

# Connectivity Production Line Tool

This document contains the release notes for Renesas Connectivity Production Line Tool v3.0.0.0.

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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

|                                                  |                                   |
|--------------------------------------------------|-----------------------------------|
| Software                                         | Connectivity Production Line Tool |
| Device Number                                    | RA6W1, RA6W2, RRQ61001, RRQ610    |
| Operating System                                 | Windows 11                        |
| Software Release Date                            | July 2026                         |
| Software Version Number                          | 3.0.0.0                           |
| Software Release Type ( <a href="#">Note 1</a> ) | 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

[1] Connectivity Production Line Tool 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 that supports production testing and programming for DA1453x SoC, RA6W1/RA6W2 MCUs and RRQ61001 and RRQ61051 modules, DA148x0 SoC, DA14495 SoC, as well as DA14AVDDECT modules.

Figure 1 shows the main window of the Connectivity Production Line Tool Configuration v3.0.0.0.

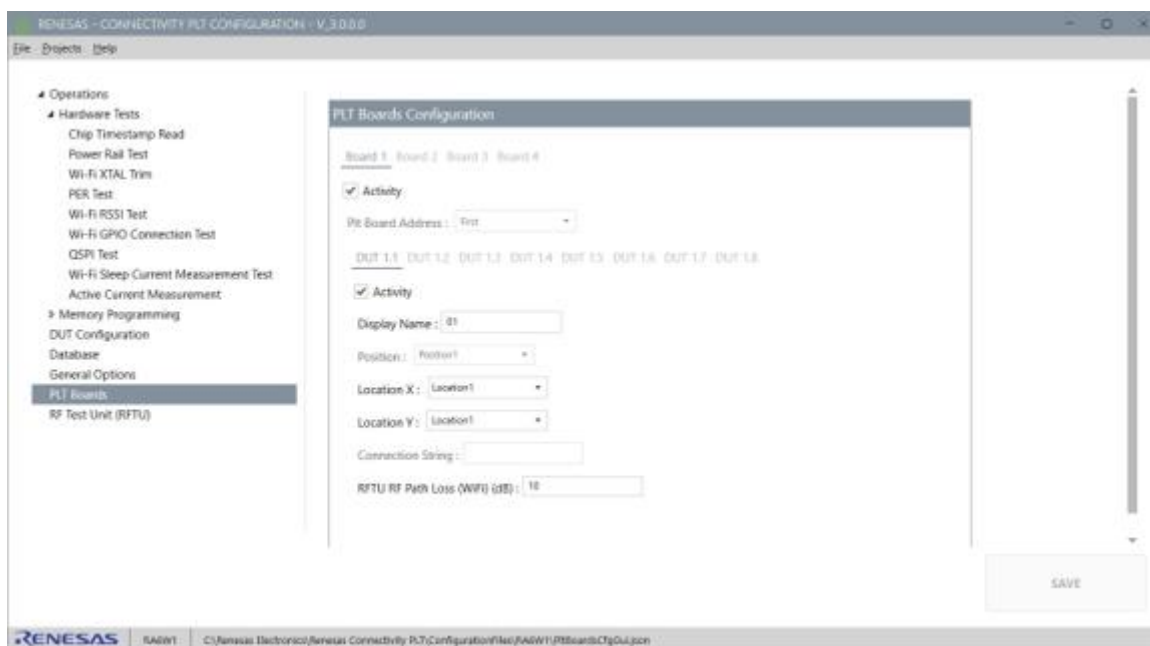


Figure 1. Connectivity Production Line Tool Configuration v3.0.0.0

Figure 2 shows the main window of the Connectivity Production Line Tool GUI v3.0.0.0.

