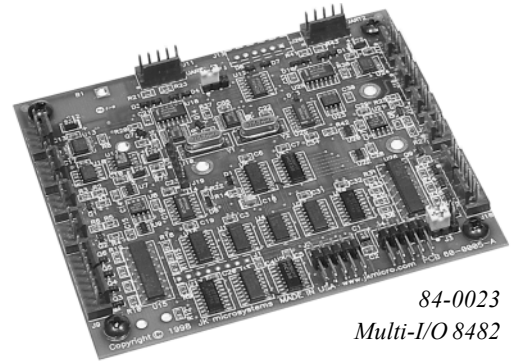


Peripheral Boards

Multi-I/O

- 4 or 8 Channel 12 Bit A/D
- 2 or 4 Channel 12 Bit D/A
- 4 or 8 1Ampere Relay Drivers
- 0 or 1 or 2 High Speed UARTs
- Software Drivers for C, QuickBasic & Assembly
- Dimensions 4.2" x 3.6" (106.7mm x 91.4 mm)



84-0023
Multi-I/O 8482

The JK microsystems *Multi-I/O* expansion board gives users the ability to add analog inputs and outputs, UART capability (for GPS or modem) and isolated high current drivers to many JK microsystems single board computers. Available in several configurations, each *Multi-I/O* board can add up to 8 channels of 12 bit A/D, 4 channels of 12 bit D/A, 8 relay output drivers and 2 UARTs. If more I/O is required, several boards can be added to the system using 10 pin IDC style ribbon cables. A driver library with functions callable from C or QuickBASIC and example programs are available to eliminate the hassle of programming devices on a serial bus.

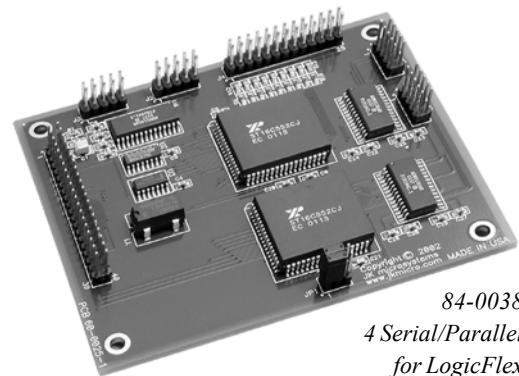
Versions Available

- | | |
|--------------------------|--|
| Multi-I/O 4240 (84-0021) | 4 A/D, 2 D/A, 4 Relay Drivers |
| Multi-I/O 4241 (84-0022) | 4 A/D, 2 D/A, 4 Relay Drivers, 1 UART |
| Multi-I/O 8482 (84-0023) | 8 A/D, 4 D/A, 2 Relay Drivers, 2 UARTs |

Multi-I/O Peripheral Kits (99-0021-99-0023) include the *Multi-I/O* board, interface cable, shells and pins kit, standoffs, and users manual.

Serial/Parallel

- Adds 2 High Speed RS-232 Serial Ports
- 4 port version available for LogicFlex
- 8 Channel A/D upgrade for LogicFlex versions
- 16C550 UART with 16 Byte FIFO
- 1 LPT1 Bi-directional Parallel Port
- 115k Baud maximum speed
- Dimensions 4.2" x 3.6" (106.7mm x 91.4 mm)



84-0038
4 Serial/Parallel
for LogicFlex

JK microsystems' Serial/Parallel peripheral boards provide additional serial ports and a bi-directional parallel port to the popular Flashlite 386Ex and LogicFlex controllers. *Serial/Parallel - Flashlite 386Ex* (84-0036) and *Serial/Parallel - LogicFlex* (84-0033) peripheral boards both add 2 serial ports, while the *4Serial/Parallel* (84-0039) adds 4 serial ports to the LogicFlex. On-chip FIFOs reduce the processor interrupt frequency (and CPU loading) during periods of heavy serial activity. PC compatible hardware allows the use of existing serial libraries and parallel port device drivers. The parallel port can also be used for additional bit I/O.

