



# ProLINE-RoadRunner™

Programming Site License



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



**ProLINE-RoadRunner** is an in-line high-speed Flash programming system that mounts directly onto the major flexible fine pitch Surface Mount Technology placement machine, without consuming additional floor space or altering the production line.

**License** — The number of usable PNP probes and usable sockets is configured in a one-time license purchase and can be upgraded to increase probe use.

**Configuration Derivative** versions are field expandable to increase the number of programming sites to keep up with the demands of increased densities and decreased production line TAKT time.

**Line-Balancing** Multi-Product site configurations cater to high and low Flash devices mounted in the same placement machine. For example: 4 site RR programming 256Mbit device throughput is 36.5 seconds, and 1 site RR programming 64Mbit device throughput is 40 seconds.

**Expand Programming Capacity** as needed by simply installing a second RoadRunner unit onto the same placement machine, or by installing a second RoadRunner unit onto a different placement machine on the same line. This is ideal for newer higher-density Flash device products, multi Flash vendor placement or to further reduce production line TAKT time as demands on capacity increase. Both alternatives require no additional floor space.

## INTRODUCING THE LOWER COST ENTRY TO THE IN-LINE PROGRAMMING ENVIRONMENT.

Low-density Flash production often does not require expensive, high throughput capital equipment. There is now a ProLINE-RoadRunner™ configuration to suit all your manufacturing environments. The industry-acclaimed 4-site ProLINE-RoadRunner is now available in 1, 2, and 3 site derivative versions. The entry-level products give you the benefits of moving from outsourcing to in-line device programming, using the ProLINE-RoadRunner on your SMT placement equipment, simplifying inventory management, improving supply chain efficiencies and increasing manufacturing profits with minimal capital outlay.

When the TAKT time of your line decreases, increasing throughput demands, then simply upgrade your existing entry level ProLINE-RoadRunner to more sites.

### Throughput Comparisons:

ProLINE RoadRunner		1-Site RR 8 sec Handling Time		2-Site RR 11 sec Handling Time	
3rd gen (0.5 sec/M bit)	Program/Verify (up to 4 devices)	RR Throughput	RR Cycle Time	RR Throughput	RR Cycle Time
4Mbit	2 sec.	360 pph	10 sec.	553 pph	6.5 sec.
8Mbit	4 sec.	300 pph	12 sec.	480 pph	7.5 sec.
16Mbit	8 sec.	225 pph	16 sec.	378 pph	9.5 sec.
32Mbit	16 sec.	150 pph	24 sec.	266 pph	13.5 sec.
64Mbit	32 sec.	90 pph	40 sec.	167 pph	21.5 sec.
128Mbit	64 sec.				
256Mbit	128 sec.				
ProLINE RoadRunner		3-Site RR 8 sec Handling Time		4-Site RR 11 sec Handling Time	
3rd gen (0.5 sec/M bit)	Program/Verify (up to 4 devices)	RR Throughput	RR Cycle Time	RR Throughput	RR Cycle Time
4Mbit	2 sec.	600 pph	6.0 sec.	720 pph	5.0 sec.
8Mbit	4 sec.	540 pph	6.6 sec.	654 pph	5.5 sec.
16Mbit	8 sec.	450 pph	8.0 sec.	553 pph	6.5 sec.
32Mbit	16 sec.	337 pph	10.6 sec.	423 pph	8.5 sec.
64Mbit	32 sec.	225 pph	16 sec.	288 pph	12.5 sec.
128Mbit	64 sec.			175 pph	20.5 sec.
256Mbit	128 sec.			98 pph	36.5 sec.

**Data I/O Corporation:** 10525 Willows Road NE, P.O. Box 97046, Redmond WA 98073-9746, USA  
(425) 881-6444 · (800) 332-8246 · <http://www.dataio.com>

**Data I/O GmbH:** Lochhamer Schlag 5, 82166 Graefelfing, Germany · 089 858580 · <http://www.dataio.de>

**Data I/O China:** Room 1010, 10/F, MLC Millennia Plaza, 663 King's Road, North Point, Hong Kong · 852-2258-1533

**Data I/O Japan:** Saisho Building 7F, 8-1-14, Nishigotanda, Shinagawa-ku, Tokyo 141-0031, Japan · 03-3779-2151

**Data I/O Canada:** 6725 Airport Road, Suite 102, Mississauga, Ontario L4V 1V2 · (905) 678-0761

For more information on our distributors around the world, please visit our Web site at <http://www.dataio.com>