23 Sep 2014 |
| 3.4 | Gerard Wolters | 19 Aug 2014 |
| 3.3 | Gerard Wolters | 06 Aug 2014 |
| 3.2 | Gerard Wolters | 17 Jul 2014 |
| 3.1 | Gerard Wolters | 17 Jun 2014 |
| 3.0 | Gerard Wolters | 27 Mar 2014 |
| 2.2 | Gerard Wolters | 4 Feb 2014 |
| 2.1 | Gerard Wolters | 06 Jan 2014 |
| 2.0 | Gerard Wolters | 23 Dec 2013 |
| 1.1 | Gerard Wolters | 02 Dec 2013 |
| 1.0 | Gerard Wolters | 11 Nov 2013 |

2.0 Release Description

2.1 Major Changes

| OVERVIEW | |
|---------------|--|
| This release: | |

#

- Enhances Battery Lifetime Estimator to support DA14531 chips
- Supports new DA14530 chip
- Adds new SUOTA tool for DA1469x chips
- Enhances RF Master tool for DA1469x chips
- Upgrades Toolbox environment to latest stable versions of tools and libraries

DESCRIPTION

- Officially supports 64-bit windows (no longer supports 32-bit windows)

It supports the following SDKs:

- SDK5: version 5.0.4 or newer
- SDK6: all versions
- SDK1: version 1.0.6 or newer
- SDK10: all versions

NEW FEATURES

| NEW FEATURES | | |
|--------------|--|--|
| 514_01 | Enhances Battery Lifetime Estimator to support DA14531 chips | |
| 514_02 | Supports new DA14530 chip | |
| 514_03 | Adds new SUOTA tool for DA1469x chips | |
| 514_04 | Adds RF Master commands for DA1469x chips | |
| 514_05 | Upgrades Java to OpenJDK version 13.0.1 | |
| 514_06 | Supports motherboard detection utility for DA14531 Development Kits | |
| FIXES / IM | PROVEMENTS | |
| 2604/01 | Improves stability and consistency of all memory-related tools for all chip families | |
| 2722/01 | Improves stability of QSPI memory reads for DA1469x chips | |
| 2497/01 | Improves stability of Proprietary Header Programmer | |
| 2637/01 | Improves the stability of firmware downloading on DA14580/1/3 and DA14585/586 chips | |
| 2598/01 | Improves padding-related logic when reading/writing hex files | |
| 2646/01 | Battery Lifetime Estimator displays warning when advertising interval is not among iPhone recommended values | |
| 2689/01 | Fixes 'File not found' error occurring in Linux when browsing for files with uppercase characters | |
| 2500/01 | Fixes issue with applying some Power Profiler configurations even when user closes the configuration dialog by pressing the 'x' button | |
| 2616/01 | Increases the font size of the Terminal Scripting log window | |
| 2607/01 | When trying to filter log messages for a specific tool, the tool list now displays only the available tools for the selected chip family | |
| 2758/01 | Fixes an issue with FW hex2bin conversion affecting DA1458x Data Rate Management tool | |
| 2816/01 | | |
| 2816/02 | For DA1468x, DA1469x and DA14585/6 families, RF Master supports packet lengths up to 255 | |
| 2865/01 | Improves messages displayed when burning with OTP | |
| 2883/01 | Fixes issue with "Clear Selection" button on Support pack window applying even if user cancels | |
| 2857/01 | For DA1453x chips, fixes an issue causing invalid warnings being displayed when trying to write the OTP using the CLI commands | |
| 2994/01 | For DA1469x chips, validates F/W image starting address before writing to QSPI | |
| 2994/02 | For DA1453x, Power Profiler allows values between 1.1Vand 3.3V for voltage configuration | |

| 3008/01 | For DA1468x and DA1469x chips, QSPI Programmer downloads image binaries faster | |
|------------|--|--|
| 3017/02 | Improves performance when writing to OTP via the command line interface | |
| 3017/03 | Improves logic and messages related to QSPI Product Header CRC validations | |
| 3020/01 | Power Profiles proposes better default values for multiplication factor depending on chip family | |
| 3022/01 | Improves stability of command-line functionality for DA1453x chips | |
| 3024/01 | Improves the workflow of multi-file 'Make Image Wizard' tool | |
| 3042/01 | Improves labels related to UART and SPI signal names in Board Setup tool | |
| 3055/01 | On DA14531 chip, sends ACTION_RESET_MODE command after burning a bootable image on SPI / EEPROM | |
| 3065/01 | Improves functionality and documentation related to DA1469x and DA13531 CLI commands | |
| 3066/01 | Updates Public Bluetooth Addresses from 80:EA:CA:XX:XX to 48:23:35:XX:XX:XX | |
| Documentat | Documentation | |
| UM-B-083 | SmartSnippets Toolbox User Guide | |

2.2 Issues or Limitations

| # | OPEN ISSUES & LIMITATIONS | |
|--------|--|--|
| 407/03 | If tool or log panel becomes too short, reposition, resize or close visible windows to increase the area of interest | |
| 407/02 | No default RF master firmware for DA14682/3 chips, user needs to load binary provided by SDK | |
| 407/01 | OTA services, Data Rate Monitor and Sleep Mode Advisor not enabled for DA14585/586 chips | |
| 408/04 | OTA services are not enabled for DA14581 and DA14583 chips | |
| 503/01 | In QSPI, the entire partition table is deleted when user asks to delete only the last partition | |
| 503/05 | No default RF master firmware for D1469x chips | |
| 505/03 | QSPI Layout Controller enforces only a limited number of validations when it comes to writing different sections on the QSPI | |
| 509/01 | SPI Flash operations are not functional for DA14531 chips when being connected over 2-wire UART | |

2.3 MAJOR Release Files

| # | File Name | Description |
|---|--|---------------|
| 1 | SmartSnippets_Studio_v2.0.12_windows.msi (bundled inside Studio) | RELEASE FILE |
| 2 | SmartSnippets_Toolbox_v5.0.12_windows.msi (standalone) | RELEASE FILE |
| 3 | SmartSnippets_Studio-linux.gtk.x86_64-2.0.12.run (bundled inside Studio) | RELEASE FILE |
| 4 | SmartSnippets_Toolbox-linux.x86_64-5.0.12.run (standalone) | RELEASE FILE |
| 5 | SmartSnippets_Toolbox_Release_Notes.doc | RELEASE NOTES |

SmartSnippets Toolbox Release Notes for version 5.0.14

3.0 Release History

3.1 Version 5.0.12

OVERVIEW

DESCRIPTION

This release:

- Supports DA14531 USB Development Kit
- Includes multiple improvements to the 'Make Image Wizard' tool

It supports the following SDKs:

- SDK5: version 5.0.4 or newer
- SDK6: all versions
- SDK1: version 1.0.6 or newer
- SDK10: all versions

NEW FEATURES

| NEW FEATURES | | |
|--------------|--|--|
| 512_01 | Supports DA14531 USB Development Kit | |
| FIXES / IMI | PROVEMENTS | |
| 2699/01 | Changes the buffer size used for communication with DA14531 chips | |
| 2699/02 | Includes fixes to allow DA14531 USB Development Kit work with RF Master tool | |
| 2705/01 | Properly initializes connection to DA14531 chips over 1-wire UART | |
| 2710/01 | Fixes failure to correctly identify input file type when filename includes multiple dots | |
| 2710/02 | Fixes memory alignment issues when writing a multi-image via the 'Make Image Wizard' | |
| 2710/03 | In 'Make Image Wizard', .hex and .ihex input files are now converted to .bin files, so that they can properly be used from mkimage.exe | |
| 2710/04 | For both single and multi images, a save option was added to the last wizard page, allowing user to save generated files for later use | |
| 2710/05 | In 'Make Image Wizard', default secondary bootloader.bin for DA14531 has been updated | |
| 2710/06 | At "Memory Offsets" page of the 'Make Image Wizard', default values for locations of 1 st and 2 nd images have been changed. | |
| 2710/07 | In 'Make Image Wizard', default option for "Add a secondary bootloader to the image" option has changed from unchecked to checked | |
| 2710/08 | 'Make Image Wizard' now restricts the types of the input files | |
| 2702/01 | Includes padding improvements when working with hex files | |
| OPEN ISSU | JES & LIMITATIONS | |
| 407/03 | If tool or log panel becomes too short, reposition, resize or close visible windows to increase the area of interest | |
| 407/02 | No default RF master firmware for DA14682/3 chips, user needs to load binary provided by SDK | |
| 407/01 | OTA services, Data Rate Monitor and Sleep Mode Advisor not enabled for DA14585/586 chips | |
| 408/04 | OTA services are not enabled for DA14581 and DA14583 chips | |
| 503/01 | In QSPI, the entire partition table is deleted when user asks to delete only the last partition | |
| 503/05 | No default RF master firmware for D1469x chips | |
| 505/03 | QSPI Layout Controller enforces only a limited number of validations when it comes to writing different sections on the QSPI | |
| 509/01 | SPI Flash operations are not functional for DA14531 chips when being connected over 2-wire UART | |
| | | |

