ACU™ — 16-bit ADCs, CAN-bus Ethernet and Host USB ports

NEW!

ACU™ with ADC, CAN-bus, Ethernet and Host USB Ports.

Features and Options:
- Measures 3.58 x 2.30 inches
- Up to 16 ch. 16-bit high speed ADC (0-5V, 1MHz, AD7655)
- 10/100-baseT Ethernet with hardware TCP/IP stack
- Host USB ports for USB Flash disk, USB keyboard/mouse
- CAN bus controller (SJA1000) and CAN transceiver

The **ACU™** is an expansion card designed for TERN controllers. It can be used to add ADCs, CAN-bus, Ethernet, and Host USB ports to TERN's family of C programmable Engine controllers.

Up to 4 ADC chips (4 ch. each AD7655, 1MHZ, 16-bit, 0-5V) can be installed to provide a total of 16 ADC inputs. Each AD7655 allows simultaneous sampling on two channels in hardware.

A Controller Area Network (CAN) controller (SJA1000), running at 20 MHz clock can be installed along with on-board CAN transceiver, supporting baud rates up to 1 Mb/s. CAN interrupt and software programmable hardware reset are available. The **ACU™** allows TERN controllers to be directly connected to CAN-bus. All registers of the CAN controller are software accessible, and software-buffering drivers are also provided.

A Fast Ethernet Module can be installed to provide 10/100M Base-T network connectivity. This Ethernet module has a hardware LSI TCP/IP stack, implementing TCP/IP, UDP, ICMP and ARP, and is programmed using a software socket interface.
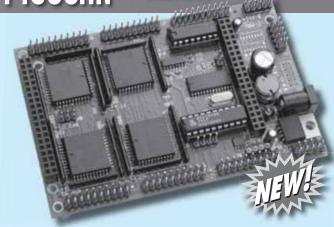
A Host USB controller can be installed to provide two Host USB Ports. Firmware support is provided to allow low-level accesses to select USB devices. Port1 can interface to USB keyboard/mouse, while port 2 supports a USB Flash Disk. Simple AT-style command set is used to support FAT file system applications.

Order Information
ACU™ $69 Qty 1

Add-on Options:
1) ADC (AD7655) up to 4 chips $40x4
2) CAN(SJA1000) with transceiver $40
3) 100 BaseT hardware TCP/IP Ethernet $30
4) Host USB ports..$50

P100CAN™ — 96 I/O lines and CAN-bus interface

NEW!

Features:
- 4.4x3.1x0.5 inches.
- Driven by a TERN controller (586-Engine, A-Engine86,…)
- Power consumption: < 200 mA @ 9V-12V
- 24x4 PPIs, 7 high voltage sinking drivers
- 5V switching regulator, RS-232 or RS-485 drivers.

The **P100CAN™** is designed to be used in automotive and general industrial application. It includes four PPI (82C55) chips, providing a total of 24x4 programmable bi-directional TTL I/O lines. 7 high voltage sinking drivers (ULN2003A) provide up to 50V, 350 mA each.

A Controller Area Network (CAN) controller (SJA1000, 20 MHz clock) with on-board CAN transceiver is available, allowing TERN controllers to be easily connected to a CAN-bus. It supports CAN2.0B protocol and up to 1M-bit baud rate. CAN interrupts and software programmable hardware resets are available. All registers of the CAN controller are software accessible, and software-buffering drivers are provided.

Two channels of RS-232 drivers and an optional 3rd RS232 or RS485 driver can be installed. The **P100CAN™** requires 8.5V to 12V DC power supply with linear regulator, or up to 30V DC power input with an optional switching regulator without generating excessive heat.

Ordering Information
P100CAN™ $99/$69/$39 Qty 1/100/1000

Includes: 2 RS-232 ports, 24 PPI I/Os, solenoid drivers, linear regulator. Driven by C/C++ programmable Engine controller.

NOT including add-on options.

Add-on Options:
1) CAN (SJA1000) with transceiver $40
2) Switching power regulators (SR) $20
3) 3rd UART driver a) RS232 or b) RS485...............................$10

Order Example:
P100CAN with CAN controller
P100CAN +1 = $99+$40

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27