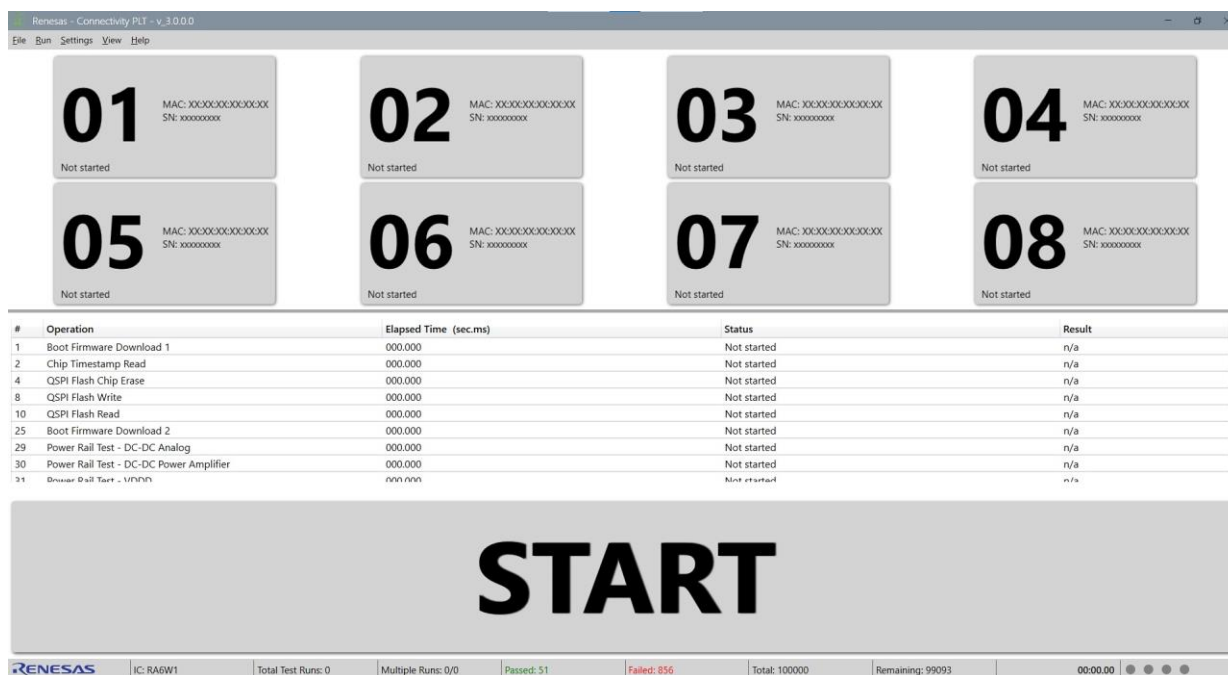


Figure 2. Connectivity Production Line Tool GUI v3.0.0.0

## 5.2 New and Updated Features of v3.0.0.0

Table 2. v3.0.0.0 new features

| Feature number | Description                                                                                                |
|----------------|------------------------------------------------------------------------------------------------------------|
| 1              | Supports DA14495 SoC                                                                                       |
| 2              | Supports DA14AVDDECT modules                                                                               |
| 3              | Supports FL7 commands for QSPI flash programming                                                           |
| 4              | Supports Embedded Access Protocol (EAP) for NVS programming                                                |
| 5              | Supports DA14850 and DA14870 SoC                                                                           |
| 6              | Supports DA148x0 commands for production testing and memory programming                                    |
| 7              | Added Help menu in Connectivity PLT and Connectivity PLT Configuration for opening the user manual         |
| 8              | Supports CS Timestamp write functionality for DA1453x and DA148xx devices                                  |
| 9              | Enhanced functionality of multiple tests run iterations, displaying remaining runs                         |
| 10             | Added option for writing timestamp value at a configurable index in OTP CS for DA1453x and DA148xx devices |

## 5.3 Fixes since Version v2.0.0.0

Table 3. v3.0.0.0 fixes

| Fix number | Description                                             |
|------------|---------------------------------------------------------|
| 1          | Fixed Custom Memory Data Write of OTP from the database |

## 5.4 Known Issues of v3.0.0.0

No known issues.

