

PLT-300A Production Line Tool

Product Brief Rev 2 - 2021-12

The PLT-300A is the 2nd generation Production Line Tool designed for Linux flashing and testing in a production environment. The standardized hardware is securely connected to PLTcloud and supports firmware programming and test automation of connected devices.





Features

- Programmable power supply to 24V
- Program MCUs via JTAG, SWD, UART, USB
- MicroSD card flasher
- Measure voltage, current, resistance, capacitance
- UART communication
- BLE Low-Level (LL) and GATT commands
- CAN bus communication
- 1 TB solid-state drive (SSD)
- Cloud-based firmware deployment
- Automated test reports
- Barcode scanner support
- NFC tag writer support
- Label printer support
- HDMI display port

Firmware Programming

- ESP32
- nRF52
- nRF91
- STM32

Comprehensive list of supported program targets is found in the PLT Documentation: docs.pltcloud.com

Applications

- Firmware programming
- · Device provisioning
- In-circuit testing
- · Finished goods testing
- Production logging

Power

Input Power: 100~240VAC, 50~60Hz

Supply Voltages: 1.8V, 3.3V, 5V, Variable 1.5~24V

(up to 2A each)

Electrical Measurements

The PLT-300A can connect with up to 45 analog test points (13 are directly connected to the multimeter circuit and the rest are routed through MUX circuits to the multimeter).

Measurement	Range	Accuracy
Voltage	-10V ~ 10V	+/-5%
Current	0.2µA ~ 2A	+/-5%
Resistance	0.1Ω ~ 60ΜΩ	+/-4%
Capacitance	1pF ~ 66mF	+/-5%
Frequency	0.1Hz ~ 66MHz	+/-2%

Logic Measurements

The PLT-300A can connect with up to 48 digital test points (15 are directly connected to the internal processors and the rest are routed through MUX circuits).

UART Testing

• 2 UART channels

• Speed: 300bps ~ 1Mbps

• Flow Control: Xon/Xoff, DTR/CTS

CAN Bus Testing

CAN Bus standards are supported by the PLT-300A:

CAN 2.0A	11-bit
CAN 2.0B	29-bit
ISO-11898-1	-
ISO-11898-2	1Mbps
ISO-11898-3	40kbps ~ 125kbps
ISO-11898-4	-
ISO-11898-5	1Mbps
ISO-11898-6	1Mbps

IMPORTANT NOTE: Additional test points and test capabilities can be accommodated via customized pogo pin cassettes.

Security

The PLT-300A is ioXt certified. It includes a Secure Element to protect the integrity of the connection with PLTcloud. All communication with PLTcloud, including the deployment of firmware and reporting of test results, are protected using TLS1.2 mutual authentication.

Front Connectors

- USB Peripherals 2x USB-A
- SD Card microSD push-push slot

Rear Connectors

- AC Power IEC 320 C13
- SWD 6-pin TC2030-IDC
- DUT Power 8-pin Molex Micro-Fit
- DUT Signal HD78
- DUT USB USB-C
- CAN bus 2x wire terminal
- USB Peripherals 4x USB-A
- Ethernet RJ45 Cat6a
- Display HDMI

Supported Scanners

- Zebra (Symbol) LS2208 (1D)
- Zebra (Symbol) LS4208 (1D)
- Zebra (Symbol) DS4208 (2D)
- Zebra (Symbol) DS6708 (2D)
- Zebra (Symbol) DS8108 (2D)

Refer to the PLT Documentation (docs.pltcloud.com) for a complete list of supported scanners.

Supported Label Printers

- Zebra GX430t
- Zebra QLn220

Refer to PLT Documentation (docs.pltcloud.com) for a complete list of supported label printers.

Dimensions & Weight

- 2U format for rack mounting
- 355mm x 251mm x 87mm (feet add 14mm to the height)
- 3.2 kg (4.7 kg with cables and packaging)

Packaging

Package includes PLT-300A, AC power cord, Cat6 ethernet cable.

bcdevices.com









