



# Velocity. Versatility. Value.

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

**Velocity:** Engineered for speed

**Versatility:** Designed for ultimate flexibility and zero changeover

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



## When Velocity Matters

- Up to 2000 devices/hour with tray, tape and tube, even with large file sizes
- Optimized system for faster file download
- FlashCORE III programmers with optimized algorithms
- LumenX programming technology for ultra-fast eMMC programming
- Alignment-on-the-fly
- Zero mechanical changeover

## When Versatility Matters

- Smallest device handling from 1.5 mm x 1.5 mm
- Greatest socket density: scalable up to 24 programmers for up to 96 socket capacity
- Concurrently installed media options
- Dual input tray feeder option
- Ergonomic design for easy access to programmers

## When Value Matters

- Lowest total cost of ownership
- Investment protections for FlashCORE customers' adapters, algorithms, programming Jobs & value added software
- Backed by Data I/O's global service, & support available 24/7
- Local engineering support



## Device Handling System

- ▀ **Throughput:** Up to 2000 devices per hour with tape, tray or tube
- ▀ **Placement Accuracy:**  $\pm .03$  mm
- ▀ **Placement Force:** Compliant probe tips, combined with precision placement means the chance for bent pins is virtually eliminated
- ▀ **Pick-and-Place Method:** 2 single vacuum nozzles
- ▀ **Component Detection:** vacuum sensor
- ▀ **Frame Dimensions:** 1250 mm W x 1280 mm D x 1500 mm H (not including media I/O & monitor)
- ▀ **Shipping Dimensions:** 1504 mm W x 1534 mm D x 1754 mm H (not including media I/O)
- ▀ **Net Weight:** 350Kg
- ▀ **Shipping Weight:** 500Kg
- ▀ **Regulatory:** CE Compliant, RoHS, WEEE
- ▀ **Alignment:** Alignment-on-the-fly alignment (laser based)
- ▀ **Component Processing Range:** (1.5 mm x 1.5 mm) to (32 mm x 32 mm)

## Positioning System

- ▀ **X-Y drive system:** Servo-driven belt drive
- ▀ **X-Y-axis resolution:**  $\pm .001$  mm using linear encoders
- ▀ **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

- ▀ **Dual Input Tray Feeder** supports up to 20 JEDEC trays and presents two trays of unprogrammed devices into the work envelop. Jobs ending with blank and programmed devices mixed are sorted at the end of the job.  
Dual Input Tray Feeder-EX has an extra tray position ensuring programmed and blank devices never mix
- ▀ **Tape-In:** Hover Davis Tape-in 8 mm to 56 mm tape-width
- ▀ **Tape-Out:** V-Tek tape out system 8 mm to 56 mm tape-width
- ▀ **Tube-In / Out:** Available without any special tooling
- ▀ **Manual Tray:** Available without any special tooling

## Device Marking Options

- ▀ **Laser Marker** option is modular and integrated into the work envelope
- ▀ **Laser Marker:** Solid-state pulsed fiber laser for alpha-numeric / graphic / 2D bar-code laser marks up to 28 mm x 28 mm mark area
- ▀ **Power:** 10 Watt

## Additional Options

- ▀ **Vision:** 3D Coplanarity Vision System
- ▀ **Vision:** 2D Downward Vision System for faster & easier teach

## Programmers

- ▀ FlashCORE III
- ▀ LumenX

System with "gull-wing" style doors open for easy access to work envelop

## System Requirements

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

## Software

- ▀ TaskLink for Windows
- ▀ AH700
- ▀ ConneX™
- ▀ Windows 7

## Support Options

- ▀ Operator training
- ▀ Annual Programmer Support (APS)

## Service Spares

- ▀ PSV7000 Basic Spares Kit
- ▀ PSV7000 Supplemental Spares Kit
- ▀ PS-FlashCORE III Spares Kit



## Universal Device Support

- ▀ **FlashCORE:** Flash Memory (NOR, NAND, MCP, MMC, eMMC, SD, MoviNAND, OneNAND, iNAND, Serial Flash, EEPROM, EPROM and more), Microcontrollers and Logic devices (CPLD, FPGA's, PLD's and more)
- ▀ **LumenX:** eMMC, SD and SPI NOR Flash

## Package Support

- ▀ PLCC, SOIC, SON, WSON, SSOP, CSP, (BGA, uBGA and FPGA, QFP, TQFP, TSOP, PoP, DIP and more)

## Device Testing

- ▀ Continuity, checksum, blank check, mis-insertion test, verify, backwards device, two pass verify