Serial/Parallel Peripheral Kits (99-0014, 99-0032 or 99-0038) include the corresponding *Serial/Parallel* board, 2 board 40 pin bus cable, standoff kit, and users manual.

A/D Upgrade Kit (99-0033) includes MAX197 A/D chip for 8 channels of 12-bit resolution.

JK microsystems, Inc.

1403 5th St. Suite D, Davis, CA 95616
<http://www.jkmicro.com>

Phone (530)297-6073
Fax (530)297-6074

Peripheral Boards

8 Channel, 12 Bit A/D Converter

This 12-bit A/D converter board is based on the Maxim MAX197 chip. The board features software-selectable input ranges of $\pm 10V$, $\pm 5V$, $0V$ to $10V$, and $0V$ to $5V$. Conversion time is $6\mu s$. The basic A/D Converter board has $\pm 16.5V$ input protection and unbalanced inputs.

An enhanced version of the A/D board is also available. This board can be upgraded on a per-channel basis to provide balanced inputs with $\pm 200V$ common mode rejection and $\pm 500V$ common-mode and differential protection. The board also has screw terminal input connections and $\pm 15V$ available for external signal conditioning.

The Burr-Brown INA117P high common-mode voltage difference amplifier is used on each channel of the enhanced A/D converter board to provide the increased common-mode and differential protection. Channels on the enhanced A/D converter board that have not been upgraded are still available for use as unbalanced inputs with $\pm 16.5V$ input protection.

Note: The Enhanced 8 Channel A/D board does not come with any INA117P amplifiers. These must be ordered separately. If you purchase an Enhanced A/D and INA117P amplifiers together, we can install the INA117 amplifiers and test the configured board as a system at your request.

Versions Available

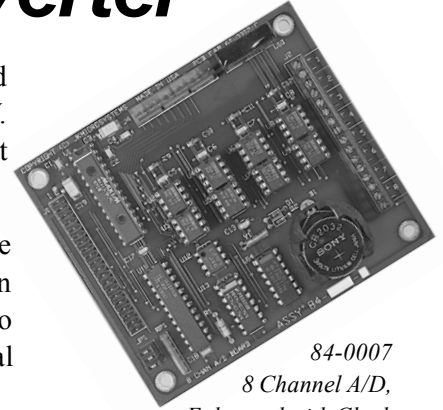
8 Channel A/D, Basic (84-0003)

8 Channel A/D, Enhanced (84-0004)

8 Channel A/D, Basic with Clock (84-0006)

8 Channel A/D, Enhanced with Clock (84-0007)

A/D Peripheral Kits (99-0003, 99-0004, 99-0006, 99-0007) include the **A/D** board, 2 board 40 pin bus cable, shell and pins, standoff kit, and manual.

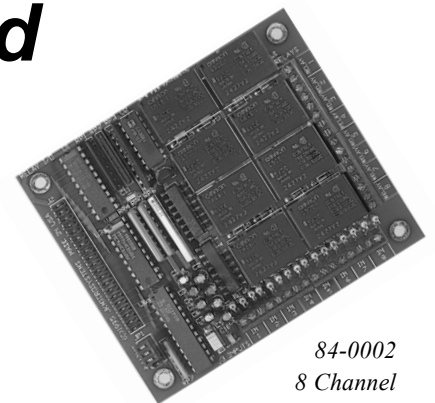


84-0007
8 Channel A/D,
Enhanced with Clock

8 Channel Relay Output and Opto-Isolated Input Board

This board has 8 relays and 8 opto-isolated inputs. The relays have 10 ampere, normally open contacts. The opto-isolated inputs accept 3-24VAC or DC and will withstand a momentary short to 120VAC. Both the relay contacts and the opto-isolated inputs are terminated with industrial-grade screw connections.

Relay I/O Peripheral Kit (99-0001) include the **Relay I/O** board, 2 board 40 pin bus cable, standoff kit, and manual.



84-0002
8 Channel
Relay/Opto Input

JK microsystems, Inc.

1403 5th St. Suite D, Davis, CA 95616
<http://www.jkmicro.com>

Phone (530)297-6073
Fax (530)297-6074