



PS588

**There is no faster, better value
Automated Programming Solution.**

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

System Components

- Automated programming system with pick and place, marking and media transfer sub-systems
- Handler throughput – 1400 cph (Tray–Tray, No Vision, No Marking)
- X, Y, Z and theta high performance servo drives
- Pick and Place accuracy: 0.038 mm (0.0015")
- Theta axis resolution: 0.07 degrees
- Placement force < 10 N
- Package size range: 2 x 2 mm to 44 x 44 mm SOIC 8 – QFP256, includes 600 mil DIP
- *Auto-optimize* to optimize programmer performance
- Easy to use GUI provides simple machine setup and diagnostics
- Quick-teach vision system for device alignment optimizes throughput

Programming Highlights

- Universal and FlashCORE high speed programmers reduce programming times enabling support of very high density devices.
- Twelve programming stations program 48 devices simultaneously.
- Programming capacity: No Limit.
- High Insertion Count (HIC) Socket Adapters for μ BGA, TSOP, MLF and QFP packages deliver the lowest insertion cost per device in the industry.
- High Performance Socket (HPS) Adapters give the fastest BGA delivery in the industry and higher performance than standard burn-in BGA sockets.
- Package adapter changeover times typically achieved in seconds per programming station.
- Independent programming stations ensure high programming yields.
- Enhanced serialization eliminates device duplication.
- Serial number pass-through to marking option.
- "Device in socket" test eliminates programming errors.
- Unique programmer selection feature allows alternate jobs to be loaded quickly.

Device Support

- Flash Memory: NOR, NAND, Disk on Chip, MCP
- Microcontrollers
- Logic

Package Support

- PLCC, SOIC, SON, WSON, SSOP, CSP (BGA, μ BGA and FPGA), QFP, TQFP, TSOP, MLP, MLF

Device Testing

- Continuity, electronic ID, verify, checksum, blank check, OTP blank check, miss-insertion, compare, test, verify, backward device, two pass verify, test vectors

I/O Media Options

- Any input/output combination possible
- Tape input/output or tube input/output or 2 JEDEC/Non-JEDEC tray locations (manual and/or automated tray feeder)
- Media transfer available without programming (i.e., tape to tray, tray to tape, Includes marking, etc.)
- Tape Input: 12–56 mm
- Tape Output: 12–56 mm
- Cover tape pressure or heat sealer
- Tube Input and Output (SOIC 8-44, PLCC 20-84, DIP 300/600mil)
- TF20 Tray feeder Input/Output JEDEC
- TF30 Tray feeder Input/Output Non-JEDEC



Marking Options

- CO₂ Laser
 - Power: 0-10 Watts
 - Spot size: 0.29 mm
- Labeler
 - Type: Thermal
 - Labels: Standard materials including regular Polyester and Kapton
 - Size: Labels to match device packages

System PC

- Processor: Pentium 4
- Operating System: Windows XP
- Drives: USB2 and CD RW
- Network: RJ45 Ethernet (LAN/WAN)

Pick and Place System Software

- User interface:
 - Monitor: 800 x 600 SVGA 12.5" TFT touch screen display
 - Features and Reports
 - Task definition, set-up, report files
 - Error tracking

Service Spares

- PS588 Maintenance Kit
- PS588 Basic Spares Kit
- PS588 Supplemental Spares Kit
- PS-FlashCORE Spares Kit
- PS-Universal Spares Kit

Support Options

- Operator training
- Annual maintenance contracts
- Device Support contracts

Electrical/Power Requirements

- Input voltage: 208 – 240 VAC, 50/60 Hz, 1 Phz
- 10 Amps Max

Compressed Air Usage

- Air pressure: 5.5 bar (80 PSI)
- Air flow: 85 liters/min (3 CFM)

Operating Temperature

- +13°C to +30°C (55°F to 86°F)

Humidity

- 35% to 90% RH Non-Condensing

Noise

- Less than 60 db

Dimensions (less Option Bay)

- Floor space length: 1117 mm (44") (includes monitor)
- Floor space width: 1473 mm (58") (includes monitor)
- Length: 889 mm (35")
- Width: 762 mm (30")
- Height: 1625 mm (64")

Shipping Dimensions (less Option Bay)

- Length: 1625 mm (64")
- Width: 1220 mm (48")
- Height: 1905 mm (75")

Shipping Weight

- 432 kg (950 lbs).