3.2 Version 5.0.10

| # | DESCRIPTION | |
|--------------|--|--|
| OVERVIEW | | |
| This release | | |
| | ds new Make Image tool for facilitating making images for DA1458x/DA1453x chips | |
| | vides significant enhancements on the Terminal Scripting tool | |
| - Su | oports new motherboard for DA1458x / DA1453x chips and new SDK6 and SDK10 versions | |
| | he following SDKs: | |
| | K5: version 5.0.4 or newer K6: all versions | |
| - | Ko. all versions K1: version 1.0.6 or newer | |
| - | K10: all versions | |
| NEW FEAT | URES | |
| 510_01 | Adds new Make Image tool for facilitating making images for DA1458x/DA1453x chips | |
| 510_02 | Terminal Scripting supports additional commands: echo, delay, branch, check, return | |
| 510_03 | Terminal Scripting includes a formatter that support text replacement and coloring | |
| 510_04 | Supports new motherboard for DA1458x / DA1453x chips and new SDK6 and SDK10 versions | |
| | PROVEMENTS | |
| 2373/01 | Fixes an issue preventing booting from QSPI on DA1469x chips | |
| 2402/01 | Fixes an issue preventing booting from QSPI on DA1469x chips after upgrading FW | |
| 2389/01 | Makes modifications on RF Master tool for DA1469x chips | |
| 2389/01 | Adjusts to new API for making DA1469x QSPI images | |
| 2401/01 | Improves the flow when user decides to switch to a different Support Pack | |
| 2406/01 | Fixes some issues affecting downloading FW files over JTAG for DA1458x chips | |
| 2405/01 | Updates the bundled SEGGER JLink version from v6.14 to v6.40 | |
| 2407/01 | Improves text displayed when Toolbox needs to failover to bundled Support Pack | |
| 2408/01 | Reads from SPI Flash and EEPROM in chunks of 0x4000 bytes for all DA145xx chips | |
| 2408/02 | Improves chip detection for DA14531 chips | |
| 2415/01 | Fixes functionality of 'x' button for the dialog that shows up when memory is already written | |
| 2410/01 | Various small improvements to the 'Proprietary Header Programmer' tool | |
| 508/02 | Fully supports DA1468x USB Development Kits | |
| OPEN ISSU | ES & LIMITATIONS | |
| 407/03 | If tool or log panel becomes too short, reposition, resize or close visible windows to increase the area of interest | |
| 407/02 | No default RF master firmware for DA14682/3 chips, user needs to load binary provided by SDK | |
| 407/01 | OTA services, Data Rate Monitor and Sleep Mode Advisor not enabled for DA14585/586 chips | |
| 408/04 | OTA services are not enabled for DA14581 and DA14583 chips | |
| 503/01 | In QSPI, the entire partition table is deleted when user asks to delete only the last partition | |
| 503/05 | No default RF master firmware for D1469x chips | |
| 505/03 | QSPI Layout Controller enforces only a limited number of validations when it comes to writing different sections on the QSPI | |
| 509/01 | SPI Flash operations are not functional for DA14531 chips when being connected over 2-wire UART | |

3.3 Version 5.0.9

| # | DESCRIPTION |
|-------------------------------|--|
| OVERVIEW | 1 |
| This release: - Suppo | rts recent DA14531 improvements |
| - SDK5: - SDK6: - SDK1: | following SDKs: version 5.0.4 or newer all versions version 1.0.6 or newer D: all versions |
| NEW FEATUR | ES |
| 509_01 | Supports DA14531 over single-wire UART |
| 509_02 | Enables RF Master for DA14531 |
| FIXES / IMPRO | VEMENTS |
| 2338/01 | Improves the workflow related to downloading firmware over JTAG for tools that require UART communication |
| 2329/01 | Improves configuration of maximum DA1469x QSPI memory size |
| 2331/01 | Fixes some UI issues happening on Linux environments |
| 2342/01 | Terminal Scripting tool displays more clear messages |
| OPEN ISSUES | & LIMITATIONS |
| 407/03 | If tool or log panel becomes too short, reposition, resize or close visible windows to increase the area of interest |
| 407/02 | No default RF master firmware for DA14682/3 chips, user needs to load binary provided by SDK |
| 407/01 | OTA services, Data Rate Monitor and Sleep Mode Advisor not enabled for DA14585/586 chips |
| 408/04 | OTA services are not enabled for DA14581 and DA14583 chips |
| 503/01 | In QSPI, the entire partition table is deleted when user asks to delete only the last partition |
| 503/05 | No default RF master firmware for D1469x chips |
| 505/03 | QSPI Layout Controller enforces only a limited number of validations when it comes to writing different sections on the QSPI |
| 506/01 | SPI Flash Options are not supported for DA14585/586 chips |
| 508/02 | DA1469x USB Development kits for Linux are not fully supported |
| 509/01 | SPI Flash operations are not functional for DA14531 chips when being connected over 2- wire UART |

3.4 Version 5.0.8

| # | DESCRIPTION |
|-------------------------|--|
| OVERVIEW | |
| This release: - Adds | the 'Terminal Scripting' tool |
| NEW FEATU | RES |
| 508_01 | Adds the 'Terminal Scripting' tool |
| 508_02 | Supports DA14531 QFN package |
| 508_03 | Supports DA1469x USB Development kits for Windows |
| FIXES / IMPR | OVEMENTS |
| 2272/01 | Uses the term 'settings' instead of 'project' to avoid confusion with Studio projects |
| 2273/01 | Supports QSPI NVPARAMS fields of different sizes |
| 2280/01 | For DA14531 chips, removes warning when reading OTP header application flags |
| 2287/01 | In Data Rate Monitor tool, clears the scan list when a new scan is triggered |
| 2289/01 | For DA14581/583 chips, removes the toolbar buttons for OTA services |
| 2290/01 | For DA14583 chips, enables Sleep Mode Advisor button |
| 2309/01 | For QSPI Layout Controller for DA1469x chips, fixes an issue resulting in FW image counter increase by one on read |
| 2313/01 | Fixes an issue with qspi_write_partition_uart/qspi_write_partition_jtag command-line commands for DA1468x and DA1469x families |
| OPEN ISSUE | S & LIMITATIONS |
| 407/03 | If tool or log panel becomes too short, reposition, resize or close visible windows to increase the area of interest |
| 407/02 | No default RF master firmware for DA14682/3 chips, user needs to load binary provided by SDK |
| 407/01 | OTA services, Data Rate Monitor and Sleep Mode Advisor not enabled for DA14585/586 chips |
| 408/04 | OTA services are not enabled for DA14581 and DA14583 chips |
| 503/01 | In QSPI, the entire partition table is deleted when user asks to delete only the last partition |
| 503/05 | No default RF master firmware for D1469x chips |
| 505/03 | QSPI Layout Controller enforces only a limited number of validations when it comes to writing different sections on the QSPI |
| 506/01 | SPI Flash Options are not supported for DA14585/586 chips |
| 508/01 | DA14531 single-wire setup is not supported |
| 508/02 | DA1469x USB Development kits for Linux are not fully supported |

