

## Powerful Desktop Programming

Easy-to-learn and easy-to-use

Language-independent graphical user interface

Program at the speed of silicon

Memory & Microcontroller support

Flexible – modular design

Enables outstanding quality

Reduce scrap costs

Leave the burden of learning to the FLX500

High throughput performance

Reliability

Lowest overall cost solution

Industry's fastest changeover times

Maximize productivity

Preserve investment in FlashCORE adapters

High performance socket adapters, lowest overall cost

Self-learning plug-and-play operation

Self-contained pneumatic system with minimal noise, no special air facilities required

Maximize floor space utilization

Ergonomic – Position at an ideal operator height



# FLX500

## Programming Automation in a Desktop Footprint

### A new experience in simplicity, quality and productivity

The FLX500 is the ultimate in simplicity, enabling you to quickly and cost-effectively achieve world-class device programming quality. The FLX500's base unit features 10 feeder-bank slots, CAN-bus control architecture, self-contained pneumatic system, dual pick-and-place nozzles with individual Z and Theta axis, X-Y gantry, color touch-screen monitor and an embedded PC. Job changeovers are fast and easy using plug-and-play modules with automated learn functionality.

#### A simplification break-through

The FLX500 automated programming system is so simple and easy-to-use, that an existing manual programming operator can be productive immediately. The graphical user-interface utilizing international symbols requires no special language skills. Installation is also fast and easy thanks to the FLX500's universal power supply and self-contained pneumatic system.

#### Increasing productivity – Industry's fastest changeover times

It takes less than two minutes to complete a Job changeover including socket adapters on two programmer modules totaling 16 sites, or less than 30 seconds using two preconfigured programmer modules. When processing devices using one programmer module, the 2nd programmer module waits preconfigured to start the next Job. Combine this with no special tooling requirements and you've got an industry first zero-changeover time or package changeovers on-demand.

#### Manage the Cost of Quality

The FLX500 eliminates human errors typically associated with manual gang programmers including bent or damaged leads, co-planarity issues and/or the binning of bad parts with good. For the first time, organizations that previously used error-prone manual gang programming solutions can afford the high quality results of an automated programming system, and at a lower overall cost!

#### Flexibility

The FLX500 can be configured to support 8 or 16 programming sites. The system supports both Standard (JEDEC) and/or Oversize Tray Modules. The FLX500's extendable platform is designed for future I/O media integration.

#### Superior signal integrity (High Performance Sockets)

Data I/O's high performance and high-insertion-count socket adapters achieve typical yields over 99% with lives of 120,000 or 1,000,000 insertions per adapter respectively. This reduces your overall consumable adapter cost to all-time low levels, compared to standard 20,000 insertion life adapters. Not only that, the cost of reprogramming, handling failed parts and working around failing sockets is virtually eliminated!

#### Highest programming speed available anywhere

The FLX500's new FlashCORE-II programmer modules utilize the industry's most advanced Flash programmer technology, plus new advancements extend the programmer's capability to include leading-edge support of microcontroller devices.

**Data I/O**

[www.dataio.com](http://www.dataio.com)  
800.426.1045

## High Performance

The state-of-the-art robotics delivers 500/pph throughput (zero programming time.)

## Programmer: FlashCore-II

The fastest programmer on the market today, the FlashCore II minimizes costs by getting the job done quick! FlashCore II technology programs devices faster than the speed of silicon, limited only by the device structure itself.

## Device Support

Flash Memories, Microcontrollers, EPROMS, EEPROMs and more.

Data I/O offers the most comprehensive device research center on the Internet, including accurate programming times verified by customers:

[www.dataio.com/device](http://www.dataio.com/device)

## Package Support

PLCC, QFP, TQFP, PQFP, TSOP, TSSOP, BGA, uBGA, CSP and more.

## Sockets

8-site programmer module configurations. Supports Standard, and High Performance socket technologies.

## NAND Flash Bad Block Handling

- Skip-block technique included.
- Add-on package of manufacturer approved NAND Flash bad block handling methods available.

Data I/O Preferred Partner



Data I/O provides priority device support to its preferred partners.

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## Technical Specifications

Embedded PC configured with Microsoft® XP Professional

Media: JEDEC and nonstandard trays up to 186mm x 334mm

## Electrical Requirements

- Operating Voltage: 100 to 240 VAC
- Power Consumption: <500 watts
- Frequency Range: 50 to 60 Hz

## Physical Specifications

- Length: 770mm (30.3 inches)
- Width: 592mm (23.3 inches)
- Height: 615mm (24.2 inches)
- Weight: 31.75kg (base unit)

## Environmental

- Temperature: 15°C (59°F) to +35°C (95°F)
- Humidity: 5-90% non-condensing

## Download Connection

- 100BaseT Ethernet

## Removable Media for Job Cards

- USB 2.0

## Services

- One year factory parts and labor warranty
- Annual Programmer Support (APS) subscription to new programming algorithms, system software and TaskLink software updates

## TaskLink PC Workstation Requirements

- Personal Computer with Microsoft® Windows 95, 98, NT, 2000, or XP operating system
- Hard disk space: 90 MB plus space for device data
- USB 2.0 port (for job cards, optional)
- Network interface (recommend 100BaseT)
- CDROM drive
- Serial or bus mouse
- VGA monitor, 640 x 480 minimum resolution

## Optional Subsystems

- Standard Tray Module
- Oversize Tray Module
- Programmer Module
- NAND Bad Block Schemes software package
- Serial Number Server



Language-Independent User Interface

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