The ProLine-Roadrunner is a high-speed, in-line Flash memory and microcontroller programming system that mounts directly onto the feeder banks of Fuji NXT OR aim SMT placement machines without consuming any additional floor space or altering the production line.

**Networked Connection** – the RoadRunner can be operated both locally and by way of the network interface. Design changes can be made as needed and downloaded directly to the RoadRunner’s own IP address.

**Accelerated NPI** - Data I/O’s Connected Programming Solutions allows ProLINE-RoadRunner users to link their programming processes with TL-WIN™ to quickly communicate firmware changes around the globe. With software changes communications from engineering to production, time and errors are dramatically reduced.

**Built-in Diagnostics/Job Statistics**
Are written to the RoadRunner’s PCMCIA card at the end of the programming task. Statistics are saved back to TaskLink (TLWIN) for analyzing production yields and throughput. Using the Remote Monitoring software, system managers can observe the operations of their RoadRunners anywhere in the world on the same network.
### SPECIFICATIONS

**SMT Platforms Supported**
- **Fuji**
  - NXT or AIM
- **Fuji (MFU) also available**
  - MFU, IP3E, QP242E, QP351E

**Typical Product Dimensions**
- Length: 990mm (39 in.)
- Width: 78.5mm (3.1 in.)
- Height: 483mm (19.02 in.)
- Protrusion distance from machine: 700mm (27.6 in.)
- Net weight: approx 16kg (35.2lbs.)

**Device Support**
The ProLINE RoadRunner supports a wide range of microcontroller, memory and NAND Flash devices in package geometries up to 21.65mm wide, 15mm long, and 3mm high.

**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

### REQUIREMENTS

**Fuji**
- Direct mount, no additional parts required
  - Supports both NXT and AIM
  - Simple conversion to both placement systems

**Power Requirements**
- AC Input: 110/240 Vac, 50/60 HZ (single phase)
- AC Input Power: 100W

**Air Requirements**
- Regulated Air to RoadRunner Unit: 75PSI +/-5 PSI @ 4 SCFM

**Personal Computer**
- PC with PCMCIA card drive running Microsoft Windows 95, Windows 98 or Windows NT, XP (Windows NT may require purchase of additional software drivers or a card drive)
- Hard disk space: 25MB 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 .8mm 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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