SmartSnippets Toolbox Release Notes for version 5.0.14

3.5 Version 5.0.7

OVERVIEW

This release:

- -
- Supports chip family DA1453x Improves the logic of identifying port pairs _

NEW FEATURES

| 507_01 | Supports chip family DA1453x | |
|-------------|--|--|
| FIXES / IMF | FIXES / IMPROVEMENTS | |
| 507/01 | Improves the logic of identifying port pairs | |
| 507/02 | Improves control on baud rate and port number through the configuration file | |
| 2249/01 | Fixes issue preventing users with specific locales from opening DA1458x projects | |
| 2255/02 | Fixes issue with some already-written DA1469x Configuration Script fields not being highlighted in yellow | |
| 2246/03 | Fixes issue after executing the 1st command of Toolbox 'bundle' CLI commands | |
| 2249/04 | Improves opening time of Toolbox projects | |
| OPEN ISSU | IES & LIMITATIONS | |
| 407/03 | If tool or log panel becomes too short, reposition, resize or close visible windows to increase the area of interest | |
| 407/02 | No default RF master firmware for DA14682/3 chips, user needs to load binary provided by SDK | |
| 407/01 | OTA services, Data Rate Monitor and Sleep Mode Advisor not enabled for DA14585/586 chips | |
| 408/04 | OTA services are not enabled for DA14581 and DA14583 chips | |
| 503/01 | In QSPI, the entire partition table is deleted when user asks to delete only the last partition | |
| 503/05 | No default RF master firmware for D1469x chips | |
| 505/03 | QSPI Layout Controller enforces only a limited number of validations when it comes to writing different sections on the QSPI | |
| 506/01 | SPI Flash Options are not supported for DA14585/586 chips | |
| | | |

DESCRIPTION

SmartSnippets Toolbox Release Notes for version 5.0.14

3.6 Version 5.0.6

OVERVIEW

This release:

- Adds Battery Lifetime Estimator tool for DA1458x and DA14585/586 families

DESCRIPTION

- Implements several improvements for supporting DA1469x SDK 10

| NEW FEAT | |
|------------|--|
| 506_01 | Adds Battery Lifetime Estimator tool for DA1458x and DA14585/586 families |
| 506 02 | Decodes the TCS section of the Configuration Script section |
| | • |
| 506_03 | Works with new booter of DA1469x chips |
| 506_04 | Is compliant with SDKs supporting more than one chip families |
| 506_05 | CLI interface now supports passing serial # as an option for OTA services |
| 506_06 | Power Profiler supports auto-stop functionality upon identifying a software cursor |
| 506_07 | Enables installing multiple Toolbox standalone versions on the same machine |
| FIXES / IM | PROVEMENTS |
| 505/01 | Allows writing to the OTP memory and appending Configuration Script commands |
| 2124/01 | Keeps documentation in one place in html format |
| 2148/02 | Fixes an issue preventing Power Profiler collect data over SPI channel while UART port was in use. |
| 2149/03 | Fixes an issue causing instabilities when trying to make an image in DA1469x chips |
| 2150/04 | Fixes issue with libprogrammer not getting reloaded when changing support pack |
| 2151/05 | Support more command line options related to DA1469x QSPI writing commands |
| 2176/06 | Enables addition of product header through the DA1469x QSPI layout Controller |
| 2177/07 | Fixes endian-ness of 'QSPI related code segments' of DA1468x OTP Header |
| OPEN ISSU | JES & LIMITATIONS |
| 407/03 | If tool or log panel becomes too short, reposition, resize or close visible windows to increase the area of interest |
| 407/02 | No default RF master firmware for DA14682/3 chips, user needs to load binary provided by SDK |
| 407/01 | OTA services, Data Rate Monitor and Sleep Mode Advisor not enabled for DA14585/586 chips |
| 408/04 | OTA services are not enabled for DA14581 and DA14583 chips |
| 503/01 | In QSPI, the entire partition table is deleted when user asks to delete only the last partition |
| 503/05 | No default RF master firmware for D1469x chips |
| 505/03 | QSPI Layout Controller enforces only a limited number of validations when it comes to writing different sections on the QSPI |
| 506/01 | SPI Flash Options are not supported for DA14585/586 chips |
| | |

3.7 Version 5.0.5

OVERVIEW

DESCRIPTION

This release:

- Supports DA1469x SDK 10
- Supports DA14585/586 SDK 6.0.8
- Supports 'make image' functionality for DA1469x chips

NEW FEATURES

| 505_01 | Supports DA1469x SDK 10 | |
|-------------|--|--|
| 505_02 | Supports DA14585/586 SDK 6.0.8 | |
| FIXES / IMP | FIXES / IMPROVEMENTS | |
| 503/02 | Supports 'make image' functionality for DA1469x chips | |
| 2054/01 | OTP Header tool enables users to decode the Configuration Script section (read-only) | |
| 2013/02 | 'QSPI Layout Controller' tools allow users write to QSPI | |
| 2057/03 | Implements tighter integration with the SDKs | |
| 2051/04 | Better handles erroneous cases when working with SDK libraries | |
| 2052/05 | In tables, improves address handling and supports address gaps between consecutive table fields | |
| 2026/06 | Adds support for read-only fields in NVParams table | |
| 2015/07 | Fixes popup position when users press Help button on initial dialog (Project Selector) | |
| 2014/08 | Removes non-printable characters from all Support Pack header files | |
| 2025/09 | Enforces '0x' prefix for hex addresses | |
| 2015/10 | Fixes 'Connect' action sometimes not working after a SPotA download on SPI | |
| 2052/11 | Follows the same standard versioning logic as the SDKs | |
| 2052/12 | Fixes connectivity issue with basic 585/586 chips over UART when trying to read OTP Header | |
| OPEN ISSU | ES & LIMITATIONS | |
| 407/03 | If tool or log panel becomes too short, reposition, resize or close visible windows to increase the area of interest | |
| 407/02 | No default RF master firmware for DA14682/3 chips, user needs to load binary provided by SDK | |
| 407/01 | OTA services, Data Rate Monitor and Sleep Mode Advisor not enabled for DA14585/586 chips | |
| 408/04 | OTA services are not enabled for DA14581 and DA14583 chips | |
| 503/01 | In QSPI, the entire partition table is deleted when user asks to delete only the last partition | |
| 503/05 | No default RF master firmware for D1469x chips | |
| 505/01 | OTP Header tool does not allow users to modify any fields (including the Configuration Script) | |
| 505/02 | OTP Header tool does not allow users to modify any fields (including the Configuration Script) | |
| 505/03 | QSPI Layout Controller enforces only a limited number of validations when it comes to writing different sections on the QSPI | |

3.8 Version 5.0.3

OVERVIEW

This release:

- -
- Supports D1469x chips Integrates Toolbox with SDKs -

NEW FEATURES

| NEW FEATURES | | |
|--------------|--|--|
| 503_01 | Supports core functionality for communicating with D1469x chips | |
| 503_02 | Adds 'QSPI Layout Controller' tool | |
| 503_03 | Integrates Toolbox with SDKs | |
| FIXES / IMI | PROVEMENTS | |
| 1813/02 | Updates jre version to 1.8.0_144 | |
| 1817/03 | Fixes issue with NVPARAMS table showing each line twice when changing project and chip at the same time | |
| 1822/04 | Gets user confirmation when deleting the entire 585 flash memory | |
| 1822/05 | Fixes crash issue when pushing browse button | |
| 1837/01 | Improves handling of partitions for DA1468x chips | |
| 1889/01 | Supports changes made on 'make image' under DA1468x SDK 1.0.10 | |
| OPEN ISSU | JES & LIMITATIONS | |
| 407/01 | OTA services, Data Rate Monitor and Sleep Mode Advisor not enabled for DA14585/586 chips | |
| 407/02 | No default RF master firmware for DA14682/3 chips, user needs to load binary provided by SDK | |
| 407/03 | If tool or log panel becomes too short, reposition, resize or close visible windows to increase the area of interest | |
| 408/04 | OTA services are not enabled for DA14581 and DA14583 chips | |
| 503/01 | In QSPI, the entire partition table is deleted when user asks to delete only the last partition | |
| 503/02 | Does not offer making images when writing QSPI | |
| 503/03 | OTP Header tool provides basic listing of OTP Header fields | |
| 503/04 | 'OTP Header' and 'QSPI Layout Controller' tools do not allow writing to OTP/QSPI | |
| 503/05 | No default RF master firmware for D1469x chips | |

