SmartSnippets Toolbox

Release Notes

This document contains the release notes for SmartSnippets Toolbox, version 5.0.26GA.

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1. Terms and Definitions

BLE	Bluetooth Low Energy
CLI	Command-Line Interface
FW	Firmware
OTP	One-Time Programming memory
SPotA	Software Patch over the Air
SUotA	Software Update over the Air
SST	Smart Snippets Toolbox
SP	Support Pack

2. Release Data

Table 1. Release data

Operating System	Windows - Linux
Operating System Version	64 bit
Software Release Date	December 10, 2024
Software Version Number	5.0.26
Software Release Type (Note 1)	FULL (GA)

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

3. License

Licenses covering this SmartSnippets Toolbox release are displayed as part of the installation process and also listed in the licensing.txt file located under the “<installation_directory>\common_resources” path.

4. Release Description

4.1 Overview

This is a FULL (GA) release of SmartSnippets Toolbox.

This release:

- Supports the migration to the latest improvements for RRQ61000 / RRQ61400 chips.
- Supports the migration to the latest improvements for DA14592 / DA14594 chips.
- Supports the migration to the latest improvements for DA1469x-BA-GF chips.
- Supports various Power Profiler improvements.
- Supports integration with PMM2.5 boards.
- Supports top-valued tool fixes and improvements.
- Supports the SUOTA - asymmetric features for DA1459x chips.

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

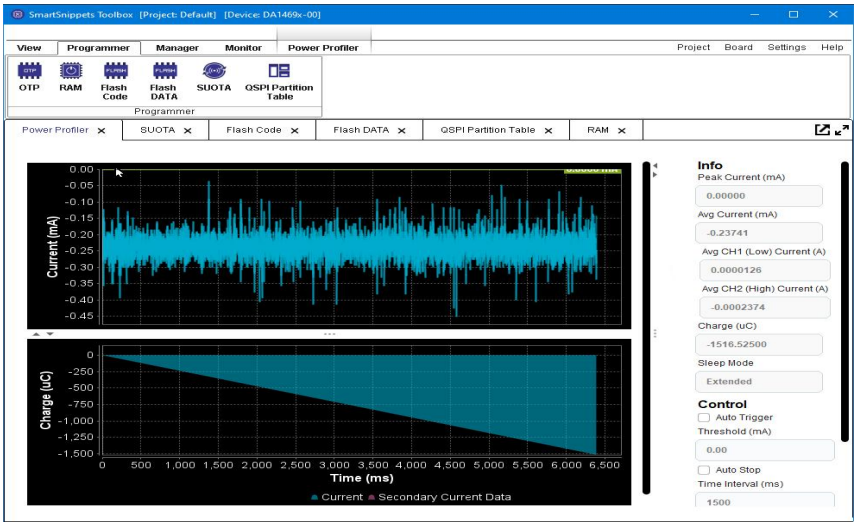

Figure 1. Smart Snippet Toolbox

4.2 New and updated features of 5.0.26

Table 2. 5.0.26 new features

Feature number	Description
526_01	Add support in Power Profiler for 140 seconds maximum sampling duration.
526_02	Add support in detecting known Flash Memories based on JEDEC ID.
526_03	Add support for RRQ61xxx chips.
526_04	Add Support for PMM2.5 in Power Profiler Tool.
526_05	Add Power measurements support on CLI for RRQ61xxx chips.
526_06	Add charge-graph support in Power Profiler for RRQ61xxx CH3/CH4 interfaces.
526_07	Add new sum-graph support in Power Profiler with average CH1/2 and CH3/4 currents.
526_08	Add RRQ61xxx support for trigger functions and digital signals in Power Profiler tool.
526_09	Add RRQ61xxx support for PMM2.5 offset calibration feature.
526_10	Add CLI support for RRQ61xxx in Power Profiler tool.
526_11	Add PMM2.5 support for import/export functionality in Power Profiler tool.

Feature number	Description
526_12	Update support for Measure and Time Marker tools in Power Profiler.
526_594	Add support for DA1469x-BA-GFchips.
526_13	Add support for asymmetric SUOTA features in FlashCode tool for DA1459x chips.

4.3 Fixes and improvements since 5.0.24

Table 3. 5.0.26 fixes and improvements

Fix number	Description
526/01	Fix issue with OTP CS read for DA1459x chips.
526/02	Migrate to the latest documentation template reference.
526/03	Update copyright year to use the latest annual revision.
526/04	Optimize Customer CS access operations in OTP for DA1459x chips.
526/05	Fix issue with JLinkGDBServer operation in toolbox.
526/06	Optimize Power Profiler Tool to support multiple current-readings.
526/07	Migrate to openjdk-jre with version 21.0.2_13.
526/590	Fix boot issue with DA14585 when binary file is larger than 64k.
526/08	Fix issue with production OTP permissions for DA1459x chips.
526/09	Optimize Flash Code/Data tools for reading/ re-writing CS Trim/Calibration values.
526/10	Limit burn/erase end-address in Flash Code/Data tools for DA1459x chips.
526/11	Optimize Cache_Eflash_Register value in the end of CS registry.

4.4 Known issues of 5.0.26

Table 4. 5.0.26 known issues

Issue number	Description
503/01	In QSPI, the entire partition table is deleted when user asks to delete only the last partition

4.5 Known limitations of 5.0.26

Table 5. 5.0.26 known limitations

Issue number	Description
408\04	OTA services are not enabled for DA14581 and DA14583 chips.
526\01	SUOTA Asymmetric is currently not supported in SUOTA tool.
526\02	DA14533 could potentially not being detected properly.
526\03	ble_adv fw update over SUOTA GATT is not properly working for DA14592 chips.
526\04	pxp_reporter fw for DA14594 supports by default advertising extensions. DA1469x and DA14592 do not support advertising extensions, thus if used as SUOTA agents they may not be able to scan devices enabled with advertising extensions.

5. Release History

5.1 5.0.24

Version 5.0.24 of SmartSnippets Toolbox was released on Jan 17, 2024.

5.1.1 Overview

This was a FULL (GA) release of SmartSnippets Toolbox. This release:

- Supports the migration to the latest improvements for DA14531 / DA14533 / DA14535 chips.
- Supports the migration to the latest improvements for DA1459x chips.
- Supports various Power Profiler improvements.
- Supports top-valued tool fixes and improvements.
- Supports latest updates regarding corporate branding details.

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

5.1.2 New and updated features of 5.0.24

Table 6. 5.0.24 new features

Feature number	Description
524_01	Add support in GUI for SWCLK frequency option.
524_02	Add support for the latest DA14535/DA14536 CS commands.
524_03	Add support for reviewing Web-SP license before fetching remote resources.
524_04	Add support for PMM2 with DA14535/DA14536 chips.
524_05	Moved RFMaster unmodulated Rx Opcode under the continuous section.
524_06	Add support for individual Power Profiler / PMM2 labels over Analog and Digital HW signals.
524_07	Add support for Flash detection with DA1459x chips.
524_08	Add support for minimal uartboot.bin with DA1459x chips.
524_09	Add SUOTA support for DA1459x chips.
529_10	Add support for JTAG reset operation from device menu.
529_11	Introduce a USB bandwidth detection feature - to inform user on sampling rate sustainability.

