Connectivity Production Line Tool

This document contains the release notes for Renesas Connectivity Production Line Tool v_1.0.0.0.

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1. Terms and Definitions

AIN	Analog Input
CS	Configuration Script
DUT	Device Under Test
GA	General Availability
GPIO	General Purpose Input Output
LA	Limited Availability
PLT	Production Line Tool
RF	Radio Frequency
RFTU	RF Test Unit

2. Release Data

Table 1. Release data

Device Number	DA1453x
Operating System	Windows 10, Windows 11
Software	Connectivity Production Line Tool
Software Release Date	May 2025
Software Version Number	1.0.0.0
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 software release are listed in the `licensing.txt` file in the Connectivity Production Line Tool installation folder.

4. Related Documentation and References

[1] Connectivity Production Line Tool, User Manual, Renesas Electronics.

Note 1 References are for the latest published version, unless otherwise indicated.

5. Release Description

5.1 Overview

This is a FULL (GA) release of the Connectivity Production Line Tool (Note 1). It supports production testing and programming for products using DA1453x family.

Figure 1 shows the main window of the Connectivity Production Line Tool Configuration v_1.0.0.0.

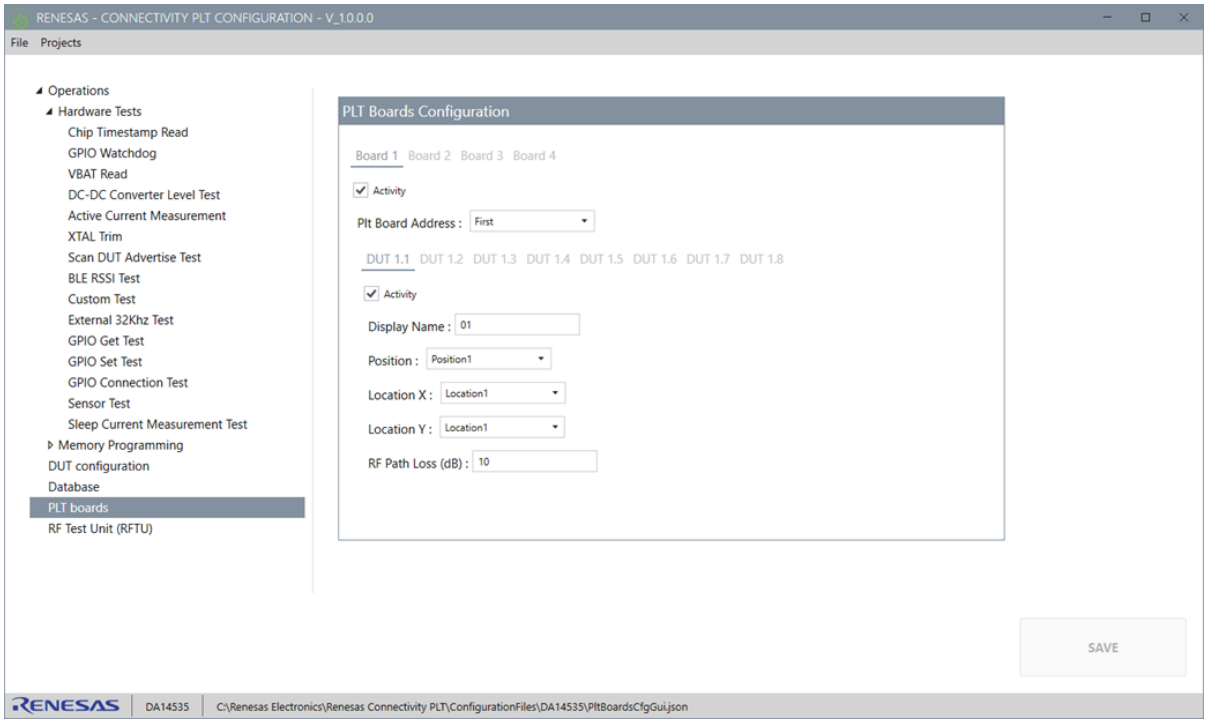


Figure 1. Connectivity Production Line Tool Configuration v_1.0.0.0

Figure 2 shows the main window of the Connectivity Production Line Tool GUI 1.0.0.