DESCRIPTION

3.9 Version 4.8

| # | Major Changes from last Release |
|--------------|--|
| OVERVIEW | |
| This release | |
| | ds partial erase command for DA14585/586 chips |
| - Su | oports configurable pins for DA14585/586 chips |
| NEW FEAT | URES |
| 408_01 | Adds partial erase command for DA14585/586 chips |
| 408_02 | Supports configurable pins for DA14585/586 chips |
| 408_03 | Lays out windows in a way that leaves more vertical space for tools |
| 408_04 | For DA1468x, adds device's IRK to the list of NVMS parameters |
| 408_05 | Allow RF Master to start without prior downloading of image in RAM |
| FIXES / IMF | ROVEMENTS |
| 1772/01 | Improves the Power Profiler oscilloscope plot |
| 1772/02 | Fixes loading of .csv files holding Power Profiler data in linux |
| 1772/03 | Fixes Power Profiler 'capture data' functionality in linux |
| 1772/04 | For DA1458x, improves description of some OTP header fields |
| 1772/05 | Becomes more configurable in terms of OTP, GPIO and PIN configuration |
| 1772/06 | Avoids reading twice the currently-viewed flash section after an erase |
| 1772/07 | Improves messages to avoid confusion between read-only and protected fields |
| 407/04 | Allows use of more than 64kByte on external I2C memories for DA14585/586 chips |
| OPEN ISSU | ES & LIMITATIONS |
| 407/01 | OTA services, Data Rate Monitor and Sleep Mode Advisor not enabled for DA14585/586 chips |
| 407/02 | No default RF master firmware for DA14682/3 chips, user needs to load binary provided by SDK |
| 407/03 | If tool or log panel becomes too short, reposition, resize or close visible windows to increase the area of interest |
| 408/04 | OTA services are not enabled for DA14581 and DA14583 chips |

3.10 Version 4.7

| # | Major Changes from last Release |
|---------------------|--|
| OVERVIEW | V |
| - Ad - De - M | e: Ids support for device DA14585/586 chips Ids support for device DA14682/3 chips etects connected devices over JTAG erges RF Master inside Toolbox Ids oscilloscope mode for Power Profiler |
| NEW FEA | IURES |
| 407_01 | Adds support for device DA14585/586 chips |
| 407_02 | Adds support for device DA14682/3 chips |
| 407_03 | Detects connected devices over JTAG |
| 407_04 | For all chips, it protects from writing read-only OTP fields |
| 407_05 | Merges RF Master inside Toolbox |
| 407_06 | Enables RF Master for all chip families |
| 407_07 | Adds oscilloscope mode for Power Profiler |
| 407_08 | Enables Power Profiler when board is connected on a single UART and a JTAG |
| 407_09 | Replaces toolbar with a more powerful one |
| 407_10 | Enables accessing user manual from project selector window |
| FIXES / IM | PROVEMENTS |
| 1650/01 | Improves RF Master's layout and steps |
| 1650/02 | Bundles jre version 1.8.0.111 |
| 1650/03 | On RF Master, user now controls when/what FW to download |
| OPEN ISS | UES & LIMITATIONS |
| 407/01 | OTA services, Data Rate Monitor and Sleep Mode Advisor not enabled for DA14585/586 chips |
| 407/02 | No default RF master firmware for DA14682/3 chips, user needs to load binary provided by SDK |
| 407/03 | If tool or log panel becomes too short, reposition, resize or close visible windows to increase the area of interest |
| 407/04 | Does not allow use of more than 64kByte on external I2C memories for DA14585/586 chips |

SmartSnippets Toolbox Release Notes for version 5.0.14

3.11 Version 4.6

| # | Major Changes from last Release | |
|---------------------------|---|--|
| OVERVIEW | l | |
| This release | e implements several Power Profiler enhancements and enables multiple QSPI Flash type | |
| NEW AND | UPDATED FEATURES | |
| 406_01 | Adds ability to program OTP Header's 'ECC Ucode' and 'QSPI header' fields through a file | |
| 406_02 | Enables working with multiple QSPI Flash types | |
| 406_03 | In Power Profiler, treats configuration option for Voltage as a range between 1.8V and 4.3V | |
| 406_04 | In Power Profiler, supports adjustable scaling for all plotting windows | |
| FIXES / IM | PROVEMENTS | |
| 1540/01 | Improves stability of JTAG operations on DA1468x chips | |
| 1540/02 | In Power Profiler, reminds and guides the user when calibration is required | |
| 1540/03 | In Power Profiler, supports 4 decimal points for Software Cursor Tolerance setting | |
| 1540/04 | In Power Profiler, disables extended/deep sleep fixed values for DA148x chips | |
| 1540/05 | Removes baudrate command-line option for DA1468x chips | |
| 1540/06 | Avoids error occurring when there is no 'loadbin.txt' file when using DA1458x SPOTA tool | |
| OPEN ISSUES & LIMITATIONS | | |
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3.12 Version 4.5

| # | Major Changes from last Release |
|---|---------------------------------|
|---|---------------------------------|

OVERVIEW

This release applies various improvements to the previous version

NEW AND UPDATED FEATURES

| FIXES / IMF | FIXES / IMPROVEMENTS | | |
|-------------|--|--|--|
| 1508/01 | Improves OTP Burn functionality when user tries to write to an area with already-written words | | |
| 1508/02 | Remembers whether the user has changed the Power Profiler multiplication factor and, if not, applies the default value no matter what the chosen chip is | | |
| 1508/03 | Handles the first 3 bytes of OTP Header 'Package Used' field as reserved for future use | | |
| 1508/04 | Fixes an issue preventing user to export data read from flash or OTP memory | | |
| 1508/05 | Improves performance of OTP Header writing when header log file has become too large | | |
| OPEN ISSU | OPEN ISSUES & LIMITATIONS | | |
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3.13 Version 4.4

| | 3.13 Version 4.4 | |
|---------------------------|--|--|
| # | Major Changes from last Release | |
| OVERVIEW | | |
| This release | e adds the partition tables and applies several Power Profiler improvements | |
| NEW AND | UPDATED FEATURES | |
| 404_01 | Includes partition table basic functionality | |
| 404_02 | Enhances CLI to support SUOTA | |
| 404_03 | On DA1468x boards, Power Profiler displays all low values as being captured; no modification / | |
| | activity level validation is applied | |
| 404_04 | On DA1468x boards, Power Profiler supports plotting very-low level values (< 200mA) | |
| 404_05 | On DA1468x boards, default Power Profiler calibration value has been set to -17.24 | |
| 404_06 | Power Profiler displays energy (in uJoule) information in the tooltip displayed when the user has placed cursors | |
| FIXES / IMI | PROVEMENTS | |
| 1418/01 | Uses improved library for connectivity over JTAG | |
| 1418/02 | Fixes issue with QSPI Flash programming for files larger than ~250 KB | |
| 1418/03 | Fixes issue where wrong values are written in TCS section of the OTP header after the first | |
| | zero byte | |
| OPEN ISSUES & LIMITATIONS | | |
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3.14 Version 4.3