5.1.3 Fixes and improvements since 5.0.22

Table 7. 5.0.24 fixes and improvements

Fix number	Description
524/01	Fix issue with Board menu unfold delay in Linux.
524/02	Fix issue with OTP offset length read error with DA14531 chips.
524/03	Optimize Visual Experience after partition reading/erasing operations.
524/04	Introduce various UI and Logging Improvements.
524/05	Improve data visualization with zoom in / zoom out operations in Power Profiler tool.
524/06	Update details with corporate branding.
407/02	Fix issue with RF master firmware for DA14682 by redirecting to DA14683.
518/01	Fix issue with sporadic “first-time-read” over Flash-XiP tool fails for DA14531 chips.
509\01	Resolve limitation with SPI Flash operations for DA14531 chips when being connected over 2-wire UART.
503\05	Resolve limitation with no default RF master firmware for D1469x chips.
524/07	Fix issue with presented UI message when missing resources from SP.
524/08	Update to latest copyright and disclaimer details.

Fix number	Description
524/09	Fix issue with RFMaster not running from flash after detach/attach operations.
CS553	Fix issue with CLI command to support space characters in file path.
CS554	Fix issue with failing to load second single image when SUOTA.
CS556	Fix issue with saving custom board setup pins.
CS557	Fix issue with flash re-programming without first erasing the flash.
CS561	Resolve issue with UART Terminal and Terminal Scripting.
524/10	Fix issue with Power Profiler domain axis - range and sampling time.
524/11	Optimize Power Profiler graceful start and stop operations.
524/12	Fix issue with Vav/Vpk measurements in Power Profiler when setting the cursors from right to left.
524/13	Optimize PMM2 Snapshots tool to save output based on the GUI plot arrangement.
524/14	Fix issue with PMM1 negative offsetting value.
CS566	Fix issue with Power Profiler time axis when charge window gets minimized.
CS567	Fix issue with license agreement version reference.
524/15	Improve header detection for DA1459x chips.
524/16	Fix issue with verification error after erase operation for DA1459x chips.
524/17	Fix issue with hibernation mode enable bit over PMM2.
CS551	Improve sporadic issue with random 0x00 readings after burn / erase operation.
CS575	Fix issue with Flash Code and Flash Data entire-memory-erase operation for DA14592 chips.

5.1.4 Known issues of 5.0.24

Table 8. 5.0.24 known issues

Issue number	Description
503/01	In QSPI, the entire partition table is deleted when user asks to delete only the last partition

5.1.5 Known limitations of 5.0.24

Table 9. 5.0.24 known limitations

Issue number	Description
408\04	OTA services are not enabled for DA14581 and DA14583 chips.

5.2 5.0.22

Version 5.0.22 of SmartSnippets Toolbox was released on Nov 4, 2022.

5.2.1 Overview

This was a FULL (GA) release of SmartSnippets Toolbox. This release:

- Supports Power Profiler improvements to take advantage of the new PMM2 features (phase 2).
- Supports standard and puya flash DA1469x chip versions.
- Support standard and DA14531-01 chip versions.
- Supports Renesas new graphical colors, logos and icons.
- Supports top-valued tool fixes and improvements.

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

5.2.2 New and updated features of 5.0.22

Table 10. 5.0.22 new features

Feature number	Description
522_01	Add support for multiple data buffers in PowerProfiler tool.
522_02	Add support for dynamic UI initialization in PowerProfiler tool based on connected PMM type.
522_03	Add support for dockable and externalized charts.
522_04	Add support for new PMM2 GUI ribbon.
522_05	Add support for dynamic ribbon labels on digital triggers.
522_06	Add support for right-click menu option over graph charts.
522_07	Maintain Support of PMM1 features in PMM2 UI mode.
522_08	Transfer control buttons from global ribbon to PowerProfiler tool.
522_09	Add support for actual time(system time) on mouse-hover data points.
522_10	Add support for export/import captured data into csv and zip formats.
522_11	Add support for Current/Voltage values in time marker tool.
522_12	Add support for multi-chart visualization on imported data.
522_13	Add support for SleepModePowerConsumption feature in PMM1.
522_14	Add support for dynamic show/hide time axis on externalized window.
522_15	Add support for auto offset calibration.
522_16	Add support for preserved information between toolbox sessions.
522_17	Add support for Stop trigger functions.
522_18	Add support for CH1/CH2 hibernation mode in PMM2.
522_19	Add support for low pass filtering in CH1 over hibernation mode.
522_20	Add support for signal color change on right click, that is saved with project file.
522_21	Add support for restoring externalized charts in the default UI setup.
522_22	Add support for Dialog-Renesas colors & logos.
522_23	Add support for PMM2-detection feature based on previous session, that is stored with project file.
522_24	Add support for dynamic digital trigger label with respect to the motherboard setup.
522_25	Add support for Start trigger functions.
522_26	Add support for reversed low/high signal states in trigger functions.
522_27	Add support for new CLI arguments for PMM2.
522_28	Add support for Reset command after flash programming in DA14585/585 devices.
522_29	Add support for a default provided “System Test Firmware” (STFW) in RFMaster tool.

5.2.3 Fixes and improvements since 5.0.20

Table 11. 5.0.22 fixes and improvements

Fix number	Description
513/01	Warning added in Flash Erase command if the size (End - Start Address) is negative or zero.
523/01	Fix issue in detecting a DA14531MOD Pro Dev Kit over UART.
529/01	Fix issue with RF master RSSI calculations.
527/01	Fix issue with trigger numbering vs motherboard numbering in PMM2.
521/01	Fix issues that PMM2 is not recognized on startup.
525/01	Fix typo issues of V5.0.20.
528/01	Fix combining trigger execution issue.
531/01	Rework OTP NVDS tables to properly display values wrapped to an 8-char length.
531/02	Fix application update issue to the Renesas prepared url-redirects.
531/03	Fix calibration popup when switching from normal to hibernation mode.
531/04	Provide various fixes and optimizations over PMM2 Measure/Marker tools.

5.2.4 Known issues of 5.0.22

Table 12. 5.0.22 known issues

Issue number	Description
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
503/01	In QSPI, the entire partition table is deleted when user asks to delete only the last partition
505/03	QSPI Layout Controller enforces only a limited number of validations when it comes to writing different sections on the QSPI
518/01	Sporadic “first-time-read” over Flash-XiP tool fails for DA14531 chips
465/01	Not stable operation under Windows 11 (especially when running in a debugging mode).

5.2.5 Known limitations of 5.0.22

Table 13. 5.0.22 known limitations

Issue number	Description
408\04	OTA services are not enabled for DA14581 and DA14583 chips
503\05	No default RF master firmware for D1469x chips
509\01	SPI Flash operations are not functional for DA14531 chips when being connected over 2-wire UART

5.3 5.0.20

Version 5.0.20 of SmartSnippets Toolbox was released on Jun 9, 2022.

5.3.1 Overview

This was a FULL (GA) release of SmartSnippets Toolbox. This release:

- Supports a New PMM2 circuit (phase 1).
- Supports standard and FabPort DA1470x chip versions.
- Supports various tool fixes and improvements.

