ProLINE-RoadRunner™
For Panasonic Placement Machines

Data I/O

ProLINE-Roadrunner is an in-line high-speed flash programming system that mounts directly onto the Panasonic MPAV2B, MSF, MPAG3 and MCF series feeder bank without consuming additional floor space or altering the production line.

Process Control Software (Tasklink™ for Windows®), is installed off-line on a secured personal computer. A system administrator uses TaskLink to create and secure programming Jobs. Completed Jobs are saved to a PCMCIA card then transferred to the ProLINE-RoadRunner to run a specific Job.

Built-in Diagnostics and Job Statistics are written back to the RoadRunner's PCMCIA card at the end of the production run. Statistics are saved back to TaskLink for analysing performance results to assist in optimizing production yields and throughput.

Expand Programming Capacity as needed by simply installing a second RoadRunner unit onto the same placement machine, or install a second RoadRunner unit onto a different placement machine on the same production line. This is ideal for newer products using higher-density Flash devices, or to further reduce cycle times required with increased capacity demands. Both alternatives require no additional floor space.

WHETHER YOU CURRENTLY OUTSOURCE DEVICE PROGRAMMING OR PROGRAM IN-LINE AT TEST, PROLINE-ROADRUNNER OFFERS SUBSTANTIAL BENEFITS.

Benefits of moving from outsourcing to in-line device programming, using ProLINE-RoadRunner

- Simplify inventory management
- Less material handling
- Just in time programming
- Supply chain efficiencies
- Lean Manufacturing
- Improve 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

- Reduce programmer/test time
- Optimize test (Expand Coverage)
- Reduce number of testers
- Optimize floor space utilization
- Balance the production line
- Place only verified devices
- Reduce board scrap costs
- High throughput at lower cost
- Fast code changes using TaskLink
- Higher manufacturing profits

Panasonic MSF

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1-800-3-DATAIO
www.dataio.com

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SPECIFICATIONS

Physical Size and Weight

– Length: 1022mm (40.2in.)
– Width: 78.5mm (3.1in)
– Height 483 (19.02in.)
– Protrusion distance from machine L700mm (27.6in)
– Net weight approx 17.7kg (39lbs)

Device Programming

Standard Flash Programming Speeds (Device Dependent)

– 3-4 year old devices
4 devices @ approx 1.2 sec/Mbit
– 1-3 year old devices
4 devices @approx 0.8 secs/Mbit
– 0-1 year old devices
4 devices @approx 0.2 secs/Mbit

High-Programming Speeds (Device Dependent)

– Intel PXA261 128 Mbit MCP device
4 devices in 94 secs
– M-Systems 128 Mbit Disk on Chip
4 devices in 36 secs
– AMD 128 Mbit device AM29DL642G
4 devices in 53 secs
– Samsung 256 Mbit device K95608
4 devices in 30.4 secs
– SanDisk 128 Mbit NAND SDTNFAH
4 devices in 43.5 secs
– Sharp 128 Mbit MCP LRS1828
4 devices in 49 seconds
– STM 64 Mbit NOR device
4 devices in 16 seconds
– Motorola MC9S12 DG128B 16 bit MCU
4 devices in 42 secs
– Leaded-device co-planarity alteration 1 mil
– Optional tape-in modules: 16, 24, 32mm and fully adjustable.
– Reel size: 13 inch Max

Changeover Time (New Job Set-up)
< 15 minutes*

– Change reel (13 inch reel dia)
– Empty cover tape take-up reel
– Change socket adapter
– Insert new job card
– Insert carrier tape and align pocket

* Does not apply to reconfigurations requiring a change in tape width

Changeover Time (consumables)
< 1 minute

– Replace PNP nozzle tips
– Replace socket adapters

Operating Temperature Range

– +15 to +40 C (+60oF to +104oF)
– Temperature stabilization time > 8 hours
– Operating humidity, non condensing 20 to 80%

Regulatory Compliance

– CE OSHA

REQUIREMENTS

SMT Platform

– Panasonic placement machines (MCF, MSF, MPAV2B, MPAG3)
– No modifications to the Panasonic Placement Machine

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 Microsfot Windows 95, Windows 98 or Windows NT (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)

(ROI) CALCULATOR

Let us share the benefits of implementing ProLINE-Road-Runner into your production environment through:

– Cost-Benefit Analysis
– Impacts to Contribution Margin
– Impacts to Operating Costs
– Production Line Capacity Report

For more information contact your local Data I/O representative. We will provide up to four impact-analysis charts that highlight the impacts of moving from your current device programming process to the ProLINE RoadRunner.