| Major Changes from last Release | |
|---|--|
| | |
| supports DA1468x AE | |
| | |
| NEW AND UPDATED FEATURES | |
| Supports DA1468x AE | |
| FIXES / IMPROVEMENTS | |
| Uses an updated second stage bootloader | |
| Improves standalone installer to help user install 3rd-party libraries | |
| No longer requires its own environment variables to operate | |
| Project Selector screen has been updated with all supported chip versions | |
| OPEN ISSUES & LIMITATIONS | |
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| # | Major Changes from last Release |
|--------------|--|
| OVERVIEW | |
| This release | enables Toolbox for Linux and applies various improvements across all tools |
| NEW AND | UPDATED FEATURES |
| 402_01 | Supports communication over JTAG for DA1468x chips |
| 402_02 | Supports Linux (linux_x86_64) |
| 402_03 | Adds a 'Power Profiler Activated' message in Project Selector dialog when UART/SPI mode is selected |
| 402_04 | Allows cleaning primary Power Profiler data |
| 402_05 | Supports different OTP Headers for different chips |
| 402_06 | Updates OTP Headers for DA14680AD |
| 402_07 | In case of JTAG connections, adds the 'Close Debug Session' button on the main toolbar |
| 402_08 | Adds the option to make SPI Flash and EEPROM bootable, even if starting burning address is other than 0x00 |
| 402_09 | Allows user to export SPI Flash, EEPROM and QSPI memory data to file. User can specify offset and memory size. |
| 402_10 | QSPI supports DA14681 basic DKs |
| 402_11 | Adds the NVPARAMS tool |
| FIXES / IMF | PROVEMENTS |
| 1323/01 | Updates firmware files |
| 1323/02 | Adds the release number in Splash Screen and Project Selector dialog |
| 1323/03 | Proposes different multiplication factors depending on motherboard type (revC and revD) |
| 1323/04 | Improves performance when reading from QSPI |
| 1323/05 | Shows selected SPI Flash pin configuration in Flash Programmer tool |
| 1323/06 | Fixes removal of time markers in Power Profiler |
| 1323/07 | Avoids Power Profiler buffer overruns |
| 1323/08 | Points to the correct folder when reopening the Power Profiler import file browser |
| 1323/09 | Keeps the user-preferred Power Profiler layout after finishing importing/exporting .csv files |
| 1323/10 | Fixes TCS Header validation error |
| 1323/11 | Prevents EEPROM erase progress bar from blocking the erase operation |
| 1323/12 | For DA1468x, when closing JTAG debugger session, the connection to the GDB server is now closed too |

3.16 Version 4.1

| # | Major Changes from last Release |
|----------|---------------------------------|
| OVERVIEW | |
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This release supports DA1468xAD chip

NEW AND UPDATED FEATURES

| 401_01 | Supports DA1468xAD chip |
|---------------------------|--|
| FIXES / IMPROVEMENTS | |
| 1217/01 | Updates bin2image.exe with enable_uart and ram shuffle options |
| 1217/02 | Enables -bootable command line option for Da1458x chips |
| OPEN ISSUES & LIMITATIONS | |
| | |

3.17 Version 4.0 # Major Changes from last Release

| # | Major Changes from last Release |
|--------------|---|
| OVERVIEW | I |
| This release | e merges the previously-separate version for DA1458x and DA1468x into one application. Also, |
| | A14680 AC/DevKit Rev B, new QSPI type W25Q80EW and various enhancements to most tools |
| •• | |
| NEW AND | UPDATED FEATURES |
| 400_01 | Supports DA14680 AC/DevKit Rev B |
| 400_02 | Supports new DA1468x OTP Header format |
| 400_03 | Adds new QSPI type: W25Q80EW |
| 400_04 | Adds "Refresh COM ports" button in horizontal toolbar |
| 400_05 | Supports new property 'STX_VALUE' to override the default STX value (0x02) |
| 400_06 | Adds [-bootable] option to SPI and EEPROM write commands to make memory bootable |
| 400_07 | Memory Programmer: Adds verification step after burning or erasing SPI Flash or EEPROM. |
| | Available on Command-Line Interface too |
| 400_08 | Memory Programmer: Allows erasing the entire EEPROM with zeroes (0x00) or ones (0xFF). |
| | Available on Command-Line Interface too |
| 400_09 | Command-Line Interface: Allows specifying the max SPI Flash and EEPROM memory size and |
| _ | applies the appropriate max size validations |
| 400_10 | General: Catches 3 consecutive timeout errors and advises the user to unplug and plug again |
| | the DK |
| | PROVEMENTS |
| 1193/01 | Resolves timing issues with basic DKs when reading the OTP immediately after downloading the firmware |
| 1193/02 | Updated application icons |
| 1193/03 | Fixes a bug resulting in some firmware files not being parsed correctly by the OTP Programmer |
| 1193/04 | Removes padding hex file data with byte 0x00 to align to 8-bytes multiple |
| 1193/05 | Power Profiler: fixes issue with delta character not being displayed properly |
| 1193/06 | OTP Header: on 'Protected' fields, it does not force 0xFFs protection bytes when the field is |
| | empty |
| 1193/07 | Fixes a bug in Cache Architecture and Serial Configuration Mapping DA1468x OTP Header |
| | fields |
| 1193/08 | Avoids "ERR_PROT_CMD_REJECTED" error during burn by ensuring that a cell (64 bits) is |
| | empty before burn |
| OPEN ISSU | JES & LIMITATIONS |
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| | |

3.18 Version 3.10

Major Changes from last Release

OVERVIEW

This release enables reading/writing on odd ports of 2-port boards for DA1458x chips

NEW AND UPDATED FEATURES

310_01 Enables reading/writing on odd ports of 2-port boards

FIXES / IMPROVEMENTS

OPEN ISSUES & LIMITATIONS

3.19 Version 3.9

| # Major Changes from last Releas |
|----------------------------------|
|----------------------------------|

OVERVIEW

This release improves application stability/reliability for DA1458x chips

NEW AND UPDATED FEATURES

| 309_01 | Supports new property 'STX_VALUE' to override the default STX value (0x02) | |
|---------------------------|---|--|
| 309_02 | Adds [-bootable] option to SPI and EEPROM write commands to make memory bootable | |
| FIXES / IMPI | FIXES / IMPROVEMENTS | |
| 1183/01 | Improves SPI erase stability | |
| 1183/02 | Resolves timing issues with basic DKs when reading the OTP immediately after downloading | |
| | the firmware | |
| 1183/03 | Fixes a bug resulting in some firmware files not being parsed correctly by the OTP Programmer | |
| 1183/04 | Removes padding hex file data with byte 0x00 to align to 8-bytes multiple | |
| | | |
| OPEN ISSUES & LIMITATIONS | | |

| 3.20 Version 3.8 | |
|------------------|--|
|------------------|--|

| # | Major Changes from last Release |
|--------------|---|
| OVERVIEW | |
| This release | supports DA14583 and includes various enhancements to most tools for DA1458x chips |
| NEW AND U | IPDATED FEATURES |
| 308_01 | Memory Programmer: Adds verification step after burning or erasing SPI Flash or EEPROM. Available on Command-Line Interface too |
| 308_02 | Memory Programmer: Allows erasing the entire EEPROM with zeroes (0x00) or ones (0xFF). Available on Command-Line Interface too |
| 308_03 | Command-Line Interface: Allows specifying the max SPI Flash and EEPROM memory size and applies the appropriate max size validations |
| 308_04 | General: Catches 3 consecutive timeout errors and advises the user to unplug and plug again the DK |
| 308_05 | Support for DA14583 |
| 308_06 | Updated the firmware files for the Flash Programmer, the JTAG Programmer and the Max Data Rate Monitor |
| 308_07 | Improves descriptions on some OTP header fields |
| 308_08 | On Proprietary Header Programmer, SPI is now the default choice |
| 308_09 | Proprietary Header programmer has been enhanced so that user can load the product header (file %SMARTSNIPPETS_WORK%\resources\ProductHeader_583.txt), modify the values of its fields and press the 'Update' button to clean up the appropriate sector and write the product header in memory |
| 308_10 | Board Setup has been updated so that user can configure the SPI flash and I2C EEPROM pin settings on non-DA14583 boards |
| 308_11 | OTP Image programmer can now be used for burning the advanced bootloader |
| 308_12 | On Max Data Rate Monitor, better controls when buttons 'Start Monitor' και 'Start Peripheral' are enabled or disabled |
| 308_13 | Improves reading of SPI sectors |
| FIXES / IMP | ROVEMENTS |
| 1115/01 | Power Profiler: fixes issue with delta character not being displayed properly |
| 1115/02 | Allows writing files that are 32768 bytes long |
| 1115/03 | Fixes an issue resulting in Power Profiler markers not showing up |
| OPEN ISSU | ES & LIMITATIONS |
| | |