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

5.3.2 New and updated features of 5.0.20

Table 14. 5.0.20 new features

Feature number	Description
520_01	Add support for PMM1 and PMM2 autodetection mechanism.
520_02	Add support for DA1470x chips [14701, 14705, 14706, 14708]
520_03	Add support for DA1470x FabPort version (ChipIDs: 2798, 3107)
520_04	Add initialization and control support for PMM2 boards.
520_05	Add support for fundamental GUI PMM2 options, features and warnings.
520_06	Add support in Flash Data tool for DA1470x chips, so that users can change the default flash size.
520_07	Add support for USB plug/unplug over PMM1 and PMM2 detection mechanism.
520_08	Optimize ADC initialization and EEPROM reading for PMM2 boards.
520_09	Add support for PMM2 16bit transmission mode.
520_10	Add support for PMM2 CLI in PowerProfiler tool.
520_11	Add support for PMMx info on csv exported file.
520_12	Add support for Project operations under a fixed default path.
520_13	Add support for optimized PMM2 intercommunication.
520_14	Remove support for “studio_sdk” option.
520_15	Add support for DA1470x chips to be used as a SUOTA agent device.
520_16	Add support for PMM2 offset calibration feature.

5.3.3 Fixes and improvements since 5.0.18

Table 15. 5.0.20 fixes and improvements

Fix number	Description
480/01	Improve how RF Master related tools under Manager group are exposing a special menu.
431/01, 225/01	Add autodetection support for the new DA1470x (D3107) FabPort chip.
519/01	Fix libprogrammer’s selected Erase function in FlashCode.
453/01	Improve big file support for Booter over UART for DA1469x.
487/01	Update correct DA1470x product family members.
489/01	Add active Ports (UART, PowerProfiler, JTAG) information over Application’s title.
490/01	Fix connectivity issues over the Linux distro.
492/01	Add support for SUOTA tool improvements.
471/01	Remove Oscilloscope mode from PowerProfiler tool.
491/01	Reorganize windows as tabs over areas that occupy the available space in a 80%-20% order.

Fix number	Description
495/01	Add support for OQSPI and remove support for PSRAM in Data Flash tool.
493/01	Add support for Macronix MX25U6432 flash.
500/01	Fix incorrect detection of DA14586 as a DA14585 device.
504/01	Fix issue with dynamic Flash memory size on SUOTA tool for DA1470x agent device.
499/01	Update Address to an Offset from Base-Address reference, in Flash Data tool.
220510/01	Migrate Dialog support e-mail references to DLG-bluetooth.support@dm.renesas.com.

5.3.4 Known issues of 5.0.20

Table 16. 5.0.20 known issues

Issue number	Description
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
503/01	In QSPI, the entire partition table is deleted when user asks to delete only the last partition
505/03	QSPI Layout Controller enforces only a limited number of validations when it comes to writing different sections on the QSPI
518/01	Sporadic “first-time-read” over Flash-XiP tool fails for DA14531 chips
465/01	Not stable operation under Windows 11 (especially when running in a debugging mode).

5.3.5 Known limitations of 5.0.20

Table 17. 5.0.20 known limitations

Issue number	Description
408\04	OTA services are not enabled for DA14581 and DA14583 chips
503\05	No default RF master firmware for D1469x chips
509\01	SPI Flash operations are not functional for DA14531 chips when being connected over 2-wire UART

5.4 5.0.18

Version 5.0.18 of SmartSnippets Toolbox was released on Feb 4, 2022.

5.4.1 Overview

This was a FULL (GA) release of SmartSnippets Toolbox. This release:

- Supports a New Graphical User Interface Facelift.
- Removes SST Initial Screen (dependency configuration screen).
- Supports Tool-Ribbon reorganization in Workspace, Programmer, Manager, Configurator, Monitor & Estimator groups.
- Supports new SST Project Menu/Concept re-organization.
- Supports new SST Device Menu/Concept re-organization.
- Supports ability to Show/Hide Main Ribbon Tools from Advanced Settings.
- Supports new OTP Programmer tool.
- Supports new RAM Programmer tool.
- Supports new Flash(XiP) Programmer tool.
- Supports new Flash(Data) Programmer tool.
- Supports optimizations for Flash(XiP) `entry-user` view mode.
- Supports optimizations for Power Profiler tool.
- Removes old-tools support.
- Supports Universal chip Auto-Detection feature.
- Supports dynamic web-based upgrade via the Dialog Portal site.
- Supports new DA1469x-GF chips.
- Supports configurable JTAG_TIMEOUT delay.

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

5.4.2 New and updated features of 5.0.18

Table 18. 5.0.18 new features

Feature number	Description
518_01	Introduce SPI read/erase checks on corner cases that exceed available max memory size.
518_02	Introduce new facelifted version of SST Graphical User Interface.
518_03	Remove SST Initial screen (startup dependency satisfaction screen).
518_04	Introduce target selection panel when no chip/family is found selected during SST startup.
518_05	Add support for independent file system location that SST-project can be located/saved.
518_06	Add support for device details over SST's application window title.
518_07	Add support for Home-Page resume ability after SST gets restarted (requires a previous existing project).
518_08	Introduce Project menu re-organization feature.
518_09	Introduce Device menu re-organization feature.
518_10	Introduce Recent-projects feature.
518_11	Introduce Project Info menu option.
518_12	Add detection of second SNC-M0 JTAG interface.
518_13	Introduce Communication-Interfaces-Update menu option.
518_14	Add support for multiple SST running instances.
518_15	Introduce Device Info menu option.
518_16	Introduce new FLASH(XiP) tool.
518_17	Add support for prepare image feature over FLASH(XiP) tool.

Feature number	Description
518_18	Introduce Export to File option in FLASH(XiP) tool.
518_19	Introduce Import from File option in FLASH(XiP) tool.
518_20	Add support for CS filtering capabilities for FLASH(XiP) tool.
518_21	Add support for Add-New-Section option in FLASH(XiP) tool.
518_22	Add highlight support for contents-to-burn / editable values, in FLASH(XiP) tool.
518_23	Introduce Advanced Settings and ability to “show/hide” special tools through ribbon menu.
518_24	Introduce universal chip Auto-Detection mechanism by consolidating information through UART and JTAG interfaces, on the connected devices.
518_25	Introduce Current Session Device Selection Dialog, using the list of found devices during Auto-Detection process.
518_26	Add Smart Filtering support for non-eligible UART Ports.
518_27	Add Auto-Detection support for Linux JTAG interface.
518_28	Introduce new FLASH(Data) tool.
518_29	Introduce Import from File option in FLASH(Data) tool.
518_30	Handle SNC-M0 UART interface under Normal and Auto-Detection modes.
518_31	Add support for dynamic FLASH/PSRAM memory configurations for FLASH(Data) tool.
518_32	Add recalculation support for Start/End Addresses when selected memory changes in FLASH(Data) tool.
518_33	Introduce new RAM tool.
518_34	Introduce a Remote Site Web-Based Upgade mechanism.
518_35	Add support for `Aborting` procedure on Web-Based Upgrade mechanism.
518_36	Add support for Booter options in new RAM tool.
518_37	Introduce Import from File option in RAM tool.
518_38	Introduce new OTP tool.
518_39	Add support for checking new App Upgrades, on Startup and upon User Request.
518_40	Add support for dynamic RAM Size Configuration in RAM tool.
518_41	Add support for `Ignore` and `Ignore forever` options under Web-Based Upgrade Dialog.
518_42	Introduce Import from File option in OTP tool.
518_43	Introduce Export to File option in OTP tool.
518_44	Add support for `Configuration Script` handling in OTP tool.
518_45	Add support for Downloading Cancelation on update Support Pack mechanism.
518_46	Introduce `What is changed` feature for new Support Pack updates received from a Web-Based Update site.
518_47	Add Highlight support for User Edited fields in OTP tool.
518_48	Add NVDS support for DA1458x devices in OTP tool.
518_49	Add support for dynamic list of FLASH types received directly from Support Pack.
518_50	Add support for dynamic FLASH type selection in Flash(XiP) tool.
518_51	Add support for SPI Memory detection using JEDEC ID.
518_52	Add support for `Importing/Exporting` the “whole file image” in Flash(XiP) tool.
518_53	Add support for `Remove Prepare Image` in Flash(XiP) tool.
518_54	Add support for exporting `Contents Read` to a file, in Flash(Data) tool.
518_55	Add support for ‘bin’ and ‘img’ files in Flash(XiP) tool.
518_56	Remove support for older tools (wherever there is a newer candidate).

