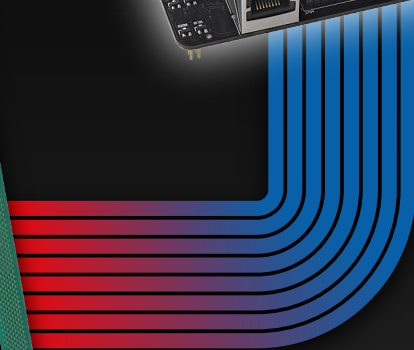
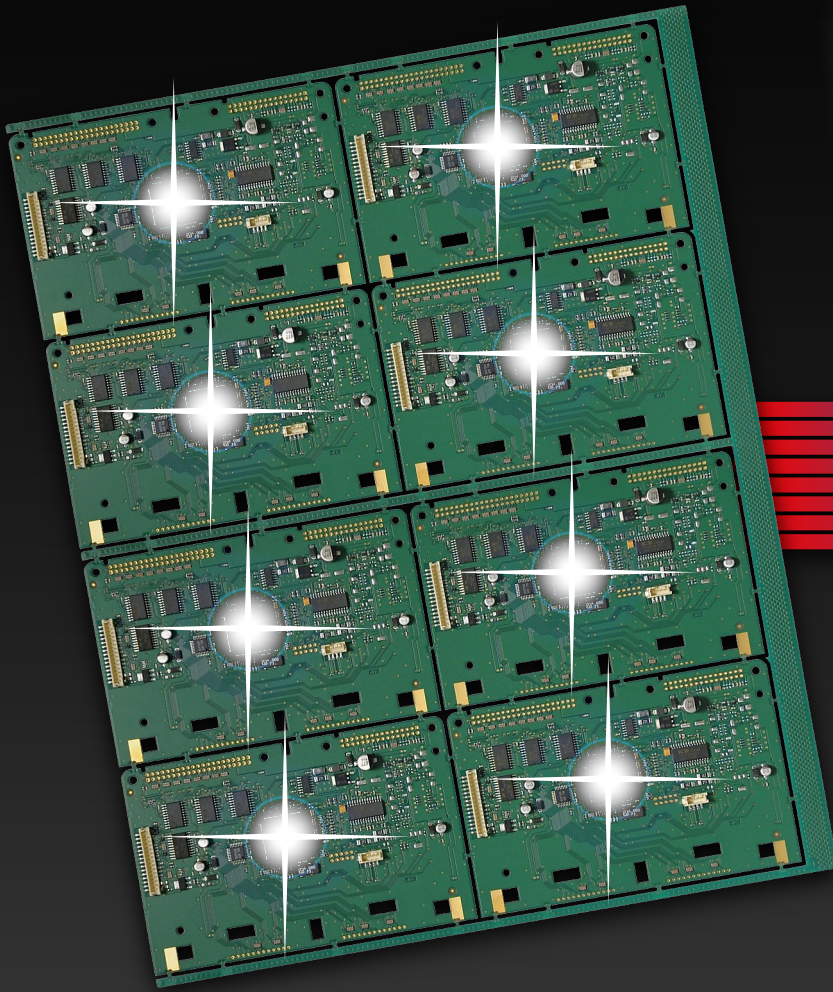


# FlashRunner

## 8-Channel In-System Programmer



**Multi-PCB Programming**  
**Extremely Compact**  
**Test-Fixture Oriented**

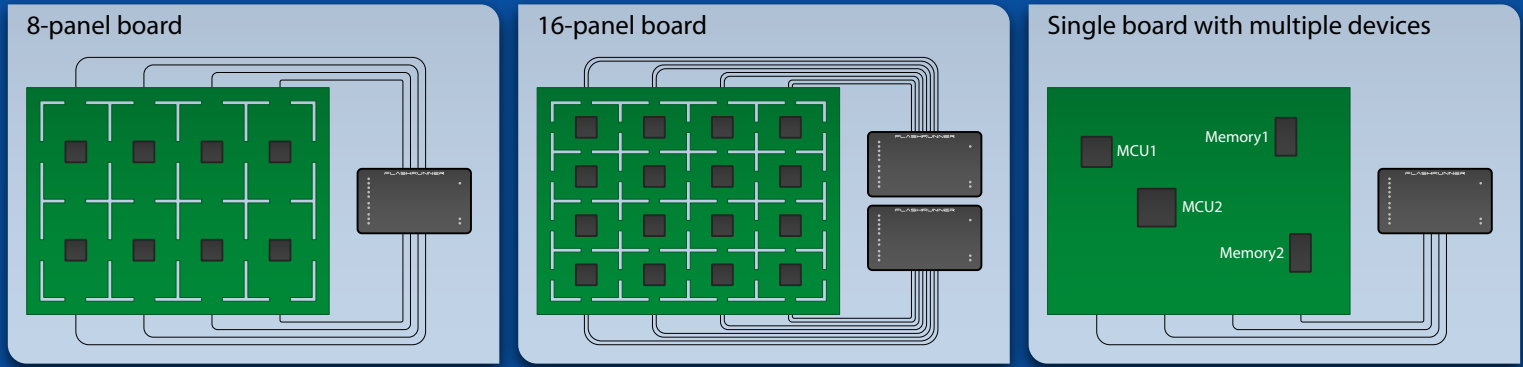
**Ideal for Manufacturing Mass Programming**