3.21 Version 1.0.2.0

| # Major Changes from last Release |
|-----------------------------------|
|-----------------------------------|

OVERVIEW

This release applies some minor improvements to the previous version for DA1468x chips

NEW AND UPDATED FEATURES

| FIXES / IMPROVEMENTS | | |
|---------------------------|--|--|
| 1114/01 | OTP Header: improved warnings when failing validating inverted values | |
| 1114/02 | General: improved logic when applying timeouts | |
| 1114/03 | QSPI Programmer: shows pop-up message proposing to remove and reconnect the USB when detecting multiple verification errors during writing | |
| 1114/04 | Power Profiler: fixes issue with delta character not showing correctly | |
| 1114/05 | General: fixes some layout issues | |
| 1114/06 | General: fixes the problem with the same project name is used for both SmartSnippets 580 and SmartSnippets 680 | |
| OPEN ISSUES & LIMITATIONS | | |
| | | |

3.22 Version 1.0.1.4

| # | Major Changes from last Release |
|--------------------|---|
| OVERVIEW | |
| This release chips | applies improvements to Booter, OTP Header, QSPI Programmer and Log Panel for DA1468x |
| NEW AND U | PDATED FEATURES |
| 1014_01 | Installer: SmartSnippets can now be installed and executed simultaneously with the official release version of SmartSnippets DA14580 |
| 1014_02 | General: detects when board has become unresponsive and proposes the user to unplug the USB and connect again |
| 1014_03 | Booter: allows downloading firmware via JTAG without need for the user to change connection type in the project chooser |
| 1014_04 | Booter: better handles downloading of new firmware files while an already-downloaded firmware transmits STX periodically |
| 1014_05 | OTP Header importing: it now skips CRC validation if CRC field is 0x00 |
| 1014_06 | OTP Header: Fields description and options have been updated to match the datasheet. Also, default values for all fields have been switched to 0x00 |
| 1014_07 | OTP Header: includes improved pop-ups for complex fields |
| 1014_08 | QSPI programmer: hides 'mirrored' option (to be enabled again with next version) |
| 1014_09 | QSPI Programmer: 'Run' button is no longer needed, user can press 'reset' button instead |
| 1014_10 | QSPI Programmer: includes new 'length' field to allow the user specify the length (in Kbytes) for erasing or reading a memory area. |
| 1014_11 | Logs: Log panel has been unified for all tools. It now supports 'Clear All' functionality and filtering |
| 1014_12 | Logs: Warnings have been added when user tries to work in Booter and OTP Programmer with files that are bigger than 64Kbytes |
| 1014_13 | User Manual: has been updated to include DA14680 environment |
| FIXES / IMP | ROVEMENTS |
| 1107/01 | QSPI Programmer: fixes issue resulting in failing downloading files longer than 64Kbytes |
| 110702 | QSPI Programmer: fixes offset field so that it accepts hex values |
| 1107/03 | QSPI Programmer: fixes problems resulting in failing to erase section larger than 0.5MBs |
| OPEN ISSU | ES & LIMITATIONS |
| | |

3.23 Version 1.0.1.3

| | # | Major Changes from last Release |
|--|---|---------------------------------|
|--|---|---------------------------------|

OVERVIEW

This release adds CLI support and applies improvements to OTP Header and Power Profiler for DA1468x chips

| NEW AND U | PDATED FEATURES | |
|-----------|-----------------|--|
| | | |

| 1013_01 | OTP Header: pop-up panel for fields 7F8EA30, 7F8EA28 and 7F8EA78 |
|---------------------------|--|
| 1013_02 | Support for 64-bit words whose bytes [47] are the inversion of bytes [03] |
| 1013_03 | Command-Line Interface has been enabled |
| FIXES / IMPI | ROVEMENTS |
| 1080/01 | Power Profiler: remembers user's last-browsed folder when importing a csv file |
| 1080/02 | Power Profiler: improves how measurement values are displayed on the plot area |
| OPEN ISSUES & LIMITATIONS | |
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3.24 Version 1.0.1.2

| # | Major Changes from last Release |
|---|---------------------------------|
|---|---------------------------------|

OVERVIEW

This release adds basic support for DA1468x chips

NEW AND UPDATED FEATURES

| 1012_01 | Booter: download firmware and boot over UART | |
|----------------------|---|--|
| 1012_02 | Booter: download firmware and boot over JTAG | |
| 1012_03 | OTP Programmer: read / write OTP over UART | |
| 1012_04 | OTP Header: read / write OTP header over UART | |
| 1012_05 | QSPI Programmer: read/write QSPI memory over UART (cached mode) | |
| 1012_06 | QSPI programmer: prepare bootable image (cached mode) | |
| 1012_07 | QSPI programmer: run from QSPI (cached mode) | |
| 1012_08 | Power Profiler: made compliant with DA14680 | |
| FIXES / IMPROVEMENTS | | |
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| OPEN ISSUE | OPEN ISSUES & LIMITATIONS | |
| | | |

3.25 Version 3.7

| # | Major Changes from last Release | |
|---|--|--|
| OVERVIEW | | |
| This release includes improvements for SUOTA, SPOTA, Data Rate Monitor, power Profiler, OTP Header, | | |
| NVDS tools f | or DA1458x chips | |
| | | |
| NEW AND U | PDATED FEATURES | |
| 307_01 | SUOTA, SPOTA and Data Rate Monitor tools now support both DA14580 and DA14581 chips | |
| 307_02 | Applies modifications to make Power Profiler more stable when running for several hours | |
| 307_03 | In Power Profiler, enables through a GUI checkbox to view negative values too. An activity level | |
| | validation logic has been adjusted accordingly | |
| 307_04 | Implements improvements in how Power Profiler communicates with FTDI chip through queues | |
| | so that the graphical representation is more stable. | |
| 307_05 | Removes the 'expected trim value' OTP Programmer warnings to avoid confusions | |
| 307_06 | Improves the names of the OTP header | |
| 307_07 | Treats 9 OTP header fields as read-only ones | |
| 307_08 | Treats the NVDS Tag BD address as read-only | |
| 307_09 | Improves the use of the HALT command in the command sequence of the JTAG booter | |
| 307_10 | Removes DA14580-00 from the device list | |
| 307_11 | Allows viewing the user manual in pdf format to enable printing | |
| FIXES / IMPROVEMENTS | | |
| 966/01 | Fixed an issue resulting in reporting a success instead of failure when getting the wrong CRC | |
| | from DK14580 while downloading a hex file. | |
| 966/02 | Fixed issue resulting in negative values for Power Profiler time axis when running for several | |
| | hours | |
| OPEN ISSUI | ES & LIMITATIONS | |
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3.26 Version 3.6

| | # | Major Changes from last Release |
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|--|---|---------------------------------|

OVERVIEW

This release includes minor improvements for DA1458x chips

NEW AND UPDATED FEATURES

| FIXES / IMPROVEMENTS | | |
|----------------------|---|--|
| 924/01 | Uses improved filechooser | |
| 924/02 | Allows users override the default user.home system variable when they are missing necessary permissions | |
| 924/03 | References the correct programmer.bin firmware for DA14581 boards | |
| 924/04 | Corrects application flag description on header file | |
| 924/05 | Fixes issue with reporting wrong (uninitialized) size of bytes to be written | |
| OPEN ISSU | OPEN ISSUES & LIMITATIONS | |
| | | |