5.4.3 Fixes and improvements since 5.0.16

Table 19. 5.0.18 fixes and improvements

Fix number	Description
408/01	Improve how installers select the default OS Drive to get installed.
436/01	Improve Info Messages / User Guidance after burning an SPI bootable Image (applies to 531/585/586 chips).
381/01	Introduce optimization on default read SPI data after a full-erase cycle.
419/01	Improve the `Update Support Pack` mechanism based on selected device or User Request.
419/02	Adapt “Custom Support Pack” logic when SST gets connected with an SDK.
419/03	Adapt remote “Support Pack” support for new SST (that is initial screen decoupled).
461/01	Apply 1MHz speed over SWD interface for DA1469x device.
433/01	Apply General SST improvements.
456/01	Add support for parametric JTAG Timeout delay through a configuration file.
323/01	Update Support Pack configuration files to expect only 64bit of resources.
465/01	Set default DA1469x Flash Size to 0x400000.

5.4.4 Known issues of 5.0.18

Table 20. 5.0.18 known issues

Issue number	Description
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
503/01	In QSPI, the entire partition table is deleted when user asks to delete only the last partition
505/03	QSPI Layout Controller enforces only a limited number of validations when it comes to writing different sections on the QSPI
518/01	Sporadic “first-time-read” over Flash-XiP tool fails for DA14531 chips
465/01	Not stable operation under Windows 11 (especially when running in a debugging mode).

5.4.5 Known limitations of 5.0.18

Table 21. 5.0.18 known limitations

Issue number	Description
408\04	OTA services are not enabled for DA14581 and DA14583 chips
503\05	No default RF master firmware for D1469x chips
509\01	SPI Flash operations are not functional for DA14531 chips when being connected over 2-wire UART

5.5 5.0.16

Version 5.0.16 of SmartSnippets Toolbox was released on Dec 24, 2020.

5.5.1 Overview

This was a FULL (GA) release of SmartSnippets Toolbox. This release:

- Supports dynamic Support Pack updates via the Dialog Portal site

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

5.5.2 New and updated features of 5.0.16

Table 22. 5.0.16 new features

Feature number	Description
516_01	Adds support in Power Profiler for multiple drawing window sizes (10, 20, 30, 40, 50, 60 sec)
516_02	Adds support for dynamic Support Pack updates via the Dialog Portal site

5.5.3 Fixes and improvements since 5.0.14

Table 23. 5.0.16 fixes and improvements

Fix number	Description
3082/01	For DA14583 devices, fixes issue with exporting NVDS table contents in csv format
3091/01	Improves file parsing stability related to path values enabled with space characters
3094/01	For DA1453x devices, adds support for RF Master: set power input option
3122/01	For DA1453x devices, fixes 0xFF padding issue found in OTP DMA field
3139/01	For DA1453x devices, fixes issue with data byte order in CLI OTP Header tool, when trying to burn the “application flag 1”
3425/01	For DA14695 and DA14697 devices, fixes issue with non-recognized CS registers when adding OTP fields
3599/01	For DA14585 and DA14531 devices, fixes issue with burning in a bitwise-AND form when writing to SPI flash memories

5.5.4 Known issues of 5.0.16

Table 24. 5.0.16 known issues

Issue number	Description
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
503/01	In QSPI, the entire partition table is deleted when user asks to delete only the last partition
505/03	QSPI Layout Controller enforces only a limited number of validations when it comes to writing different sections on the QSPI

5.5.5 Known limitations of 5.0.16

Table 25. 5.0.16 known limitations

Issue number	Description
408\04	OTA services are not enabled for DA14581 and DA14583 chips
503\05	No default RF master firmware for D1469x chips
509\01	SPI Flash operations are not functional for DA14531 chips when being connected over 2-wire UART

5.6 5.0.14

Version 5.0.14 of SmartSnippets Toolbox was released on May 29, 2020.

5.6.1 Overview

This was a FULL (GA) release of SmartSnippets Toolbox. 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
- 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

5.6.2 New and updated features of 5.0.14

Table 26. 5.0.14 new features

Feature number	Description
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

5.6.3 Fixes and improvements since 5.0.12

Table 27. 5.0.14 fixes and improvements

Fix number	Description
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	For DA1453x chips, removes unsupported STOP command from Manage Configuration Script Dialog
2816/02	For DA1468x, DA1469x and DA14585/6 families, RF Master supports packet lengths up to 255

Fix number	Description
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:XX to 48:23:35:XX:XX:XX

5.6.4 Known issues of 5.0.14

Table 28. 5.0.14 known issues

Issue number	Description
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
503/01	In QSPI, the entire partition table is deleted when user asks to delete only the last partition
505/03	QSPI Layout Controller enforces only a limited number of validations when it comes to writing different sections on the QSPI

5.6.5 Known limitations of 5.0.14

Table 29. 5.0.14 known limitations

Issue number	Description
408\04	OTA services are not enabled for DA14581 and DA14583 chips
503\05	No default RF master firmware for D1469x chips
509\01	SPI Flash operations are not functional for DA14531 chips when being connected over 2-wire UART

5.7 5.0.12

Version 5.0.12 of SmartSnippets Toolbox was released on Feb 28, 2020.