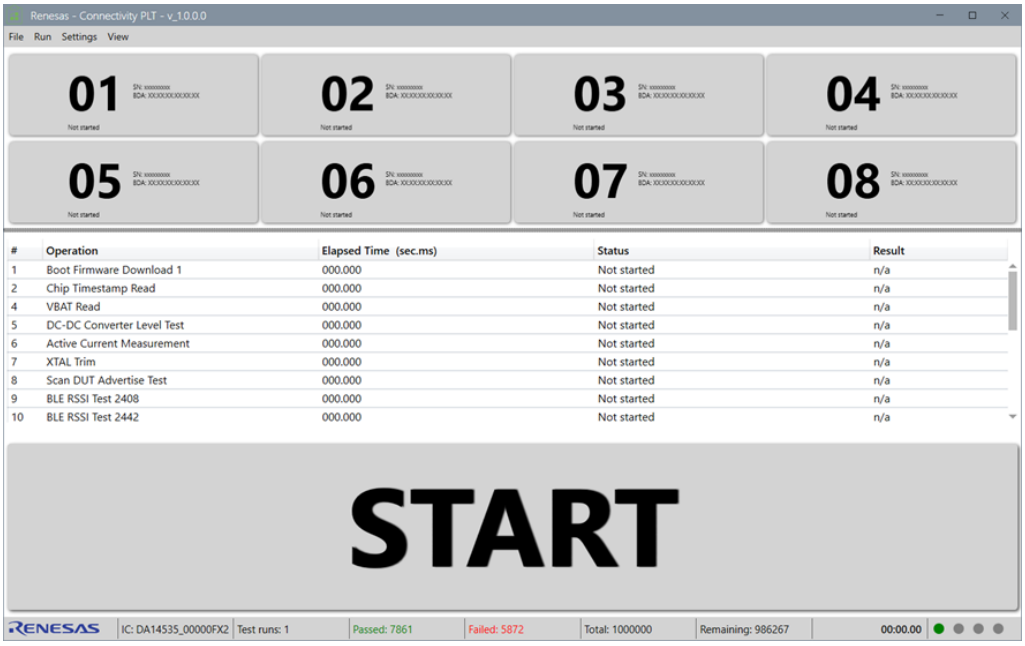
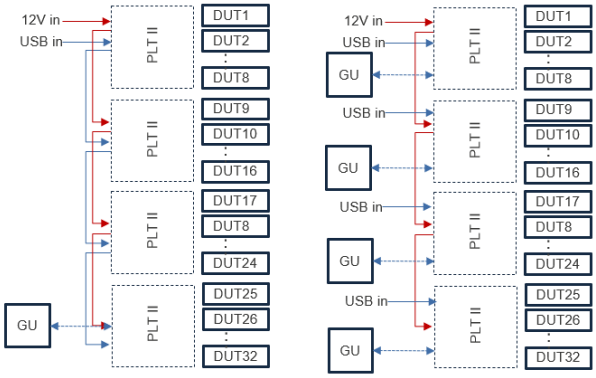


Figure 2. Connectivity Production Line Tool v_1.0.0.0

5.2 New and Updated Features of v_1.0.0.0

Table 2. v_1.0.0.0 new features

Feature number	Description
1	Up to 32x DUTs supported.
2	Adjustable UART leve1.2-3.3 V. Adjustable Reset level 0.9-3.3 V. Adjustable VAUX 0-5 V. GPIO0, GPIO1, GPIO2 selectable I/O per DUT. Adjustable GPIO level 1.2-3.3 V. AIN analog input signal per DUT. Adjustable AIN per DUT with 0-5 V level support.
3	Onboard current measurement with 100 µA – 300 mA range support per DUT.
4	External RF Test Unit (RFTU). Position flexibility.
	PLT boards can be connected in a daisy chain. 
5	Companion board for checking proper operation of the PLT hardware in the field.
6	Redesigned software: ▪ Added new test easily. ▪ Modified test sequence. ▪ Created new test.
7	Added emote database for: ▪ DUT serial number acquire ▪ DUT Bluetooth LE address acquire ▪ Per DUT memory data acquire ▪ Common memory data acquire ▪ DUT final result update ▪ DUT access counter update.
8	PLT hardware firmware update software tool.

5.3 Known Issues of v_1.0.0.0

Table 3. v_1.0.0.0 known issues

Issue number	Description
1	After pressing the Start button for the first time, the test run typically takes one to two minutes as the software enumerates the DUT COM ports. This occurs only during the first test execution or if the PLT hardware undergoes a power cycle.
2	In rare cases, the DUT number and the start time fields may be missing from the CSV log file.

5.4 Known Limitations of v_1.0.0.0

Table 4. v_1.0.0.0 known limitations

Issue number	Description
1	In CSV log file the RSSI and PER results are not displayed
2	External sleep current measurement can only be performed when a single PLT hardware board is used (up to 8 DUTs).

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.

6. Document Revision History

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

Revision	Date	Description
1.00	May 16, 2025	First version

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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