3.27 Version 3.5

| # | Major Changes from last Release | | |
|----------------------|--|--|--|
| OVERVIEW | | | |
| This release a | adds Support for DA14581 and includes enhancements for SPOTA, SUOTA, CLI and | | |
| SPI/EEPRON | SPI/EEPROM programming for DA1458x chips | | |
| | | | |
| NEW AND U | PDATED FEATURES | | |
| 305_01 | Shows only devices with SPOTA service | | |
| 305_02 | Enables SUOTA notifications | | |
| 305_03 | Adds write functionality to Terminal window | | |
| 305_04 | Supports bundles of CLI commands | | |
| 305_05 | Changes the layout so that groups of similar tools occupy the whole screen | | |
| 305_06 | Allows string/integer fields for header/NVDS of SPI/EEPROM | | |
| 305_07 | Adds Support for DA14581 | | |
| 305_08 | Improves way to write big chunks of data to SPI/EEPROM | | |
| FIXES / IMPROVEMENTS | | | |
| 891/01 | Fixes "null port is not a valid FTDI device UART port" CLI error | | |
| 891/02 | Fixes memory issues with Power Profiler csv exporting when period is long | | |
| 891/03 | Fixes issue with Power Profiler missing some samples | | |
| OPEN ISSUE | ES & LIMITATIONS | | |
| | | | |

3.28 Version 3.4

Major Changes from last Release

OVERVIEW

This release fixes a bug related to ignoring zero bytes included at the end of a hex file

NEW AND UPDATED FEATURES

FIXES / IMPROVEMENTS

856/01 Fixes a bug related to ignoring zero bytes included at the end of a hex file OPEN ISSUES & LIMITATIONS

3.29 Version 3.3

| # Major Changes from last Release |
|-----------------------------------|
|-----------------------------------|

OVERVIEW

This release fixes a bug with CLI command ignoring UART RX/TX port when deciding the appropriate baud rate

NEW AND UPDATED FEATURES

FIXES / IMPROVEMENTS

854/01 Fixes a bug with CLI command ignoring UART RX/TX port when deciding the appropriate baud rate
OPEN ISSUES & LIMITATIONS

3.30 Version 3.2

| 3.30 Versi | on 3.2 | |
|---|---|--|
| # | Major Changes from last Release | |
| OVERVIEW | | |
| This release adds Max Data Rate Monitor tool and SUOTA tool for DA1458x chips | | |
| | | |
| NEW AND UPDATED FEATURES | | |
| 302_01 | Adds Max Data Rate Monitor tool, used for monitoring the overall receive and transmit rate over | |
| | Bluetooth | |
| 302_02 | Supports SUOTA service in OTA services tool. | |
| 302_03 | UART Terminal that reads data from UART has been separated from the Booter tool | |
| 302_04 | Supports writing large files (>32 KB) in SPI / EEPROM by writing them in blocks of 16 KB | |
| FIXES / IMPROVEMENTS | | |
| | | |
| OPEN ISSUE | ES & LIMITATIONS | |
| | | |

3.31 Version 3.1

Major Changes from last Release

OVERVIEW

This release supports JTAG connections, adds 'Memory Header/NVDS Programmer' tool, provides enhanced CLI functionality and implements improvements In Power Profiler and Sleep Mode Advisor for DA1458x chips

| NEW AND U | JPDATED FEATURES |
|-----------|---|
| 301_01 | Enables users configure their projects to work over a JTAG connection |
| 301_02 | Supports downloading firmware over a JTAG connection |
| 301_03 | Supports OTP Programming functionality over a JTAG connection |
| 301_04 | Supports SPI Flash Programming functionality over a JTAG connection |
| 301_05 | Supports EEPROM Programming functionality over a JTAG connection |
| 301_06 | Enhances CLI commands to work over a JTAG connection |
| 301_07 | Supports deleting SPI Flash memory sectors starting from a user-defined memory offset. |
| 301_08 | Adds 'Memory Header/NVDS Programmer' tool that allows users describe their own header |
| | and/or NVDS formats and write them to SPI Flash or EEPROM Memory. |
| 301_09 | Adds CLI commands for reading/writing SPI Flash memory |
| 301_10 | Adds CLI commands for reading/writing EEPROM memory |
| 301_11 | Adds a CLI write command so that users can write specific OTP/SPI/EPPROM fields |
| 301_12 | Expedites CLI commands by having the option to skip validations and all checks associated with them |
| 301_13 | Unifies read/write CLI commands with uart booter CLI command so that firmware downloading |
| 001_10 | and read/write action is done in one execution |
| 301 14 | Saves cursors together with measurements when exporting Power Profiler results |
| 301_15 | Power Profiler automatically calculates peak current / avg. current / charge (uC) for the period |
| | between two cursors |
| 301_16 | Power Profiler automatically calculates Connection Interval Time and Charge |
| 301_17 | Better controls sliding of time axis on Power Profiler |
| 301_18 | Added Power Profiler configuration option to control the upper threshold under which small |
| | power measurements are considered zeroes. Related to S/W cursors. |
| 301_19 | Provides configuration option to disable S/W cursors in Power Profiler |
| 301_20 | Updates Sleep Mode Advisor calculations so that they take into account the connection interval |
| | charge that will be calculated automatically by Power Profiler |
| 301_21 | Replaces old COM port communication framework with a new one |
| 301_22 | Overcomes location Id = 0 limitation |
| 301_23 | Uses smaller toolbar buttons |
| | PROVEMENTS |
| 814/01 | Uses JRE 7.0.51 |
| 814/02 | Fixes some corner cases not handled correctly by OTP Programmer |
| OPEN ISSU | IES & LIMITATIONS |
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| 3.32 Versi | |
|------------------|---|
| # | Major Changes from last Release |
| OVERVIEW | a dela Osferiaria Databasiana (ha Aia (ODatA) task Olasa Mada Ashisar task EEDDOM Darmarana |
| | adds Software Patch over the Air (SPotA) tool, Sleep Mode Advisor tool, EEPROM Programmer roves most of the other tools for DA1458x chips |
| NEW AND U | PDATED FEATURES |
| 300_01 | Does not block command-line calls until user confirms validation checks when property |
| | DISABLEVALIDATIONS has been set to true in the properties.txt file. |
| 300_02 | Improved workflow related to pressing the reset button |
| 300_03 | Improved handling of non-acceptable values for header fields having only a specific set of |
| | acceptable values |
| 300_04 | Uses new firmware when connecting via the SPI or EEPROM Programmers |
| 300_05 | SPotA supports 128-bit UUIDs |
| 300_06 | Handles the case that DA14580-01 boards complete the firmware downloading procedure |
| | without needing to press the reset button when there is no firmware downloaded already. |
| 300_07 | Improves the UI of the Sleep Mode Advisor |
| 300_08 | Improves the UI of SPotA |
| 300_09 | Adds Software Patch over the Air (SPotA) tool |
| 300_10 | Adds Sleep Mode Advisor tool |
| 300_11 | Adds new command 'export_stats' to command line implementation of Power Profiler |
| 300_12 | Power Profiler calculates current consumed during idle periods |
| 300_13 | Uses new firmware when connecting via the SPI or EEPROM Programmers |
| 300_14 | Adds support for importing and exporting .bin files to OTP Image, OTP Header and NVDS tools |
| 300_15 | Displays contents of bin files when importing into OTP Image, SPI Flash Programmer and |
| | EEPROM Programmer tools |
| 300_16 | Adds command-line implementation for Power Profiler |
| 300_17 | In UART Booter, to avoid timeouts due to bandwidth taken by SPI port when Power Profiler is running, Power Profiler stops and then starts again when downloading a file |
| 300_18 | Installer categorizes Dialog applications under a separate Start -> All Programs folder |
| 300_19 | Adds new EEPROM Programmer tool |
| 300_20 | Uses new .bin file when connecting to SPI Flash programmer |
| 300_21 | Enables SPI Flash Programmer for DA14580-00 too |
| 300_22 | Supports burning in SPI Flash and EEPROM as bootable or non-bootable |
| 300_23 | Extends the command-line interface to support hex files having base address 0x20000000 |
| 300_24 | Better organizes how installed components are grouped under the Windows Start -> All Programs area |
| 300_25 | Supports spaces in the project name |
| 300_26 | Adds new 'SPI Flash programmer' tool for DA14580-01 boards |
| 300_27 | Power profiler displays the Charge over time graph too |
| 300_28 | Power Profiler configuration dialog has been enhanced so that user can better control the quality of the plot due to downsampling through the 'Max Number of Samples To Draw' |
| 300_29 | parameter On Power Profiler, manual scaling is done on the y-axis only |
| 300_29 | Power Profiler remembers which of the 'Threshold (mA)' or 'TimeInterval (ms)' textbox had the |
| 300_30 | focus before chart stealing it and brings the focus back to the appropriate textbox when the |
| | mouse leaves the chart. |
| 300_31 | Better handles the case that more than one UART ports are given location ID = 0 by the |
| | operating system while in UART/SPI mode |
| | ROVEMENTS |
| 695/01 | Fixes exception occurring when running 'read_custom_code' command and providing a hex or bin file as input |
| 695/02 | In OTP programmer, when downloading firmware, data is read again and UI is refreshed appropriately |
| 695/03 | Fixes a Power Profile issue resulting in not always showing the S/W cursor when importing a csv file |
| | |
| 695/04 | Fixes permissions of uninstaller |
| 695/04 695/05 | Fixes permissions of uninstaller Fixes shortcuts created by installer |

