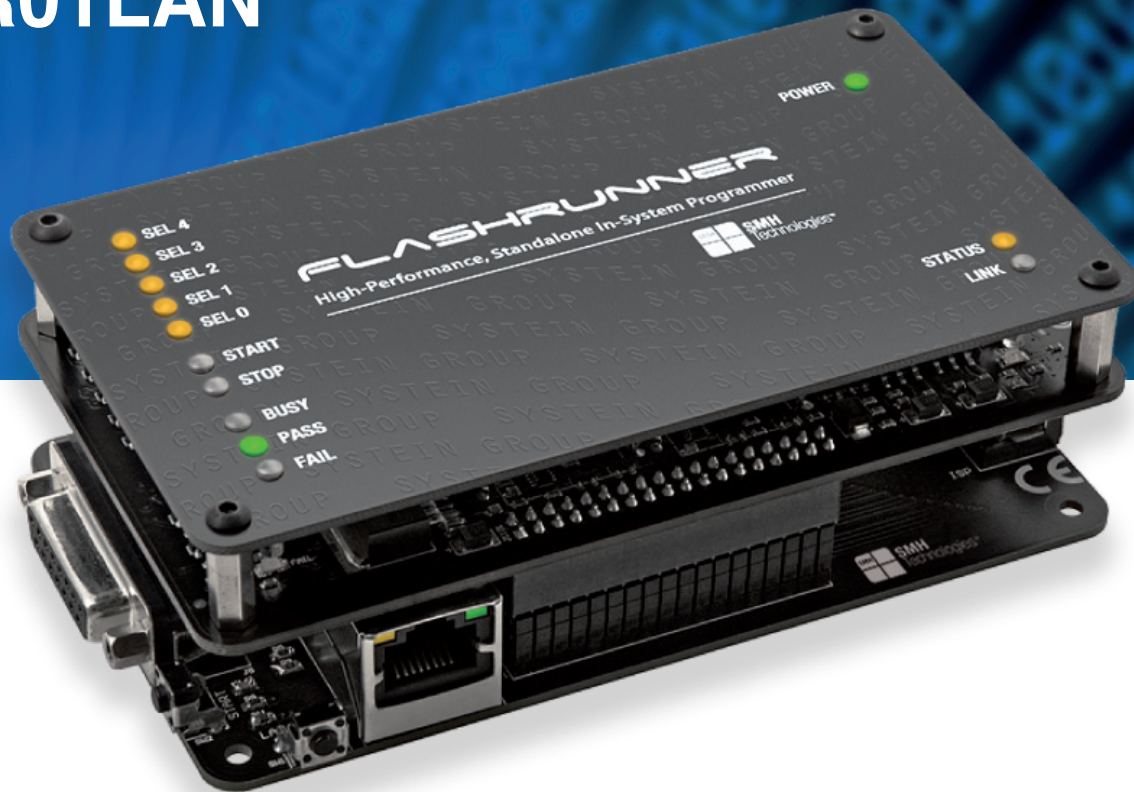


FLASHRUNNER

FR01LAN



Overview

FR01LAN belongs to FlashRunner I series, a range of high performance, standalone In-System Programmers specific for Flash-based microcontrollers and serial memories. FlashRunner I series is targeted at production environments and can work either in full standalone mode or controlled by a host system.

All of the models of the FlashRunner I series have been designed for maximum performance and reliability.

Features

- Fast programming algorithms developed to reach the memory technology speed limit of the target device;
- Easy ATE integration;
- Standalone operations (projects and code images stored on a memory card);
- Also controllable by any host system via RS-232 or Ethernet (depending on the model);
- Supports most ISP protocols (BDM, JTAG, SPI, I2C, MON, ICC, SCI, etc.);
- Flexible, fully configurable;
- Compact and robust design for production environments;
- Data integrity guaranteed (every data transfer to/from the host system or SD card is CRC tagged).

FlashRunner I Series Hardware Features

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

- 9 to 24V DC power supply input (110/220V AC for the FR01PRO model);
- Five digital I/O lines;
- Two digital I/O or analog output lines;
- Two programmable output voltages (0 to 15V, 0.25A and 0 to 5V, 0.5A);
- One analog input line;
- One programmable clock output;
- Secure Digital memory card (up to 2 GB);
- 512 bytes on-board dynamic memory;
- On-board timekeeper and calendar;
- I/O protection;
- Optoisolated inputs for project selection;
- Two optoisolated command inputs (START and STOP);
- Three optoisolated status outputs (FAIL, PASS, BUSY);
- Optoisolated RS-232/Ethernet channel.

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

FlashRunner I Series Software Features

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

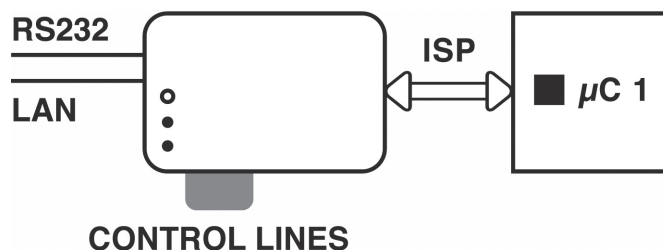
- Over the RS-232 or Ethernet connection (Host mode);
- Via "scripts" stored in its SD card (Standalone mode).

In the first case, FlashRunner is controlled by a host system (e.g. Windows HyperTerminal); in the latter case, FlashRunner works in standalone mode and is fully autonomous.

- Fully autonomous standalone mode thanks to its SD memory card (FAT16);
- Controllable by any host system through a terminal utility and simple ASCII protocol;
- Unlimited projects (scripts);
- Log files;
- Erase, blank check, program, read, verify, oscillator trimming, etc.

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.

Typical Application



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