## 5.5 Known Limitations of v3.0.0.0

Table 4. v3.0.0.0 known limitations

| Issue number | Description                                                                                                    |
|--------------|----------------------------------------------------------------------------------------------------------------|
| 1            | External current measurement can only be performed with a single PLT board (up to 8 DUTs)                      |
| 2            | Common Memory Data Write and Custom Memory Data Write are not supported for DA14495 SoC and DA14AVDDECT module |

## 6. Release History

### 6.1 Version 2.0.0.0

#### 6.1.1 Overview

This is a FULL (GA) release of the Connectivity Production Line Tool that supports production testing and programming for products for the DA14531x SoC and RA6Wx SoC families as well as the RRQ610xx modules.

Figure 3 shows the main window of the Connectivity Production Line Tool Configuration v\_2.0.0.0.

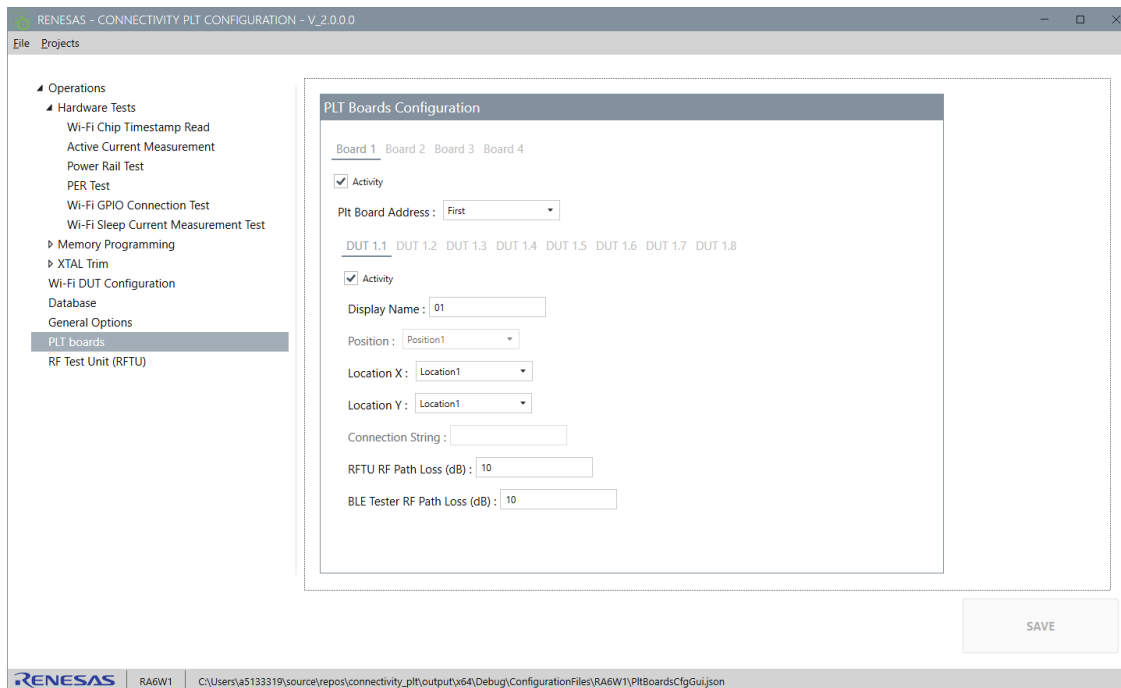


Figure 3. Connectivity Production Line Tool Configuration v\_2.0.0.0

Figure 4 shows the main window of the Connectivity Production Line Tool GUI v\_2.0.0.0.