Regulatory Compliance

- CE



North America: Data I/O Corporation, Redmond, Washington, USA

Website: www.dataio.com
e-mail: SalesDIOAmerica@dataio.com

Europe: Data I/O GMBH, Graefelfing, Germany

Website: <http://www.dataio.de/>
e-mail: EuropeSales@dataio.com

China: Data I/O Electronics (Shanghai) Co. Ltd, Shanghai, China, PRC

Website: www.dataio.cn
e-mail: ChinaSales@dataio.com

Asia: To Contact Local Data I/O Representatives throughout Asia.

Website: www.dataio.com/contact

South America: To Contact Local Data I/O Representative in South America

Website: www.dataio.com/contact



PS 588

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PS588 Automated Device Programming System for High Mix to High Volume Applications

Throughput

- Fastest universal automated programming solution
- Program and verify speeds of less than 0.19sec/Mbit

Cost

- Lowest programming cost per part in the industry
- Combination of high output and low consumable cost equates to a secure capital investment

Quality

Our Industry proven platform ensures quality products from day one.

Versatile and Reliable

Fast changeover, easy configuration, and high reliability maximize production time.

Capacity

Offering 12 programming stations providing up to 48 device sockets.

Protected Investment

PS Family modular concept sharing same GUI, programmers, adapters, algorithms, programming job files and feeder options.

Technology

- FlashCORE™ is the same high-speed architecture used in the industry leading FlashPAK™, PS300FC™, PS288FC™ and ProLINE-RoadRunner™
- Fastest programming performance includes verification time
- No limit to programming densities
- System configuration maximizes output improving productivity and lowering programming costs

Fast Changeover Times

- Optimized for high mix, high volume applications
- Changeover includes data files, media and adapters; typically converting from
 - 16 sockets, tray to tray to
 - 16 sockets, tray to tape with auto labeling in less than five minutes, no re-teaching, no calibrations necessary.

PS588 is the perfect answer to your programming need for small or large batches. It accommodates varied batch sizes and your continually changing programming demands. PS588 adapts to your business environment with flexibility and fast changeover times without compromise to throughput or cost per device. Built around the experience of the reliable PS Automated Programming platform, PS588 exceeds the standard for a higher industry performance in component handling efficiency. The combination of high throughput and fast job changeover results in additional capacity not available on other systems. The unique user interface, common with the PS Family, enhances productivity while reducing operator fatigue and training. PS588 maximizes the effectiveness of your programming investment in today's challenging business environment.

MODULAR CONCEPT

The PS Automated Programmer concept means that every one of our machines is compatible with each other. They all use the same GUI, programmers, consumables, algorithms, programming job files, operator training, and feeder options (such as tray, tape and tube). With the PS Automated Programmer concept, your investment protection is guaranteed for years to come.

ERGONOMIC PLATFORM

A new programmer platform layout improves working area, reducing operator fatigue and minimizing occupational strains.

FAST PRODUCT CHANGEOVERS

PS588 is developed especially for use in flexible, high volume, high mix programming environments involving variable lot sizes and quick product changeovers. Quick changeovers and high performance create additional revenues without increase to capital expense.

PRICE PERFORMANCE

The PS588 fully automated programming solution from Data I/O delivers an entirely new benchmark for productivity and value. Highly automated and extremely flexible, there is no faster, better value automated programming solution.

HIGH MIX PROGRAMMING

To meet high mix programming challenges, you get the same control, precision and consistency as high volume programming without the complexity.

INCREASED PRODUCTIVITY

PS588 maximizes productivity by the combination of its highly reliable system platform, lower cost of ownership, proven quality performance, ease of use, and Data I/O's global support organization.