Data I/O

PSV7000

The world's premiere automated programming system with speed, flexibility and fast changeover to handle any job at the lowest total cost of ownership.

Velocity: *Engineered for speed*

OPTIMIZED HANDLER

- Up to 2000 parts/hour
- SSD for fast file download
- Dual pick & place heads

FAST CHANGEOVER

- Zero mechanical change over with concurrently installed options
- Fast and simple job teach with NexTeach Pro
- Ergonomic design for easy access to programmers

OPTIMIZED ALGORITHMS & UNIVERSAL DEVICE SUPPORT

- Universal device support on FlashCORE III
- Ultra-fast programming for eMMC and UFS with TurboBoost
- 4.5x faster read speeds for UFS devices with VerifyBoost

Versatility: *Designed for ultimate flexibility and zero changeover*

SMALL DEVICE HANDLING

- 1.5mm x 1.5mm

HIGHEST SOCKET DENSITY

- Up to 24 FlashCORE programmers for 96 sockets
- Up to 14 LumenX programmers for 112 sockets

FLEXIBLE OPTIONS

- Concurrently installed media options
- Fiber laser marking, 3D coplanarity, 2D tape-out inspection & integrated self-monitoring ionizers for highest quality

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Value: *Unprecedented capability, quality & investment protection for customers*

LOWEST TOTAL COST

- 1 PSV7000 does the work of 2 or more competitive systems
- Maximum socket density minimizes floor space and enables quick scaling as production ramps

INVESTMENT PROTECTION

- Works with existing FlashCORE & LumenX adapters & algorithms
- LumenX supports the latest Flash technologies ensuring your investment is protected
- LumenX is field upgradeable to support UFS

GLOBAL SERVICE & SUPPORT

- Local service, engineering & support
- Regional spare parts

VELOCITY.

VERSATILITY.

VALUE.

DATA I/O CORPORATION

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DEVICE HANDLING

- **Throughput:** Handler rated up to 2000 devices per hour
- **Placement Accuracy:** ± .03mm
- **Pick-and-Place Method:** 2 single vacuum nozzles
- **Component Range:** 1.5mm x 1.5mm to 32mm x 32mm
- **Probe Stroke:** 50mm (max)
- **Alignment:** Alignment-on-the-flay (laser based)
- **System Software:** TaskLink for Windows, LumenX software, AH700, Windows 10

- **Regulatory Compliance:** CE Compliant, RoHs, WEEE
- **Frame Dimensions:** 1280mm D x 1250mm W x 1500mm H (not including media I/O)
- **Shipping Dimensions:** 1900mm D x 1600mm W x 1600mm H (not including media I/O
- **Net Weight:** 350kg (771 lbs)
- **Shipping Weight:** 765kg (1686 lbs)

POSITIONING SYSTEM

- **X-Y Drive System:** Servo-driven belt drive
- **X-Y Axis Resolution:** ± .001mm using linear
- **Theta-axis Resolution:** .072° servo drive

- **X-Y Encoder Type:** Linear/rotary dual encoder
- **Z-drive System:** Stepper belt-drive
- **Theta Drive System:** Servo motor

I/O MEDIA OPTIONS

Any combination of input/output media I/O

- **Tape Input:** 8mm - 56mm
- **Tape Output:** 8mm - 56mm (adjustable)
- **Dual Tray Feeder**
- **Input/Output:** Supports up to 20 JEDEC Trays
- **Manual Tray:** Available without any special tooling
  Supports up to 2 static trays
- **Tube Input/Output:**
- **Reject Bin**

VALUE ADDED SOFTWARE

- **Serial Number Server**
- **Automotive Performance PAK**
- **NAND Flash Bad Block Management**
- **Job Composer for LumenX**
- **ConneX® Software**
- **LumenX Software with:**
  TurboBoost standard with v2.0 and higher
  VerifyBoost license available

DEVICE MARKING OPTION

- **Laser Marker:** Solid state pulsed fiber laser marking for alpha numeric / graphic / 2D bar-code laser mark up to 28mm x 28 mm mark area

  Power: 0 - 10 Watts
- **Ink Dot Marking:** Supports dot marking for parts as small as 4mm x 4mm and various colors

ADDITIONAL OPTIONS

- **Vision:** 3D Coplanarity Vision System
- **Vision:** 2D tape-out inspection
- **Ionizers:** Self-monitoring Ionizer
- **Barcode Scanner**
- **NexTeach Pro:** Z-Laser measurement & 2D Vision Alignment

PROGRAMMING ENGINE, ADAPTERS & DEVICE SUPPORT

Programmer:

- **FlashCORE III**
- **LumenX® with TurboBoost speed standard and VerifyBoost license**

Socketing Technology:

- **Standard burn-in sockets** (typically 5,000 - 10,000 insertions per socket)
- **Medium Insertion Count (MIC):** for BGA, QFN, QFP, SOP (50,000 insertions per socket)
- **High Insertion Count Sockets:** (HIC) for BGA, TSOP, QFP (typically 250,000 insertions per socket)

Package Support:

PLCC, SOIC, SON, WSON, SSOP, CSP, BGA, uBGA and FPGA, QFP, TQFP, TSOP, PoP, DIP, SD/mini, SD/micro, SD card and more

Universal Device Support:

- **FlashCORE III** Flash Memory (NOR, NAND, MCP, MMC, e.MMC, SD, MoviNAND, OneNAND, iNAND, Serial Flash, EEPROM, EPROM and more), Microcontrollers and Logic devices (CPLD, FPGA's, PLD's) and more

- **LumenX® with TurboBoost and VerifyBoost** eMMC, UFS, SD and SPI NOR with support for additional device technologies in process

Device Programming & Testing:

Program, continuity, checksum, blank check, mis-insertion, test, verify, backwards device, two pass verify, ID check, Illegal bit-check

SUPPORT OPTIONS & SERVICE

- **PSV7000 Basic Spares Kit**
- **PSV7000 Supplemental Spares Kit**
- **PS- FlashCORE III Spares Kit**
- **Operator Training**
- **Extended Service Contracts:** The first year of support is included in the system purchase price and can be extended via extended service contracts. Data I/O offers a suite of options to cover both hardware and system software (consumables are not included).

REQUIREMENTS

- **Input Voltage:** Single-phase 220V
- **Input Line Frequency:** 50-60 Hz
- **Power Consumption:** 1.5 KVA
- **Operating Temperature:** 55°F to 86°F (+13°C to + 30°C)
- **Humidity:** 35% to 90% RH Non-Condensing
- **Air Pressure:** 80psi (5.5 bar)
- **Air Flow:** 6 SCFM (max)

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