5.7.1 Overview

This was a FULL (GA) release of SmartSnippets Toolbox. 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

5.7.2 New and updated features of 5.0.12

Table 30. 5.0.12 new features

Feature number	Description
512_01	Supports DA14531 USB Development Kit

5.7.3 Fixes and improvements since 5.0.10

Table 31. 5.0.12 fixes and improvements

Fix number	Description
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 1st and 2nd 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

5.7.4 Known issues of 5.0.12

Table 32. 5.0.12 known issues

Issue number	Description
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
503/01	In QSPI, the entire partition table is deleted when user asks to delete only the last partition
505/03	QSPI Layout Controller enforces only a limited number of validations when it comes to writing different sections on the QSPI

5.7.5 Known limitations of 5.0.12

Table 33. 5.0.12 known limitations

Issue number	Description
408\04	OTA services are not enabled for DA14581 and DA14583 chips
503\05	No default RF master firmware for D1469x chips
509\01	SPI Flash operations are not functional for DA14531 chips when being connected over 2-wire UART

5.8 5.0.10

Version 5.0.10 of SmartSnippets Toolbox was released on Sep 25, 2019.

5.8.1 Overview

This was a FULL (GA) release of SmartSnippets Toolbox. This release:

- Adds new Make Image tool for facilitating making images for DA1458x/DA1453x chips
- Provides significant enhancements on the Terminal Scripting tool
- Supports new motherboard for DA1458x / DA1453x chips and new SDK6 and SDK10 versions

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

5.8.2 New and updated features of 5.0.10

Table 34. 5.0.10 new features

Feature number	Description
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

5.8.3 Fixes and improvements since 5.0.9

Table 35. 5.0.10 fixes and improvements

Fix number	Description
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

5.8.4 Known issues of 5.0.10

Table 36. 5.0.10 known issues

Issue number	Description
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
503/01	In QSPI, the entire partition table is deleted when user asks to delete only the last partition
505/03	QSPI Layout Controller enforces only a limited number of validations when it comes to writing different sections on the QSPI

5.8.5 Known limitations of 5.0.10

Table 37. 5.0.10 known limitations

Issue number	Description
408\04	OTA services are not enabled for DA14581 and DA14583 chips
503\05	No default RF master firmware for D1469x chips
509\01	SPI Flash operations are not functional for DA14531 chips when being connected over 2-wire UART

5.9 5.0.9

Version 5.0.9 of SmartSnippets Toolbox was released on Jun 21, 2019.

5.9.1 Overview

This was a FULL (GA) release of SmartSnippets Toolbox. This release:
- Supports recent DA14531 improvements

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

5.9.2 New and updated features of 5.0.9

Table 38. 5.0.9 new features

Feature number	Description
509_01	Supports DA14531 over single-wire UART
509_02	Enables RF Master for DA14531

5.9.3 Fixes and improvements since 5.0.8

Table 39. 5.0.9 fixes and improvements

Fix number	Description
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

5.9.4 Known issues of 5.0.9

Table 40. 5.0.9 known issues

Issue number	Description
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
503/01	In QSPI, the entire partition table is deleted when user asks to delete only the last partition
505/03	QSPI Layout Controller enforces only a limited number of validations when it comes to writing different sections on the QSPI

5.9.5 Known limitations of 5.0.9

Table 41. 5.0.9 known limitations

Issue number	Description
408\04	OTA services are not enabled for DA14581 and DA14583 chips
503\05	No default RF master firmware for D1469x chips
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

5.10 5.0.8

Version 5.0.8 of SmartSnippets Toolbox was released on Apr 3, 2019.

5.10.1 Overview

This was a FULL (GA) release of SmartSnippets Toolbox. This release:

- Adds the ‘Terminal Scripting’ tool

5.10.2 New and updated features of 5.0.8

Table 42. 5.0.8 new features

Feature number	Description
508_01	Adds the ‘Terminal Scripting’ tool
508_02	Supports DA14531 QFN package
508_03	Supports DA1469x USB Development kits for Windows

5.10.3 Fixes and improvements since 5.0.7

Table 43. 5.0.8 fixes and improvements

Fix number	Description
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

5.10.4 Known issues of 5.0.8

Table 44. 5.0.8 known issues

Issue number	Description
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
503/01	In QSPI, the entire partition table is deleted when user asks to delete only the last partition
505/03	QSPI Layout Controller enforces only a limited number of validations when it comes to writing different sections on the QSPI

5.10.5 Known limitations of 5.0.8

Table 45. 5.0.8 known limitations

Issue number	Description
408\04	OTA services are not enabled for DA14581 and DA14583 chips
503\05	No default RF master firmware for D1469x chips
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

5.11 5.0.7

Version 5.0.7 of SmartSnippets Toolbox was released on Feb 8, 2019.

5.11.1 Overview

This was a FULL (GA) release of SmartSnippets Toolbox. This release:

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

5.11.2 New and updated features of 5.0.7

Table 46. 5.0.7 new features

Feature number	Description
507_01	Supports chip family DA1453x

5.11.3 Fixes and improvements since 5.0.6

Table 47. 5.0.7 fixes and improvements

Fix number	Description
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

5.11.4 Known issues of 5.0.7

Table 48. 5.0.7 known issues

Issue number	Description
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
503/01	In QSPI, the entire partition table is deleted when user asks to delete only the last partition
505/03	QSPI Layout Controller enforces only a limited number of validations when it comes to writing different sections on the QSPI

5.11.5 Known limitations of 5.0.7

Table 49. 5.0.7 known limitations

Issue number	Description
408\04	OTA services are not enabled for DA14581 and DA14583 chips
503\05	No default RF master firmware for D1469x chips
506\01	SPI Flash Options are not supported for DA14585/586 chips

5.12 5.0.6

Version 5.0.6 of SmartSnippets Toolbox was released on Nov 7, 2018.

5.12.1 Overview

This was a FULL (GA) release of SmartSnippets Toolbox. This release:

- Adds Battery Lifetime Estimator tool for DA1458x and DA14585/586 families
- Implements several improvements for supporting DA1469x SDK 10

5.12.2 New and updated features of 5.0.6

Table 50. 5.0.6 new features

Feature number	Description
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

5.12.3 Fixes and improvements since 5.0.5

Table 51. 5.0.6 fixes and improvements

Fix number	Description
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

5.12.4 Known issues of 5.0.6

Table 52. 5.0.6 known issues

Issue number	Description
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
503/01	In QSPI, the entire partition table is deleted when user asks to delete only the last partition
503/03	OTP Header tool provides basic listing of OTP Header fields

5.12.5 Known limitations of 5.0.6

Table 53. 5.0.6 known limitations

Issue number	Description
408\04	OTA services are not enabled for DA14581 and DA14583 chips

Issue number	Description
503\05	No default RF master firmware for D1469x chips
506\01	SPI Flash Options are not supported for DA14585/586 chips

5.13 5.0.5

Version 5.0.5 of SmartSnippets Toolbox was released on May 18, 2018.

5.13.1 Overview

This was a FULL (GA) release of SmartSnippets Toolbox. This release:

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

5.13.2 New and updated features of 5.0.5

Table 54. 5.0.5 new features

Feature number	Description
505_01	Supports DA1469x SDK 10
505_02	Supports DA14585/586 SDK 6.0.8

5.13.3 Fixes and improvements since 5.0.3

Table 55. 5.0.5 fixes and improvements

Fix number	Description
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

5.13.4 Known issues of 5.0.5

Table 56. 5.0.5 known issues

Issue number	Description
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
503/01	In QSPI, the entire partition table is deleted when user asks to delete only the last partition
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

5.13.5 Known limitations of 5.0.5

Table 57. 5.0.5 known limitations

Issue number	Description
408\04	OTA services are not enabled for DA14581 and DA14583 chips
503\05	No default RF master firmware for D1469x chips

5.14 5.0.3

Version 5.0.3 of SmartSnippets Toolbox was released on Feb 2, 2018.

