



# ProLINE-RoadRunner XLF

Just-in-time Automotive Programming Solution  
for Siemens Assembly Machines

THE WORLD'S ONLY JUST-IN-TIME AUTOMATED DEVICE PROGRAMMING SYSTEM – DELIVERING THE HIGHEST QUALITY AT THE LOWEST COST PER DEVICE

**Benefits of moving from outsourcing to inline device programming, using ProLINE-RoadRunner:**

- Simplified inventory management
- Less material handling
- Just-in-time programming
- Supply chain efficiencies
- Lean Manufacturing
- Improved time-to-market
- Immediate response to code changes
- Higher manufacturing profits

**Benefits of moving from programming-at-test to programming-at-placement, using ProLINE-RoadRunner:**

- Reduced programmer/test time
- Optimize in-circuit test
- Reduced number of testers
- Optimal utilization of floor space
- Balance the production line
- Place only verified devices
- Reduced board scrap costs
- High throughput at lower cost
- Faster code changes using TaskLink for Windows™
- Higher manufacturing profits

**ProLINE-RoadRunner XLF** is a high-speed, inline Flash memory and microcontroller programming system that mounts directly onto Siemens SIPLACE Assembly machines without consuming any additional floor space or altering the production line.

**Networked Connection –**

RoadRunner XLF can be operated both locally and through a network interface. Design changes can be made as needed and downloaded directly to RoadRunner's own IP address.

**Accelerated NPI – Data I/O's** Connected Programming Solutions allows ProLINE-RoadRunner XLF customers to link their programming processes with TaskLink™ for Windows® (TLWin) to quickly communicate firmware changes around the globe. With TaskLink, dramatically reduce errors and delays caused by software changes and interdepartmental communications.

**Built-in Diagnostics/Job Statistics**

Statistics are written to RoadRunner's PC card after the programming task is completed. Statistics are saved back to TaskLink for analyzing production yields and throughput.





# ProLINE-RoadRunner XLF

## InLine Programming Solutions for Siemens SIPLACE Assembly Machines

### SPECIFICATIONS

#### SMT Platforms Supported: Siemens

- 80F4, 80F5, HF, HS, S, \*X3, \*D-series
- \*supported using S-type feeder table
- HF – RR XLF is supported on locations 2 & 4
- X3 – RR XLF is supported on location 4

#### Typical Product Dimensions

- Length: 1180 mm (46.5 in.)
- Width: 93.3 mm (3.91 in.)
- Height: 520 mm (20.5 in.)
- Net weight: approx 21 kg (45 lbs.)

#### Device Support

The ProLINE RoadRunner XLF supports a wide range of microcontroller, memory and NAND Flash devices.

Maximum package geometries up to (L)32 mm x (W)32 mm x (H)6 mm

#### Annual Programmer Support (APS)

The first year of support is included in the system purchase price which can be extended via annual support agreement renewal. The APS support program covers both hardware and system software (consumables are not included)

#### High Insertion Count (HIC) adapters

Using HIC socket adapter modules, the RoadRunner produces the highest first-pass yields and lowest cost per programmed device available

#### Changeover Time (New Job Set-up)

- < 15 minutes
- Change reel (13 inch reel diameter)
- Empty cover tape take-up reel
- Change socket adapter
- Insert new job card
- Insert carrier tape and align pocket
- \*Includes tape reconfiguration using adjustable tape-in module

#### Changeover Time (consumables)

- < 1 minute
- Replace PNP nozzle tips
- Replace socket adapters

#### Co-planarity Alteration

- Leaded-device co-planarity alteration 1 mil

#### Standard Tape-In

- Adjustable tape-in module supports 32 mm and 44mm tape widths

#### Tape-In Options

- Adjustable tape-in module supports 16, 24, 32 mm tape widths

#### Reel Size

- 32/44 mm tape
- 13 inch diameter reel (max)

#### Optional Reel Size

- 16/24/32 mm tape
- 13 inch diameter reel (max)

#### Operating Temperature Range

- +15° to +40°C (+60°F to +104°F)
- Temperature stabilization time > 8 hours
- Operating humidity, non-condensing: 20 to 80%

#### Regulatory Compliance

CE, OSHA

### REQUIREMENTS

#### Siemens

- Direct mount requires Siemens Hook

#### Power Requirements

- AC Input: 110/240 V~, 50/60 HZ (single phase)
- AC Input Power: 100 W

#### Air Requirements

- Regulated Air to RoadRunner: 75 PSI ± 5 PSI @ 4 SCFM

#### Personal Computer

- PC with PCMCIA card drive running Microsoft Windows 95, 98, NT, or XP. (Windows NT may require the purchase of additional software drivers or a card drive)
- Hard disk space: 25 MB minimum for TaskLink files
- CD ROM drive
- Serial or bus mouse
- Memory card drive
- VGA monitor with 640 x 480 (minimum resolution)

#### Socketing Technology

Standard burn-in sockets (5,000 – 10,000 insertions per socket)

High Performance Sockets (HPS) for .8 mm BGA footprint (30,000–40,000 insertions per socket)

High Insertion Count (HIC) For BGA, TSOP, QFP (250,000 insertions per socket)

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