

# FlashPAK II



## AT A GLANCE

Device Support for Flash memories, Microcontrollers, NAND & EEPROM

### FlashPAK II™ Features

- FlashPAK II™ 4-site programmer
- Networked operation
- Load from master or data file
- Ganged socket actuation
- Small, lightweight, portable design
- Auto-start programming
- TaskLink Software
- Keypad, LCD display, and Status LEDs
- PCMCIA card reader/writer

### Actuator

- Unique actuating bar opens sockets for easy insertion and removal of devices
- Reduces parts damage and socket wear
- Reduces operator fatigue
- Improves overall throughput

### TaskLink™ Software

- Manage programming process
- Create programming tasks & kits
- Run yield and operator statistics
- Remote supervisor monitoring via network

## Optimized for High Speed Flash Device Programming

The FlashPAK II™ Networked Programming System supports the latest high-density Flash memory, NAND Flash, Microcontroller and EEPROM devices at maximum programming speeds and highest quality per device. FlashPAK II is the second generation programming architecture extending Data I/O's unique design for high-speed Flash support.

### Customer Benefits

#### Expanded Device Support

In addition to supporting a wealth of Flash memory devices, the FlashPAK II architecture has been expanded to support the latest Flash microcontrollers.

#### Easy to Use

FlashPAK II's unique actuator handle opens and closes multiple sockets without stressing the device or the operator. User friendly features include status LEDs, LCD display, control keypad and a grounding connector.

#### Easy Transition to Production – Your Connected Solution

The FlashPAK II is ideal for first article builds and NPI applications. As your product moves to higher volume production, the programming tasks can be easily transferred to Data I/O's automated FlashCore programming systems without altering the programming itself.

#### Additional Application Software

Also available is a broad portfolio of application specific software including Data Mapper (for merging multiple files into a single image), Version Control (for traceability and configuration management), Serial Number Server, and multiple bad block schemes for NAND devices.

#### Worldwide Support – Asia, Europe and Americas

Data I/O is the only programming solutions company with direct operations worldwide (engineering, sales, service and support) built on our 35-year history of designing quality programming solutions.

The logo for Data I/O, featuring the text "Data I/O" in a bold, sans-serif font. The "I" and "O" are stylized with a yellow swoosh that loops around them.

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

# FlashPAK II

## High Performance

FlashPAK II™ programs devices at theoretical speeds as specified by the semiconductor manufactures.

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

## Device Support

### FLASH Memory

Supports devices from all major semiconductor vendors:

AMD	Atmel	Fujitsu
Hynix	Hyundai	Integrated Silicon
Intel	M-Systems	Macronix
Micron	Mitsubishi	NanoAmp
Renesas	SST	ST Micro
Samsung	Sharp	Spansion
Toshiba	Winbond	...and more!

### NAND Bad Block Handling

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

### Microcontrollers

Atmel	Freescale	Fujitsu
Hitachi	Intel	Microchip
Mitsubishi	Motorola	NEC
Philips	Renesas	TI...and more!

### Supports All Popular Packages:

TSOP	TSOP2	CSP	SOIC	SSOP
BGA	FBGA	µBGA	EBGA	TFBGA
QFP	TQFP	PLCC		

Program	Read	Verify
Blank Check	Illegal Bit Check	Erase
Secure	Pin Continuity	

### Optional Data I/O Software

NAND Bad Block Schemes  
Serial Number Server  
Data Mapper  
Version Control

## FlashPAK II™ Specifications

### Network Interface

- RJ45 connector
- Requires IP address

### Electrical Requirements

- Operating Voltage: 110 to 240 VAC
- Power Consumption: 100 watts
- Frequency Range: 50 to 60 Hz

### Physical Specifications

- Width: 23.5cm (9 1/4")
- Depth: 34cm (13 3/8")
- Height: 15cm (5 9/16")
- Weight: 3kg (6 lbs. 9 oz.)

### Environmental

- Normal office environment/power

### Temperature

- Operating: 0° to +50°C (+32° to 122°F)
- Transportation: -4° to +70°C (+40° to 158°F)
- Storage: 0° to +70°C (+32° to 158°F)

### Humidity

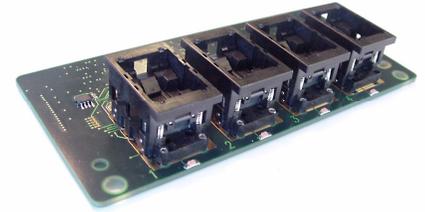
- Operating: up to 70% non-condensing
- Storage: up to 80% non-condensing

### Services

- One year warranty
- One year renewable subscription to new programming algorithms and TaskLink software updates.

### TaskLink PC Workstation Requirements

- Personal Computer with Microsoft® Windows 95, 98, NT or XP operating system
- Hard disk space: 90 MB minimum plus space for device data
- PCMCIA card slot (For job cards, optional)
- Network interface (optional)
- CD ROM drive
- Serial or bus mouse



FlashPAK II supports both standard socket modules and High Performance (longer life) Socket modules



Compact, portable desktop system

### North America:

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### Other Regions:

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