



# FlashTOP

For Multisyte

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

**Data I/O**

- **Simultaneously programs four Flash memory devices per TOP, quadrupling your Flash programming throughput.**
- **Unique, interchangeable design works on Optima, Dual, Quad and Octal device programmers, providing solutions from 4 to 32 sockets per programmer.**
- **Flexible support for a wide range of standard and fine-pitch package types, including  $\mu$ BGAs, TSOPs and PLCCs.**
- **Quick, easy changeovers between package types turn the Multisyte Universal Programmer into a high throughput Flash Programmer in under a minute.**
- **Minimum lead lengths ensure clean signals to the device, maximizing yields and reducing scrap.**
- **Low-voltage (5 volts down to 1.8 volts) supports the newest Flash devices just entering the market.**
- **Quick set-up time and no download time maximizes your total daily throughput.**
- **Works with TaskLink for Windows Programmer and Process Control Software to increase yields and throughput.**

## Cost-Effective, High Throughput Support for Flash Memory Devices

With Flash memory an increasingly popular choice for consumer electronics, Data I/O® introduces the FlashTOP.™ The FlashTOP for Multisyte™ provides a cost-effective way for medium to high-volume production programming operations to achieve high programming throughput and yields. Designed to work interchangeably across the entire line of Multisyte programming systems, the four-socket FlashTOPs deliver the high-throughput, high-quality Flash memory support today's manufacturers require.

## Quick Setups and Changeovers Maximize Production Yields

FlashTOP bases and adapters can be installed on the Multisyte programmers in under a minute — ensuring high yields and throughput over the entire production shift, not just for a particular job. The interchangeable adapters provide support for a wide variety of today's popular packages, including TSOPs,  $\mu$ BGAs, PLCCs, and more.

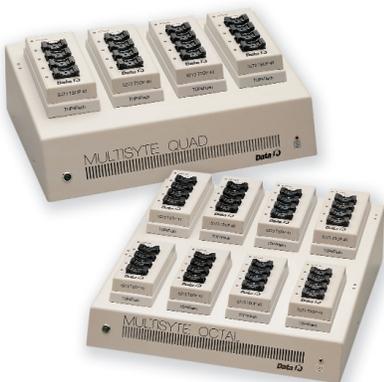
With each FlashTOP supporting four Flash devices, you can program up to 32 devices at a time with the 8-site Octal™ programming system, up to 16 with the 4-site Quad™ system, and up to eight with the 2-site Dual™ system.

## Unique Design Improves Programming Flexibility and Reliability

The FlashTOP consists of a base and an interchangeable adapter which is selected for the device being programmed. Many of the adapters use receptacles which allow you to economically replace all four sockets on an adapter within a few minutes, thus ensuring continually high yields. By keeping the electronics close to the device pins, the FlashTOP design minimizes noise and keeps the programming signals clean.

## Process Control Software Increases Productivity

Coupling the FlashTOP with Data I/O's TaskLink™ for Windows® process control software further increases yields by simplifying set-up and execution of device programming operations — extremely critical when running multiple jobs during a day. Using TaskLink, programmer parameters, data sources, and other programming processes can be saved as Tasks. Multiple Tasks can then be linked together into Kits to create an error-free programming process.



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## Specifications

### Flash Formats Supported

- Hex
- Binary

### Device Support

- Flash memory
- Low-voltage (5.0 volts down to 1.8 volts)

### Package Support

- PLCC, TSOP,  $\mu$ BGA

### Device Operations

- Quick Copy
- Load
- Program
- Verify
- Sumcheck
- Erase
- Fill Ram
- Sector protect (for selected devices)
- Device continuity test

### Accessories

- Socket replacement kit for TSOP and PLCC adapters

### System Support

- Operates on Optima, Dual, Quad and Octal programmers using software version A/2000 or higher, hardware version Base 7 or higher.
- Supported by Tasklink for Windows

### Safety Standards

- UL, cUL

Please see the TaskLink for Windows and Multisyste data sheets for more information.

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