5.14.1 Overview

This was a FULL (GA) release of SmartSnippets Toolbox. This release:

- Supports D1469x chips
- Integrates Toolbox with SDKs

5.14.2 New and updated features of 5.0.3

Table 58. 5.0.3 new features

Feature number	Description
503_01	Supports core functionality for communicating with D1469x chips
503_02	Adds ‘QSPI Layout Controller’ tool
503_03	Integrates Toolbox with SDKs

5.14.3 Fixes and improvements since 4.8

Table 59. 5.0.3 fixes and improvements

Fix number	Description
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

5.14.4 Known issues of 5.0.3

Table 60. 5.0.3 known issues

Issue number	Description
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
503/01	In QSPI, the entire partition table is deleted when user asks to delete only the last partition
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

5.14.5 Known limitations of 5.0.3

Table 61. 5.0.3 known limitations

Issue number	Description
408\04	OTA services are not enabled for DA14581 and DA14583 chips
503\02	Does not offer making images when writing QSPI
503\05	No default RF master firmware for D1469x chips

5.15 4.8

Version 4.8 of SmartSnippets Toolbox was released on Jun 23, 2017.

5.15.1 Overview

This was a FULL (GA) release of SmartSnippets Toolbox. This release:

- Adds partial erase command for DA14585/586 chips
- Supports configurable pins for DA14585/586 chips

5.15.2 New and updated features of 4.8

Table 62. 4.8 new features

Feature number	Description
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

5.15.3 Fixes and improvements since 4.7

Table 63. 4.8 fixes and improvements

Fix number	Description
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\01	Allows use of more than 64kByte on external I2C memories for DA14585/586 chips

5.15.4 Known issues of 4.8

Table 64. 4.8 known issues

Issue number	Description
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

5.15.5 Known limitations of 4.8

Table 65. 4.8 known limitations

Issue number	Description
408\01	OTA services are not enabled for DA14581 and DA14583 chips

5.16 4.7

Version 4.7 of SmartSnippets Toolbox was released on Mar 24, 2017.

5.16.1 Overview

This was a FULL (GA) release of SmartSnippets Toolbox. This release:

- Adds support for device DA14585/586 chips.
- Adds support for device DA14682/3 chips.
- Detects connected devices over JTAG.
- Merges RF Master inside Toolbox.
- Adds oscilloscope mode for Power Profiler.

5.16.2 New and updated features of 4.7

Table 66. 4.7 new features

Feature number	Description
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

5.16.3 Fixes and improvements since 4.6

Table 67. 4.7 fixes and improvements

Fix number	Description
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

5.16.4 Known issues of 4.7

Table 68. 4.7 known issues

Issue number	Description
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

5.16.5 Known limitations of 4.7

Table 69. 4.7 known limitations

Issue number	Description
407\01	Does not allow use of more than 64kByte on external I2C memories for DA14585/586 chips

5.17 4.6

Version 4.6 of SmartSnippets Toolbox was released on Dec 22, 2016.

5.17.1 Overview

This was a FULL (GA) release of SmartSnippets Toolbox. This release implements several Power Profiler enhancements and enables multiple QSPI Flash type.

5.17.2 New and updated features of 4.6

Table 70. 4.6 new features

Feature number	Description
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

5.17.3 Fixes and improvements since 4.5

Table 71. 4.6 fixes and improvements

Fix number	Description
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

5.18 4.5

Version 4.5 of SmartSnippets Toolbox was released on Nov 18, 2016.

5.18.1 Overview

This was a FULL (GA) release of SmartSnippets Toolbox. This release applies various improvements to the previous version.

5.18.2 Fixes and improvements since 4.4

Table 72. 4.5 fixes and improvements

Fix number	Description
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

5.19 4.4

Version 4.4 of SmartSnippets Toolbox was released on Aug 24, 2016.

5.19.1 Overview

This was a FULL (GA) release of SmartSnippets Toolbox. This release adds the partition tables and applies several Power Profiler improvements.

5.19.2 New and updated features of 4.4

Table 73. 4.4 new features

Feature number	Description
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

5.19.3 Fixes and improvements since 4.3

Table 74. 4.4 fixes and improvements

Fix number	Description
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

5.20 4.3

Version 4.3 of SmartSnippets Toolbox was released on Jun 17, 2016.

5.20.1 Overview

This was a FULL (GA) release of SmartSnippets Toolbox. This release supports DA1468x AE.

5.20.2 New and updated features of 4.3

Table 75. 4.3 new features

Feature number	Description
403_01	Supports DA1468x AE

5.20.3 Fixes and improvements since 4.2

Table 76. 4.3 fixes and improvements

Fix number	Description
1378/01	Uses an updated second stage bootloader
1378/02	Improves standalone installer to help user install 3rd-party libraries
1378/03	No longer requires its own environment variables to operate
1378/04	Project Selector screen has been updated with all supported chip versions

5.21 4.2

Version 4.2 of SmartSnippets Toolbox was released on Apr 28, 2016.

5.21.1 Overview

This was a FULL (GA) release of SmartSnippets Toolbox. This release enables Toolbox for Linux and applies various improvements across all tools.

5.21.2 New and updated features of 4.2

Table 77. 4.2 new features

Feature number	Description
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

5.21.3 Fixes and improvements since 4.1

Table 78. 4.2 fixes and improvements

Fix number	Description
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

5.22 4.1

Version 4.1 of SmartSnippets Toolbox was released on Nov 16, 2015.

5.22.1 Overview

This was a FULL (GA) release of SmartSnippets Toolbox.This release supports DA1468xAD chip.

5.22.2 New and updated features of 4.1

Table 79. 4.1 new features

Feature number	Description
401_01	Supports DA1468xAD chip

5.22.3 Fixes and improvements since 4.0

Table 80. 4.1 fixes and improvements

Fix number	Description
1217/01	Updates bin2image.exe with enable_uart and ram shuffle options
1217/02	Enables -bootable command line option for Da1458x chips

5.23 4.0

Version 4.0 of SmartSnippets Toolbox was released on Oct 30, 2015.

5.23.1 Overview

This was a FULL (GA) release of SmartSnippets Toolbox. This release merges the previously-separate version for DA1458x and DA1468x into one application. Also, supports DA14680 AC/DevKit Rev B, new QSPI type W25Q80EW and various enhancements to most tools.

5.23.2 New and updated features of 4.0

Table 81. 4.0 new features

Feature number	Description
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

5.23.3 Fixes and improvements since 3.10

Table 82. 4.0 fixes and improvements

Fix number	Description
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

5.24 3.10

Version 3.10 of SmartSnippets Toolbox was released on Dec 3, 2015.

5.24.1 Overview

This was a FULL (GA) release of SmartSnippets Toolbox. This release enables reading/writing on odd ports of 2-port boards for DA1458x chips.

5.24.2 New and updated features of 3.10

Table 83. 3.10 new features

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

5.25 3.9

Version 3.9 of SmartSnippets Toolbox was released on Nov 18, 2015.