**Free  
30-Day  
Trial**



**SofTec Microsystems™**  
Designed to Solve

# Typical Applications



## FlashRunner FR01M01 8-Channel In-System Programmer

FlashRunner FR01M01 is a member of the FlashRunner I Series of universal, standalone in-system programmers. It is targeted at production environments, easily and seamlessly integrates on test fixtures and can work either in full standalone mode or controlled by a host system. FlashRunner FR01M01 provides connections for programming up to eight ISP sites thanks to the built-in ISP lines multiplexing.

- Eight ISP sites (multiplexed);
- Fastest programming algorithms, approved by silicon manufacturers;
- 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;
- Supports most ISP protocols (BDM, JTAG, SPI, I<sup>2</sup>C, MON, ICC, SCI, etc.);
- Flexible, fully configurable;
- Compact and robust design for production environments;
- Data integrity guaranteed.



### Hardware Features

- 9 to 24V power supply input;
- Five digital I/O lines per ISP site;
- Two digital I/O or analog output lines per ISP site;
- Two programmable output voltages (0 to 14.5V, 250mA and 0 to 5.5V, 500mA) per ISP site;
- One programmable clock output per ISP site;
- 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);
- One optoisolated RS-232 channel;
- One optoisolated Ethernet channel.

### Software Features

- Fully autonomous standalone mode thanks to its SD memory card (FAT16);
- Controllable by any host system through a terminal utility and simple ASCII protocol;
- Up to 32 hardware-selectable projects (scripts);
- Unlimited software-selectable projects;
- Detailed log files;
- Erase, blank check, program, read, verify, oscillator trimming, etc.

*The top panel protects the main hardware and replicates status LEDs. Can be easily removed if space is an issue when integrating in your programming/testing system.*

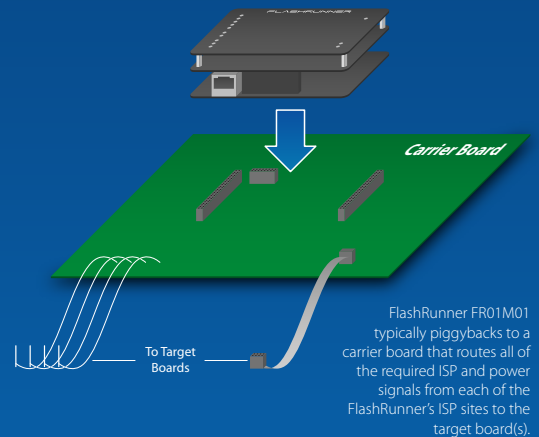
*A built-in timekeeper/calendar allows for detailed, timestamped logs. Production problems can thus be traced back to the exact moment they happened.*

*FlashRunner uses a standard, removable Secure Digital card (up to 2GB) to store binary image files, projects and log files.*

*Mounts easily inside ATE and test fixtures. Compatible with Agilent, Teradyne, Genrad, and other major test systems.*

*The connection layer provides header connectors to interface to your programming/testing system. Includes optoisolation circuitry and an Ethernet connector to interface to a host system.*

*The programming engine layer (common to all FlashRunner I Series instruments) contains all of the FlashRunner electronics in a compact footprint.*



## FlashRunner supports the most important Silicon Manufacturers:



FlashRunner is available from and supported by a worldwide network of Sales Offices and Support Alliance Members.

Brazil • Canada • China • Denmark • Egypt • Finland • France • Germany  
 Hong Kong • India • Ireland • Italy • Japan • Malaysia • Mexico • Norway  
 Portugal • Singapore • South Africa • South Korea • Spain • Sweden  
 Switzerland • Taiwan • Thailand • UK • USA



www.softecmicro.com | info@softecmicro.com