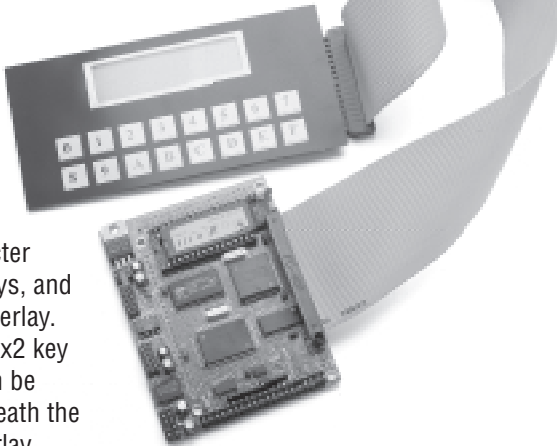


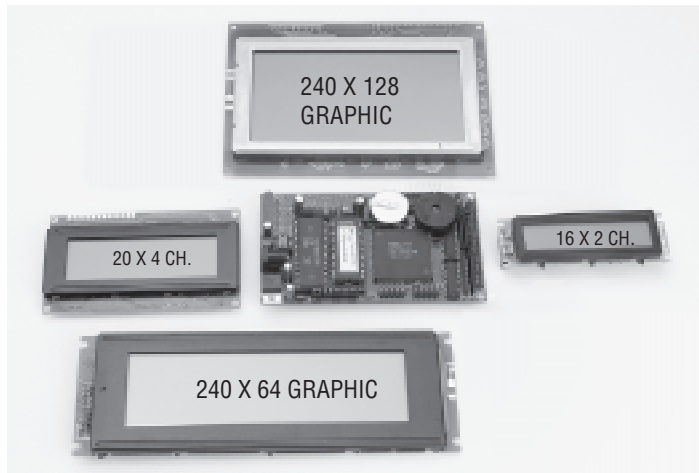
# Kpad™

The Kpad™ is a low cost user interface. Measuring 5.2x2.5", the Kpad supports a 16x2 line character type LCD, 16 keys, and a blue plastic overlay. User definable 8x2 key layout paper can be inserted underneath the blue plastic overlay.



Software sample programs are available. Two versions of the Kpad are available: Kpad-I/O and Kpad-Bus. The Kpad-I/O can be driven by 6 TTL I/O pins, 5V, and GND. The Kpad-Bus can interface to a host TERN controller (such as AC, AEP, IEL) via the 20x2 J1 bus header with no extra I/O pins required. An A-Core can be directly installed on the back side of the Kpad-bus. Other controllers can control the Kpad via a socket or a flat cable.

The MiniDrive™ (MD) supports various character or graphic LCD modules (with a built-in LCD controller). The MD is directly soldered on the backside of a LCD.



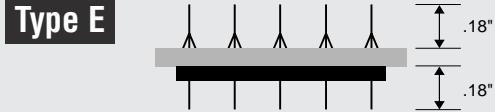
## Ordering Information

<b>Kpad-I/O</b> (16x2 LCD, 8x2 keys) .....	\$99
<b>Kpad-bus</b> (16x2 LCD, 8x2 keys, 20x2 J1 socket) .....	\$129
<b>SLC16x2-MD</b> (16 x 2 character, 85x30 mm) .....	\$199
<b>SLC20x4-MD</b> (20 x 4 character (98x60 mm) .....	\$249
<b>SLG240x64-MD</b> (240 x 64 pixel (180x75 mm) .....	\$349
<b>SLG240x128-MD</b> (240 x 128 pixel (144x104 mm) .....	\$399
Includes LCD, MD w 128K SRAM, battery, beeper.	
<b>Cable</b> DB9-IDE10 serial cable(DEBUG cable) .....	\$10
<b>Wall transformer</b> (AC to DC 9V, 500 mA) .....	\$15
3x4 keypad .....	\$15
16 x 2 character LCD, 85x30 mm .....	\$40
20 x 4 character LCD, 98x60 mm .....	\$60

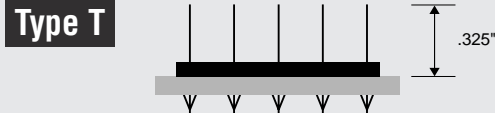
# Header Installation Types

TERN controllers use 0.1 spacing, 0.025 square inch straight pin headers.

The four types of header installations are as follows:

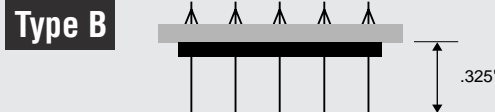


**Type E** is for evaluation boards, with signal accessible on both top (component) and bottom (solder) sides of the PCB. **Type E** is available with the **EV-P or DV-P Kits**.

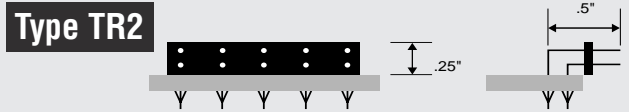


**Type T** puts the long leads with plastic spacer on the top side of the board. The short pins are soldered at the bottom side of the board.

**Type T** is the factory default installation for OEM.



**Type B** puts the long leads with plastic spacer on the bottom side. The short pins are soldered at the top side.



**Type TR2** (top, right angle, dual) has long bent pins on the component side of the board.

## **Type S** Special Header configuration.

**Example 1:** FlashCore's PCB has 5x2 pads for J5 which supports 2 RS232 ports and DC power input. In order to install two RS-232 cables and a DC power plug at the same time during evaluation, three types of pin headers are installed in J5, including 2 right angle pins for the DC power inputs, 4x1 type "T" pins for SER0, and 4x1 right angle pins for SER1.

**Example 2:** A-Engine J4 has 25x2 pins and H0 has 5x2 pins. The J4 should be installed as type "TR2" if you want to install an MMB or FCO on the top of the AE. The H0 should not be installed if you are not ordering the ADC.

**Example 3:** The "Engine" controllers J2 and J1 header should be installed as Type "B", if the Engine drives a P100, P50, or MotionC. The J4 uses Type "T" to allow access of PPI signals from the top.

**After prototype, you can specify and request suitable header configurations for your OEM board orders.**