5.25.1 Overview

This was a FULL (GA) release of SmartSnippets Toolbox. This release improves application stability/reliability for DA1458x chips.

5.25.2 New and updated features of 3.9

Table 84. 3.9 new features

Feature number	Description
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

5.25.3 Fixes and improvements since 3.8

Table 85. 3.9 fixes and improvements

Fix number	Description
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

5.26 3.8

Version 3.8 of SmartSnippets Toolbox was released on Jul 27, 2015.

5.26.1 Overview

This was a FULL (GA) release of SmartSnippets Toolbox. This release supports DA14583 and includes various enhancements to most tools for DA1458x chips.

5.26.2 New and updated features of 3.8

Table 86. 3.8 new features

Feature number	Description
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

5.26.3 Fixes and improvements since 1.0.2.0

Table 87. 3.8 fixes and improvements

Fix number	Description
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

5.27 1.0.2.0

Version 1.0.2.0 of SmartSnippets Toolbox was released on Jul 21, 2015.

5.27.1 Overview

This was a FULL (GA) release of SmartSnippets Toolbox. This release applies some minor improvements to the previous version for DA1468x chips.

5.27.2 Fixes and improvements since 1.0.1.4

Table 88. 1.0.2.0 fixes and improvements

Fix number	Description
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

5.28 1.0.1.4

Version 1.0.1.4 of SmartSnippets Toolbox was released on Jul 15, 2015.

5.28.1 Overview

This was a FULL (GA) release of SmartSnippets Toolbox. This release applies improvements to Booter, OTP Header, QSPI Programmer and Log Panel for DA1468x chips.

5.28.2 New and updated features of 1.0.1.4

Table 89. 1.0.1.4 new features

Feature number	Description
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

5.28.3 Fixes and improvements since 1.0.1.3

Table 90. 1.0.1.4 fixes and improvements

Fix number	Description
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

5.29 1.0.1.3

Version 1.0.1.3 of SmartSnippets Toolbox was released on Jun 26, 2015.

5.29.1 Overview

This was a FULL (GA) release of SmartSnippets Toolbox. This release adds CLI support and applies improvements to OTP Header and Power Profiler for DA1468x chips.

5.29.2 New and updated features of 1.0.1.3

Table 91. 1.0.1.3 new features

Feature number	Description
1013_01	OTP Header: pop-up panel for fields 7F8EA30, 7F8EA28 and 7F8EA78
1013_02	Support for 64-bit words whose bytes [4..7] are the inversion of bytes [0..3]
1013_03	Command-Line Interface has been enabled

5.29.3 Fixes and improvements since 1.0.1.2

Table 92. 1.0.1.3 fixes and improvements

Fix number	Description
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

5.30 1.0.1.2

Version 1.0.1.2 of SmartSnippets Toolbox was released on Jun 12, 2015.

5.30.1 Overview

This was a FULL (GA) release of SmartSnippets Toolbox. This release adds basic support for DA1468x chips.

5.30.2 New and updated features of 1.0.1.2

Table 93. 1.0.1.2 new features

Feature number	Description
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

5.31 3.7

Version 3.7 of SmartSnippets Toolbox was released on Feb 20, 2015.

5.31.1 Overview

This was a FULL (GA) release of SmartSnippets Toolbox. This release includes improvements for SUOTA, SPOTA, Data Rate Monitor, power Profiler, OTP Header, NVDS tools for DA1458x chips.

5.31.2 New and updated features of 3.7

Table 94. 3.7 new features

Feature number	Description
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

5.31.3 Fixes and improvements since 3.6

Table 95. 3.7 fixes and improvements

Fix number	Description
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

5.32 3.6

Version 3.6 of SmartSnippets Toolbox was released on Nov 3, 2014.

5.32.1 Overview

This was a FULL (GA) release of SmartSnippets Toolbox. This release includes minor improvements for DA1458x chips.

5.32.2 Fixes and improvements since 3.5

Table 96. 3.6 fixes and improvements

Fix number	Description
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

5.33 3.5

Version 3.5 of SmartSnippets Toolbox was released on Sep 23, 2014.

5.33.1 Overview

This was a FULL (GA) release of SmartSnippets Toolbox. This release adds Support for DA14581 and includes enhancements for SPOTA, SUOTA, CLI and SPI/EEPROM programming for DA1458x chips.

5.33.2 New and updated features of 3.5

Table 97. 3.5 new features

Feature number	Description
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

5.33.3 Fixes and improvements since 3.4

Table 98. 3.5 fixes and improvements

Fix number	Description
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

5.34 3.4

Version 3.4 of SmartSnippets Toolbox was released on Aug 19, 2014.

5.34.1 Overview

This was a FULL (GA) release of SmartSnippets Toolbox. This release fixes a bug related to ignoring zero bytes included at the end of a hex file.

5.34.2 Fixes and improvements since 3.3

Table 99. 3.4 fixes and improvements

Fix number	Description
856/01	Fixes a bug related to ignoring zero bytes included at the end of a hex file

5.35 3.3

Version 3.3 of SmartSnippets Toolbox was released on Aug 6, 2014.

5.35.1 Overview

This was a FULL (GA) release of SmartSnippets Toolbox. This release fixes a bug with CLI command ignoring UART RX/TX port when deciding the appropriate baud rate.

5.35.2 Fixes and improvements since 3.2

Table 100. 3.3 fixes and improvements

Fix number	Description
854/01	Fixes a bug with CLI command ignoring UART RX/TX port when deciding the appropriate baud rate

5.36 3.2

Version 3.2 of SmartSnippets Toolbox was released on Jul 17, 2014.

5.36.1 Overview

This was a FULL (GA) release of SmartSnippets Toolbox. This release adds Max Data Rate Monitor tool and SUOTA tool for DA1458x chips.

5.36.2 New and updated features of 3.2

Table 101. 3.2 new features

Feature number	Description
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

5.37 3.1

Version 3.1 of SmartSnippets Toolbox was released on Jun 17, 2014.

5.37.1 Overview

This was a FULL (GA) release of SmartSnippets Toolbox. 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.

5.37.2 New and updated features of 3.1

Table 102. 3.1 new features

Feature number	Description
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 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

5.37.3 Fixes and improvements since 3.0

Table 103. 3.1 fixes and improvements

Fix number	Description
814/01	Uses JRE 7.0.51
814/02	Fixes some corner cases not handled correctly by OTP Programmer

5.38 3.0

Version 3.0 of SmartSnippets Toolbox was released on Mar 27, 2014.

5.38.1 Overview

This was a FULL (GA) release of SmartSnippets Toolbox. This release adds Software Patch over the Air (SPotA) tool, Sleep Mode Advisor tool, EEPROM Programmer tool, and improves most of the other tools for DA1458x chips.

5.38.2 New and updated features of 3.0

Table 104. 3.0 new features

Feature number	Description
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' parameter
300_29	On Power Profiler, manual scaling is done on the y-axis only
300_30	Power Profiler remembers which of the 'Threshold (mA)' or 'TimeInterval (ms)' textbox had the focus before chart stealing it and brings the focus back to the appropriate textbox when the mouse leaves the chart.