| 695/07 | Fixes issue causing incorrect downloading of firmware .bin files having 0x00 bytes at the end of the file |
|---------------------------|---|
| 695/08 | Fixes issue with command-line tool not accepting files with .ihex extension |
| 695/09 | Fixes issues with command-line and UI tools not accepting files with extension in uppercase |
| OPEN ISSUES & LIMITATIONS | |
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3.33 Version 2.2

| # | Major Changes from last Release |
|---------------------------|---|
| OVERVIEW | |
| This release s | supports DA14580-01 |
| | |
| NEW AND UPDATED FEATURES | |
| 202_01 | Supports DA14580-01 |
| 202_02 | Allows user to select for each project the board type to connect to |
| 202_03 | Enhances command-line interface (CLI) with ability to read and write NVDS memory block |
| 202_04 | Allows managing OTP Programmer and UART Booter through Windows COM ports (does not |
| | require any more the existence of a FTDI-enabled board) |
| 202_05 | Makes this revision history document available through the SmartSnippets application |
| 202_06 | Improves layout of OTP Header fields |
| 202_07 | Improves Power Profiler's time auto-scaling |
| 202_08 | When loading. hex files, it creates a warning but allows burning an OTP image having zero |
| | bytes for addresses greater than 0x47F00 |
| FIXES / IMPROVEMENTS | |
| 518/01 | Fixes writing of NVDS fields that are 1 or 2 bytes long |
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| OPEN ISSUES & LIMITATIONS | |
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3.34 Version 2.1

| _ 3.34 Version 2.1 | | |
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| # | Major Changes from last Release | |
| OVERVIEW | 1 | |
| This release | e fixes some issues found in previous version | |
| NEW AND | UPDATED FEATURES | |
| 201_01 | Does not block header burning when DMA length is smaller than the image file currently loaded in OTP Image tab | |
| FIXES / IMF | PROVEMENTS | |
| 469/01 | Fixes an issue with downloading firmware files whose addresses go beyond 0x80000 | |
| 469/02 | Fixes some false 'missing FTDI devices' messages showing up on the UI logs | |
| 469/03 | Fixes DMA length validations so that they are made in words and not in bytes | |
| 469/04 | Fixes an issue with infinitely scanning for COM ports when USB location ID equals to 0 and there are multiple FTDI boards attached to the system | |
| 469/05 | Hides the second console window when running in UI mode | |
| OPEN ISSUES & LIMITATIONS | | |
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3.35 Version 2.0

| 3.35 Versi | 3.35 Version 2.0 | | |
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| # | Major Changes from last Release | | |
| OVERVIEW | OVERVIEW | | |
| This release supports DA14580-00 and adds OTP NVDS and Command-Line Interface (CLI) functionality | | | |
| NEW AND UPDATED FEATURES | | | |
| 200_01 | Supports DA14580-00 | | |
| 200_02 | Makes Power Profiler more stable | | |
| 200_03 | Adds command-line interface (CLI) to control UART Booter, OTP Image and OTP Header tools | | |
| | through the console | | |
| 200_04 | Adds OTP NVDS tool | | |
| 200_05 | Modifies some OTP Header descriptions | | |
| 200_06 | When using an imported header file to write the OTP Header, it skips line-to-line CRC validation | | |
| | if CRC field in the file is 0x00 | | |
| FIXES / IMPROVEMENTS | | | |
| 459/01 | Fixes a bug that was resulting in not writing the OTP memory the field that is in edit mode | | |
| OPEN ISSUES & LIMITATIONS | | | |
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3.36 Version 1.1

| # | Major Changes from last Release |
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OVERVIEW

This release improves Power Profiler

| NEW AND UPDATED FEATURES | | |
|--------------------------|--|--|
| 101_01 | Treats OTP Header 'Device Unique ID' field as string | |
| 101_02 | On Power Profiler, allows user to switch LOD on and off | |
| 101_03 | On Power Profiler, adds ability to set the amount of time before triggering and plotting | |
| 101_04 | On Power Profiler, changes clicking behaviour of measurement tool | |
| 101_05 | On Power Profiler, adds configuration form field for the offset of the SW cursor | |
| 101_06 | On Power Profiler, allows saving plot area into a file | |
| 101_07 | On UART Booter, adds 'Clear' button to clean up terminal | |
| FIXES / IMPROVEMENTS | | |
| 422/01 | Makes Power Profiler more stable | |
| 422/02 | On Power Profiler, if offset is applied, it fixes the issue of zero samples are never zero | |
| 422/03 | Fixes an issue resulting in Project Selector not listing COM ports with location ID equal to 0 | |
| 422/04 | Fixes an error resulting in not correctly recognizing which COM port belongs to which | |
| | board/project when more than one boards are connected to the system | |
| 422/05 | On Power Profiler, fixes an issue with csv export file chooser not showing folders | |
| 422/06 | Fixes issue happening when switching to another project and resulting in UART Booter default | |
| | folder not getting updated | |
| OPEN ISS | OPEN ISSUES & LIMITATIONS | |
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3.37 Version 1.0 OVERVIEW

This release introduces basic Toolbox functionality

| NEW FEATURES | |
|--------------|----------------------------------|
| 100_01 | Framework main application |
| 100_02 | Power Profiler (basic version) |
| 100_03 | OTP Image (basic version) |
| 100_04 | OTP Header (basic version) |
| 100_05 | UART Booter (basic version) |
| 100_06 | Board Setup (basic version) |
| 100_07 | Project Selector (basic version) |

Appendix I: Versioning Rules

Each software version number string consists of 4 numbers. MAJOR.BRANCH.MINOR.BUILD Versioning rules:

#MAJOR: It is increased by 1 only if the project undergoes a major modification, e.g. major ROM changes. It practically changes only when the project sources undergo major restructuring affecting most of the repository. It is initialized at 1.

#BRANCH: Should be used in the case of concurrent projects that for special reasons need to be spun off the major repository. It corresponds to different versions of the repository code that have to be supported concurrently. In this case each branch number corresponds to a different GIT branch. The basic project has BRANCH ID 0.

#MINOR: Odd numbers indicate Engineering (or Patch or Binary) versions, even numbers indicate Full release versions or Release Candidates of Full versions. Each Full release increases this number by one. After the Full release, the number is increased by 1 again. Therefore, Project releases correspond to release numbers like 2.0.1.xxxx, 2.0.2.xxxx etc. The #MINOR number is initialized at 1.

#BUILD: The **#** BUILD number increases by 1 at every repository update and thus indicates the total number of changes since repository initialization. The BUILD number is initialized at 1.

<u>Note</u>: Before SmartSnippets Toolbox 5.0.x, each software version number string consisted of 2 numbers: MAJOR.MINOR. It has been updated to match generic SW versioning rules of Dialog.