

EPAC-3000



CENTRAL PROCESSING UNIT: HD64180/Z180 with 6.144 MHz clock speed.

LOW POWER: All CMOS construction.

DIGITAL I/O: 8 optically coupled inputs, 8 high drive outputs, 20 programmable unbuffered lines terminated to a 50 pin I/O rack compatible header connector.

ANALOG I/O: 16 channel, 8 bit analog to digital converter, or optional 16 channel, 12 bit plus sign analog to digital converter with sample/hold.

MEMORY: Maximum system memory is 512K bytes, 128K RAM is furnished and 1K bit nonvolatile EEPROM.

COMMUNICATION: 2 RS232 serial ports with interrupt support.

TIMERS: 2, 16 bit timers with interrupt support and a watchdog timer.

POWER SUPPLY: Single Voltage supply operating from +8 to +15 Vdc. with on board regulation.

EXPANSIBILITY: 50 pin header connector for use with accessory boards.

The EPAC 3000 is a high performance data acquisition and control computer based on Hitachi's HD64180 / Zilog Z180 processor. This high integration CMOS microprocessor features an enhanced Z80 instruction set that includes a fast multiply instruction, two 16 bit timers, a memory management unit that supports 1 MB abyte of memory and 64K bytes of I/O space, a DMA controller with memory to memory and memory to I/O transfer capability and a versatile interrupt controller that manages twelve interrupt sources. EMAC integrated this powerful processor onto a board that contains 36 digital I/O lines, 2 serial RS232 ports, an 8 bit A/D converter (13 bit optional), all CMOS

construction and more with a board size of 5 1/4" by 8.0".The EPAC 3000 was designed with the same key features (watchdog timer, machine sockets, single rail power supply with on board regulation, optically coupled digital inputs, transient protection for analog inputs and a separate analog ground) that give the EPAC series of single board computers their high degree of reliability. Reliability and Performance make the EPAC 3000 just as home on the Factory Floor as the Laboratory Bench. Future expansion is also provided for by the EPAC 3000 with the ENET network. ENET allows up to 32 EPAC Single Board Computers to exchange information.EMAC offers a total system solution to your application needs, with development software, peripheral boards, signal conditioning cards and more. The new Universal Expansion Interface gives the EPAC 3000 compatibility with virtually all the EPAC series accessory boards. So take the EPAC 3000 for a 30 day risk free test drive and just see what this single board computer can do for you!

Specifications

Single Board Computer Microcontroller

Processor

HD64180/Z180

Clock Speed:

6.144 MHz

Real Time Clock:

Memory

Memory Misc.:

MEMORY: Maximum system memory is 512K bytes, 128K RAM is furnished and 1K bit nonvolatile EEPROM.

Primary I/O

GPIO:

36x Total 20x Prog. 8x HiDrive Outs 8x OptoIns

SDIO:

36x digital I/O lines

Video Out:

Optional LCD Display Board

Serial Ports:

2x RS232

Watchdog:

Primary I/O Misc.:

DIGITAL I/O: 8x optically coupled inputs, 8 high drive outputs, 20 programmable unbuffered lines terminated to a 50 pin I/O rack compatible header connector.

COMMUNICATION: 2x RS232 serial ports with interrupt support.

Secondary I/O

Timers/ Counters/ PWM:

2x 16-bit timers

LPT Port:

Keypad:

PS/2:

Secondary I/O Misc.:

TIMERS: 2x 16 bit timers with interrupt support and a watchdog timer.

Analog on

AD:

A/D Channels:

16

A/D Channels:

16x 8/13 bit

A/D Resolution:

8/13 bit

D/A:
4
D/A Channels:
4x 8 bit
D/A Resolution:
8 bit
Analog Misc.:
ANALOG I/O: 16 channel, 8 bit analog to digital converter, or optional 16 channel, 12 bit plus sign analog to digital converter with sample/hold.

Dimensions
8.2 × 5.69 in
Form Factor:
ePAC
Power Requirements
Voltage:
12 V
Typical Current:
130 mA
Max Boot Current:
150 mA
Power Misc.:
POWER REQUIRMENTS: Single Voltage supply operation from +8 Vdc to +15 Vdc (+12 Vdc recommended) with on board regulation. Maximum current draw is 150 ma., 130 ma typical.

Environmental
Low Operating Temperature:
0 C
High Operating Temperature:
60 C
Upper Operating Humidity:
90%

Pricing
E301-01
E301-01
\$0.00
Keypads:
E020-25
12 KEY MEM TELEPHONE STYLE KEYPAD
\$25.00
E020-21
16 KEY MEMBRANE HEX STYLE KEYPAD
\$30.00

Analog & Digital I/O Boards:
E301-03
12 bit PLUS sign Resoltion A/D Converter
\$34.00
E301-04
4 Channel, 8 bit Resolution D/A Converter
\$59.00

E010-02
Transient spike protection for A/D
\$19.00

Date/Time Clocks:

E010-04
REAL TIME CLOCK/CALENDAR 128K BATTERY BACKED PROVISION (REQUIRES 128K RAM, 06-0724 OPTION)
\$50.00

Power Supply:

E010-11
WALL TRANSFORMER 110V - 9 V 500 MA
\$10.00

E010-10
WALL TRANSFORMER 110V - 12 V 800 MA
\$10.00

E010-15
WALL TRANSFORMER 110V - 9 V 1 A
\$18.00

Memory:

E010-07
128K BY 8 BATTERY BACKED SOCKET (REQUIRES 128K RAM, 06-0724 OPTION)
\$29.00

E010-09
32K by 8 Battery Backed RAM Module
\$39.00

E010-12
128K by 8 Battery Backed RAM Module
\$39.00

Displays:

E020-25
12 KEY MEM TELEPHONE STYLE KEYPAD
\$25.00

E020-31
20 CHAR. X 2 Line LCD backlit display
\$65.00

E020-24
240 X 128 Backlit Graphic LCD Display
\$195.00

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