Feature number	Description
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

5.38.3 Fixes and improvements since 2.2

Table 105. 3.0 fixes and improvements

Fix number	Description
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
695/05	Fixes shortcuts created by installer
695/06	Fixes Power Profile graphical output when receiving negative current values
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

5.39 2.2

Version 2.2 of SmartSnippets Toolbox was released on Feb 4, 2014.

5.39.1 Overview

This was a FULL (GA) release of SmartSnippets Toolbox. This release supports DA14580-01.

5.39.2 New and updated features of 2.2

Table 106. 2.2 new features

Feature number	Description
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

5.39.3 Fixes and improvements since 2.1

Table 107. 2.2 fixes and improvements

Fix number	Description
518/01	Fixes writing of NVDS fields that are 1 or 2 bytes long

5.40 2.1

Version 2.1 of SmartSnippets Toolbox was released on Jan 6, 2014.

5.40.1 Overview

This was a FULL (GA) release of SmartSnippets Toolbox.This release fixes some issues found in previous version.

5.40.2 New and updated features of 2.1

Table 108. 2.1 new features

Feature number	Description
201_01	Does not block header burning when DMA length is smaller than the image file currently loaded in OTP Image tab.

5.40.3 Fixes and improvements since 2.0

Table 109. 2.1 fixes and improvements

Fix number	Description
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

5.41 2.0

Version 2.0 of SmartSnippets Toolbox was released on Dec 23, 2013.

5.41.1 Overview

This was a FULL (GA) release of SmartSnippets Toolbox. This release supports DA14580-00 and adds OTP NVDS and Command-Line Interface (CLI) functionality.

5.41.2 New and updated features of 2.0

Table 110. 2.0 new features

Feature number	Description
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

5.41.3 Fixes and improvements since 1.1

Table 111. 2.0 fixes and improvements

Fix number	Description
459/01	Fixes a bug that was resulting in not writing the OTP memory the field that is in edit mode

5.42 1.1

Version 1.1 of SmartSnippets Toolbox was released on Dec 2, 2013.

5.42.1 Overview

This was a FULL (GA) release of SmartSnippets Toolbox. This release improves Power Profiler tool.

5.42.2 New and updated features of 1.1

Table 112. 1.1 new features

Feature number	Description
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

5.42.3 Fixes and improvements since 1.0

Table 113. 1.1 fixes and improvements

Fix number	Description
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

5.43 1.0

Version 1.0 of SmartSnippets Toolbox was released on Nov 11, 2013.

5.43.1 Overview

This was a FULL (GA) release of SmartSnippets Toolbox. This release introduces basic Toolbox functionality.

5.43.2 New and updated features of 1.0

Table 114. 1.0 new features

Feature number	Description
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 A Software Versioning Rules

This describes the software version numbers and does not apply to documentation version numbers (as found in the footer of this document).

Each software version number string consists of four numbers: MAJOR. BRANCH. MINOR. and BUILD.

#MAJOR: It is increased (by one only) if the project undergoes a major modification, for example major ROM changes. It usually changes only when the project sources undergo major restructuring affecting most of the repository. It is initialized at 1.

#BRANCH: 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 one again. Therefore, Project releases correspond to release numbers like 2.0.1.xxx, 2.0.2.xxx. etc. The #MINOR number is initialized at 1.

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

Document Revision History

This section summarizes the changes made to this document and not to the Software that this document describes.

Revision	Date	Description
47.00	Dec 10, 2024	Introduce changes for SSTv5.0.26
46.00	Jan 17, 2024	Introduce hot-fix changes for SSTv5.0.24
45.00	Dec 21, 2023	Introduce hot-fix changes for SSTv5.0.24
44.00	Oct 31, 2023	Introduce changes for SSTv5.0.24
43.00	Jul 31, 2023	Introduce changes for SSTv5.0.24
42.00	Nov 4, 2022	Introduce changes for SSTv5.0.22
41.00	Jun 9, 2022	Introduce changes for SSTv5.0.20
40.00	Feb 4, 2022	Introduce changes for SSTv5.0.18
39.00	Dec 24, 2020	Introduce changes for SSTv5.0.16
38.00	May 29, 2020	Introduce changes for SSTv5.0.14
37.00	Feb 28, 2020	Introduce changes for SSTv5.0.12
36.00	Sep 25, 2019	Introduce changes for SSTv5.0.10
35.00	Jun 21, 2019	Introduce changes for SSTv5.0.9
34.00	Apr 3, 2019	Introduce changes for SSTv5.0.8
33.00	Feb 8, 2019	Introduce changes for SSTv5.0.7
32.00	Nov 7, 2018	Introduce changes for SSTv5.0.6
31.00	May 18, 2018	Introduce changes for SSTv5.0.5
30.00	Feb 2, 2018	Introduce changes for SSTv5.0.3
29.00	Jun 23, 2017	Introduce changes for SSTv4.8
28.00	Mar 24, 2017	Introduce changes for SSTv4.7
27.00	Dec 22, 2016	Introduce changes for SSTv4.6
26.00	Nov 18, 2016	Introduce changes for SSTv4.5
25.00	Aug 24, 2016	Introduce changes for SSTv4.4
24.00	Jun 17, 2016	Introduce changes for SSTv4.3
23.00	Apr 28, 2016	Introduce changes for SSTv4.2
22.00	Nov 16, 2015	Introduce changes for SSTv4.1
21.00	Oct 30, 2015	Introduce changes for SSTv4.0
20.00	Dec 3, 2015	Introduce changes for SSTv3.10
19.00	Nov 18, 2015	Introduce changes for SSTv3.9
18.00	Jul 27, 2015	Introduce changes for SSTv3.8
17.00	Jul 21, 2015	Introduce changes for SSTv1.0.2.0
16.00	Jul 15, 2015	Introduce changes for SSTv1.0.1.4
15.00	Jun 26, 2015	Introduce changes for SSTv1.0.1.3
14.00	Jun 12, 2015	Introduce changes for SSTv1.0.0.2
13.00	Feb 20, 2015	Introduce changes for SSTv3.7
12.00	Nov 3, 2014	Introduce changes for SSTv3.6
11.00	Sep 23, 2014	Introduce changes for SSTv3.5
10.00	Aug 19, 2014	Introduce changes for SSTv3.4
09.00	Aug 6, 2014	Introduce changes for SSTv3.3
08.00	Jul 17, 2014	Introduce changes for SSTv3.2
07.00	Jun17, 2014	Introduce changes for SSTv3.1
06.00	Mar 27, 2014	Introduce changes for SSTv3.0
05.00	Feb 4, 2014	Introduce changes for SSTv2.2
04.00	Jan 6, 2014	Introduce changes for SSTv2.1
03.00	Dec 23, 2013	Introduce changes for SSTv2.0
02.00	Dec 2, 2013	Introduce changes for SSTv1.1

Revision	Date	Description
01.00	Nov 11, 2013	First version. Introduce changes for SSTv1.0

Status Definitions

Status	Definition
DRAFT	The content of this document is under review and subject to formal approval, which may result in modifications or additions.
APPROVED or unmarked	The content of this document has been approved for publication.

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