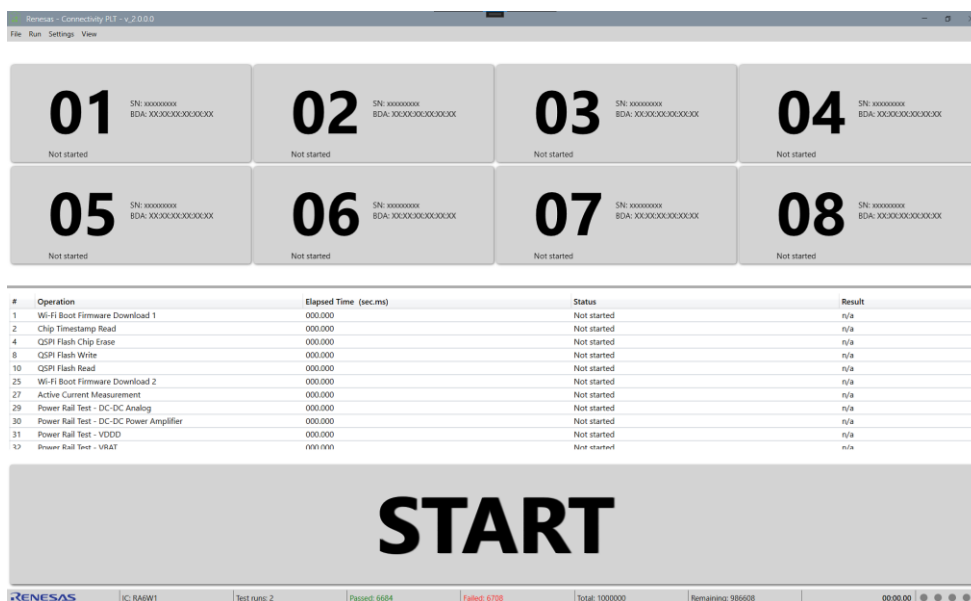


Figure 4. Connectivity Production Line Tool v\_2.0.0.0

## 6.1.2 New and Updated Features of v\_2.0.0.0

Table 5. v\_2.0.0.0 new features

| Feature number | Description                                                     |
|----------------|-----------------------------------------------------------------|
| 1              | Supports RA6Wx SoC.                                             |
| 2              | Supports RRQ610xx modules.                                      |
| 3              | Supports RAFW FSP AT commands for production testing.           |
| 4              | Supports RA6Wx RF Test Unit (RFTU).                             |
| 5              | Retry if tests fail. User selectable from Configuration GUI.    |
| 6              | Selectively test DUTs in CLI (a <Active DUTs> <First DUT S/N>). |
| 7              | Added new DUT log file viewer in Connectivity PLT GUI.          |

## 6.1.3 Fixes since Version v\_1.0.0.0

Table 6. v\_2.0.0.0 fixes

| Fix number | Description                                                                                   |
|------------|-----------------------------------------------------------------------------------------------|
| 1          | Fixed issue 1 of v_1.0.0.0. Improved DUT COM port enumeration timing.                         |
| 2          | Fixed issue 2 of v_1.0.0.0. Improved CSV file result and test naming display.                 |
| 3          | Added overall test result in CSV.                                                             |
| 4          | Fixed issue with CSV test ordering.                                                           |
| 5          | Exit CLI after -s command and return a 32-bit value with each bit to be per DUT pass or fail. |
| 6          | Fixed issue in Bluetooth® LE scan execution after Bluetooth LE RSSI test.                     |
| 7          | Improved ammeter instrument implementation.                                                   |
| 8          | Improved binary selection to be burned to a memory.                                           |
| 9          | Improved RF path losses to be different per test type.                                        |
| 10         | Resolved an issue preventing the SPI Flash Write configuration from being saved.              |
| 11         | Resolved an issue where the memory read log file occasionally generated as empty.             |

## 6.1.4 Known Issues of v\_2.0.0.0

No known issues.

## 6.1.5 Known Limitations of v\_2.0.0.0

Table 7. v\_2.0.0.0 known limitations

| Issue number | Description                                                                                |
|--------------|--------------------------------------------------------------------------------------------|
| 1            | External current measurement can only be performed with a single PLT board (up to 8 DUTs). |

## 6.2 Version 1.0.0.0

Version v\_1.0.0.0 of the Connectivity Production Line Tool for DA1453x was released May 2025.

