

FR ICUBE

True Parallel Panel-target Standalone In-System Programmer



Overview

FlashRunner Cube is a high-integration in-system gang programmer, based on the FlashRunner technology. FlashRunner Cube is designed for programming multi-PCB panel assemblies.

Features

- Extremely fast programming (it is one of the fastest in-system programming system on the market);
- Standalone operations (projects and code images stored on memory cards);
- Compact and robust design for production environments.

FR ICUBE

True Parallel Panel-target Standalone In-System Programmer

FlashRunner Cube Hardware Features

FlashRunner features state-of-the-art electronics to provide you with high integration flexibility in a compact footprint.

- 12 to 25V DC power supply input;
- Seven digital I/O lines;
- One programmable output power voltage;
- One programmable clock output;
- Secure Digital memory cards (up to 2 GB);
- On-board dynamic memory;
- On-board timekeeper and calendar;
- Optoisolated inputs for project selection;
- Optoisolated command inputs (START, START_ENA and STOP);
- Three optoisolated status outputs (FAIL, PASS, BUSY);
- Optoisolated RS-232/Ethernet channel.

FlashRunner Cube open architecture makes its firmware easily upgradable to support both new devices and new features.

FlashRunner Cube Software Features

FlashRunner Cube is set up and controlled via ASCII-based commands. FlashRunner can receive and execute commands in two ways:

- Over the RS-232, USB or Ethernet connection (Host mode);
- Via “scripts” stored in its SD card (Standalone mode).

In the first case, FlashRunner Cube is controlled by a host system; in the latter case, FlashRunner Cube works in standalone mode and is fully autonomous.

- Fully autonomous standalone mode thanks to its SD memory cards;
- Controllable by any host system through a terminal utility and simple ASCII protocol;
- Unlimited projects (scripts);
- Interface Library DLL to control the instrument from within user written applications;
- Optional Data Protection System to make the contents of the binary file to be programmed to the target device not readable (and not duplicable) by non-authorized people;
- Erase, blank check, program, read, verify, oscillator trimming, etc.
- Friendly set-up user interface (Windows platform)
- Supports microcontrollers, serial memories and direct programming of parallel memories (eMMC, NAND and NOR)

FlashRunner comes with a Windows utility that allows you to communicate with the instrument and perform the most common operations: send commands, manage SD card files, update the instrument’s firmware, etc.

FR ICUBE

True Parallel Panel-target Standalone In-System Programmer



FRC_GP_02 2 true parallel ISP channels system.

FlashRunner Cube series is targeted at Manufacturing Mass Production and can work either in full stand alone mode or controlled by host system. Multiple programming up to 2 identical devices at a time. Suggested when you have up to 2 identical devices, in the same panel or in the same board.

FR_GP_02 may be configured also for direct programming of NOR and eMMC memories.

FRC_GP_04 4 true parallel ISP channels system.

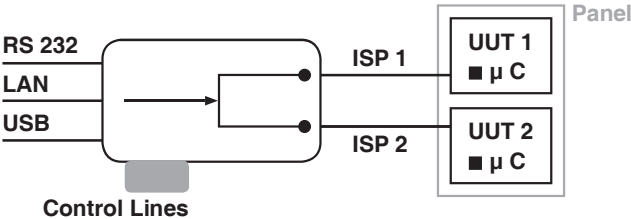
FlashRunner Cube series is targeted at Manufacturing Mass Production and can work either in full stand alone mode or controlled by host system. Multiple programming up to 4 identical devices at a time. Suggested when you have up to 4 identical devices in the same panel.

FRC_GP_08 8 true parallel ISP channels system.

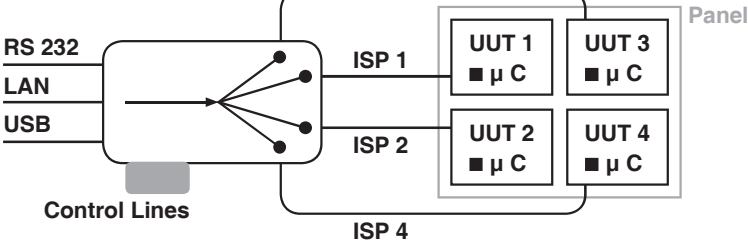
FlashRunner Cube series is targeted at Manufacturing Mass Production and can work either in full stand alone mode or controlled by host system. Multiple programming up to 8 identical devices at a time. Suggested when you have up to 8 identical devices in the same panel.

Typical Applications

FR_GP_02



FR_GP_04



FR_GP_08

