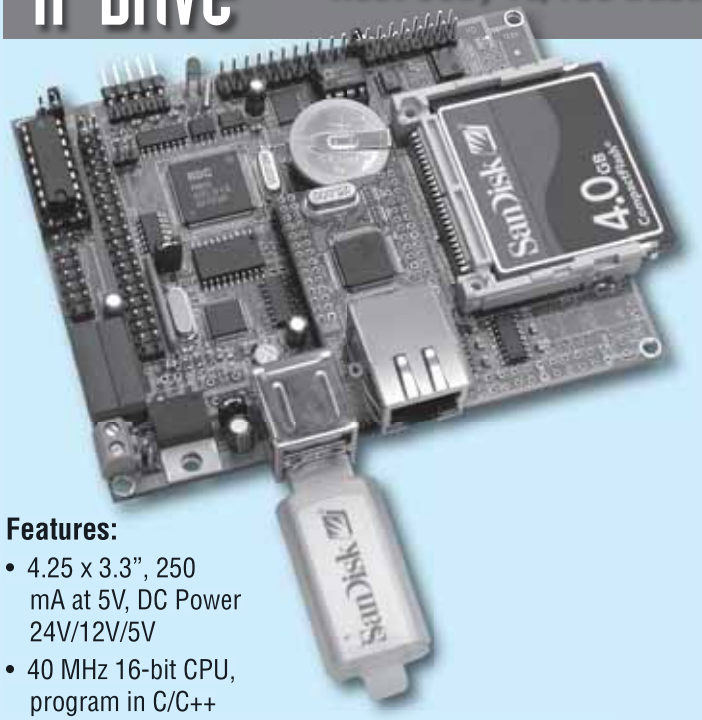
H-Drive™ *Host USB, 10/100 Base-T Ethernet, CF, ADC, DAC, TFT*

NEW!



Features:

- 4.25 x 3.3", 250 mA at 5V, DC Power 24V/12V/5V
- 40 MHz 16-bit CPU, program in C/C++
- 8 high voltage I/Os, 4 TTL I/Os and 2 Reed Relays
- 6 RS232/485 serial ports, Real-time clock, PWM,Timers
- 16 ch. 24-bit ADC, 11 ch. 12-bit ADC, 8 ch. 16-bit DAC
- Hardware TCP/IP stack for 100M Base-T Ethernet
- CompactFlash card with FAT file system support
- Two Host USB ports for Flash Disk, USB mouse/keyboard
- QVGA 5.7" TFT color display interface

The ***H-Drive™ (HD)*** is a low cost, C/C++ programmable embedded controller based on a 40 MHz 16-bit CPU. It is intended for networking industrial process control, data acquisition. Costs are reduced by using a LCD panel with an integrated control chipset, making this product especially ideal for cost-sensitive Human Interface Device OEM applications.

A Fast Ethernet Module can be installed to provide 10/100 Base-T network connectivity. This Ethernet module has a hardware LSI TCP/IP stack. It implements TCP/IP, UDP, ICMP and ARP in hardware. It releases internet connectivity and protocol processing from the host processor, which represents a huge improvement over software-based TCP/IP stacks. The resulting system can easily handle transmissions in the 100KB/s+ range in real world applications.

A Host USB controller can be installed to provide two Host USB Ports. Port1 can interface to a USB keyboard/mouse. Port 2 supports a USB Flash Disk. Simple commands can handle FAT file system applications. No USB specific firmware programming is required on the controller side.

A 24-bit ADC (LTC2448) offers 8 ch. differential or 16 ch. single-ended input channels. A peak single-channel output rate of 5 KHz can be achieved. A 12-bit ADC (TLC2543, 0-5V) provides 11 ch. analog inputs at up to 10K Hz sample rate. A 16-bit DAC (LTC2600) provides 8 analog output voltages (0-5V).

The ***HD*** supports up to 2 GB mass storage CompactFlash cards with Windows compatible FAT file system support, allowing user easily transfer large amounts of data to or from a PC.

The ***HD*** features 16-bit ACTF Flash (256 KW) and battery-backed SRAM (256 KW). It also includes 4 TTL I/Os, 3 timers, 512 bytes EEPROM, watchdog timer, and Real Time Clock(DS1337).

There are a total of 6 UARTs on board: 2 from the CPU chip, 4 from QUART chip(TI16C754B). By default all UARTs are supported by RS232 drivers. Two of the QUART RS232 ports can be converted to RS485.

Seven high voltage I/Os (30V DC inputs or 50V sinking outputs) are included. Optional 8 sourcing driver can be installed. Two mechanical Reed Relays provide reliable, fast switching contacts with a specification of 200 V, maximum 1 Amp carry current, 0.5 Amp switching, and 100 million times operation. A Color TFT display (320x240 pixels, 5.7", No touch screen) with an integrated control chipset is available, allowing access to drawing buffer using limited vendor-provided command set.

The ***HD*** can be powered by regulated 5V, or 9-12V with on-board linear regulator, or 9-24V with optional switching regulator. The HD works with most TERN expansion boards including the P52, P100, P300, MotionC, MMC, UR8, and EyeJ.

Ordering Information

HD $189/$139/$99/$89 Qty 1/50/100/1K+

Includes 40 MHz CPU, 256KW SRAM, PIOs, 6 RS232, 3 timers, watchdog timer, 512 bytes EE, 256KW flash

NOT including add-on options. OEM option discounts available.

Add-on Options:

1) Real-time clock (RTC) and battery $20
2) CompactFlash interface $20
3) USB Host Port1 and Port2 ..... $50
4) 100M BaseT hardware TCP/IP Ethernet $30
5) 24-bit ADC(LTC2448) $40
6) Precision Reference with Temp Sensor $15
7) 8 ch. 16-bit DAC (LTC2600) $60
8) 11 ch. 12-bit ADC (P2543) $20
9) Switching Regulator $20
10) Reed Relay, up to 2 ..... $10x2
11) 5.7" Color QVGA TFT $200
12) Plastic Enclosure/Aluminum Bezel ..... Call

Typical Order Example:

H-Drive™, 5.7" Color TFT
HD +11 = $189+$200 = $389

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