### 6.2.1 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 5](#) shows the main window of the Connectivity Production Line Tool Configuration v\_1.0.0.0.

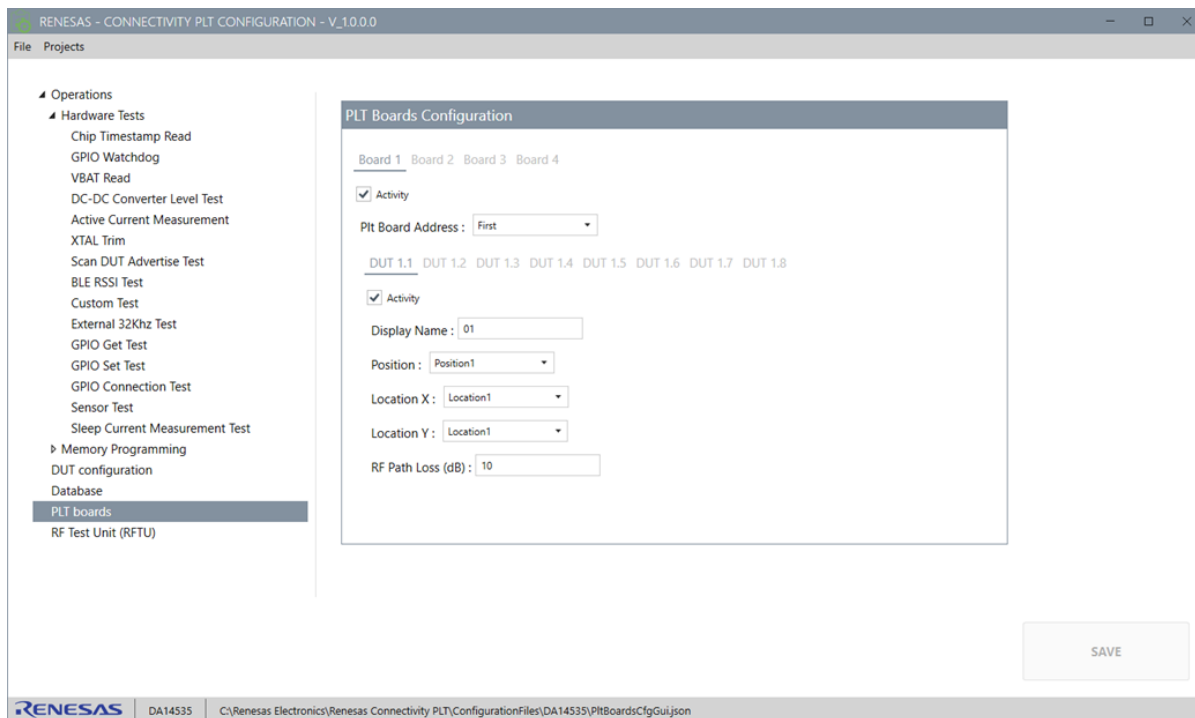


Figure 5. Connectivity Production Line Tool Configuration v\_1.0.0.0

[Figure 6](#) shows the main window of the Connectivity Production Line Tool GUI 1.0.0.

