Apex
Embedded
Systems

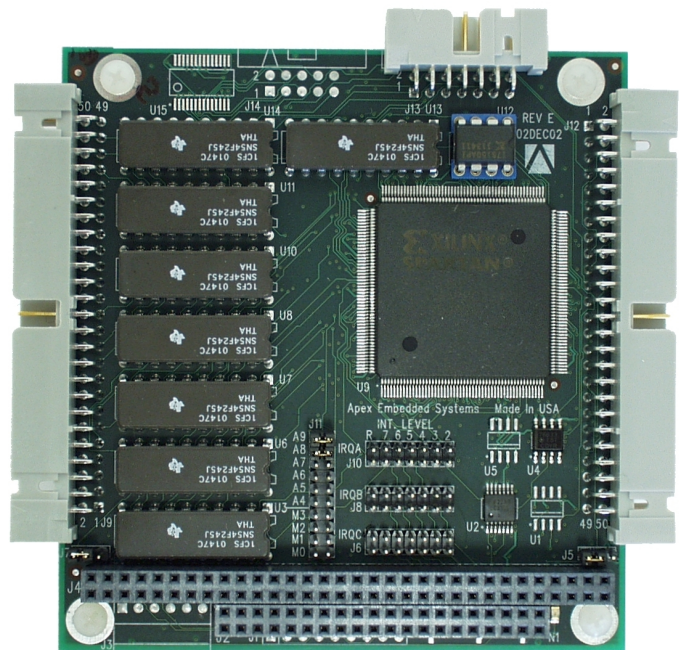**RUGGEDIZED** PC/104 High Drive
48 line DIO and counter-timer module

TRACER-E

The TRACER-E is the toughest PC/104 DIO module on the market today!

The Tracer is a high current PC/104 digital I/O and counter/timer module. It is designed for use in systems where high reliability is of utmost importance while operating in harsh environments. The board provides 48 lines of 8255 compatible GPIO and three 16-bit 8254 compatible counter/timers.

- **8255 Software compatible interface structure.** The hardware provides two 8255 compatible I/O ports that provide 48 lines of general purpose I/O.
- **8254 Software compatible counter/timers.** 3 16-bit counter/timers are based on an 82C54.
- **Industry Standard Form Facto**r. Compliant to the PC/104 standard form factor ensuring consistent system packaging
- **Long-Term Product Availability.** Apex Embedded Systems is committed to delivering long life cycle products.
- **General Purpose DIO.**
- **Designed for operation in harsh environments.** All components and materials used in our products are designed to operate in the extended temperature range, under high shock and vibration. We have utilized MIL-SPEC drivers in the TRACER-E design to insure the greatest MTBF for mission critical applications.
- **-40 to 85° C Operating Temperature.**
- **No tantalum or electrolytic capacitors used in the design.**
- **Direct interfacing to OPTO-22's isolated I/O racks.** Digital I/O connectors organized to allow direct connection to OPTO-22's isolated I/O racks including the G4 series, the PB16-H, PB16-J, PB16-K, PB16-L, PB8H and the PB24HQ.
- **High-current outputs 65mA sink, 15mA source.** This is true even while operating at high temperatures.
- **FPGA customization available.** We are always able to offer FPGA customization to any of our standard products to meet your exact program requirements.

- **Broad selection of interrupt sources and software configurable.**
- **LED Status indicator.** Useful in determining general status and in system debugging. A wide variety of signals can be routed to the LED via software selection.
- **8254 Counter/Timer operation to 40MHz.**
- **Counter/Timer can be easily configured to support quadrature encoder signals.**
- **Polarized Locking I/O Connectors.**
- **Designed and manufactured in Wisconsin by Apex Embedded Systems.** We will do whatever we can to assist you in designing in our products.

Ordering Information
Part Number: TRACER-E
Description: RUGGEDIZED PC/104 High Drive 48 line DIO and counter-timer module

Apex Embedded Systems
116 Owen Road
Monona, WI 53716
Voice: 608-256-0767 EXT 22
FAX: 608-256-0765
sales@apexembedded.com
http://www.apexembedded.com/