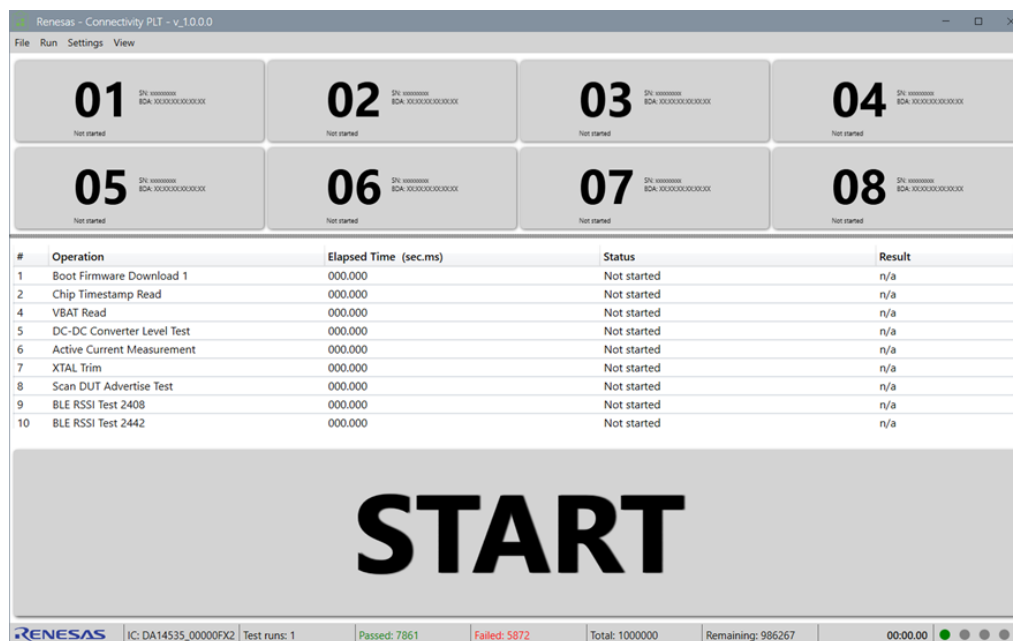


Figure 6. Connectivity Production Line Tool v\_1.0.0.0



## 6.2.2 New and Updated Features of v\_1.0.0.0

Table 8. v\_1.0.0.0 new features

| Feature number | Description                                                                                                                                                                                                                                                                                                |
|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1              | Up to 32x DUTs supported.                                                                                                                                                                                                                                                                                  |
| 2              | Adjustable UART level 1.2-3.3 V.<br>Adjustable Reset level 0.9-3.3 V.<br>Adjustable VAUX 0-5 V.<br>GPIO0, GPIO1, GPIO2 selectable I/O per DUT.<br>Adjustable GPIO level 1.2-3.3 V.<br>AIN analog input signal per DUT.<br>Adjustable AIN per DUT with 0-5 V level support.                                 |
| 3              | Onboard current measurement with 100 $\mu$ A – 300 mA range support per DUT.                                                                                                                                                                                                                               |
| 4              | External RF Test Unit (RFTU). Position flexibility.                                                                                                                                                                                                                                                        |
|                | <p>PLT boards can be connected in a daisy chain.</p>                                                                                                                                                                                                                                                       |
| 5              | Companion board for checking proper operation of the PLT hardware in the field.                                                                                                                                                                                                                            |
| 6              | Redesigned software: <ul style="list-style-type: none"> <li>▪ Added new test easily.</li> <li>▪ Modified test sequence.</li> <li>▪ Created new test.</li> </ul>                                                                                                                                            |
| 7              | Added remote database for: <ul style="list-style-type: none"> <li>▪ DUT serial number acquire</li> <li>▪ DUT Bluetooth LE address acquire</li> <li>▪ Per DUT memory data acquire</li> <li>▪ Common memory data acquire</li> <li>▪ DUT final result update</li> <li>▪ DUT access counter update.</li> </ul> |
| 8              | PLT hardware firmware update software tool.                                                                                                                                                                                                                                                                |

## 6.2.3 Known Issues of v\_1.0.0.0

Table 9. 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.                                                                                                                                                      |

## 6.2.4 Known Limitations of v\_1.0.0.0

Table 10. 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.

## 7. Document Revision History

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

| Revision | Date         | Description                                              |
|----------|--------------|----------------------------------------------------------|
| 1.02     | July 9, 2026 | Release of the Connectivity Production Line Tool 3.0.0.0 |
| 1.01     | Nov 18, 2025 | Release of the Connectivity Production Line Tool 2.0.0.0 |
| 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<br>or unmarked | The content of this document has been approved for publication.                                                              |

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