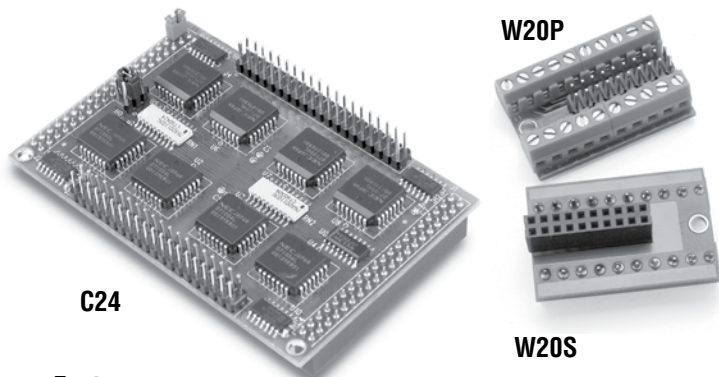


# C24™ Independent 24 16-bit counters



C24

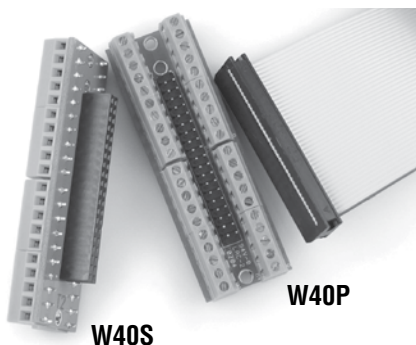
W20P

W20S

## Features:

- 3.6 x 2.3 x 0.3", interfaces to TERN Engine controllers.
- 24 independent 16-bit hardware counters.
- Daisy chain to form a 16x24-bit long counter
- Software programmable in 6 modes.
- All counter inputs are buffered with Schmitt-triggers.
- High speed external event counters, up to 10MHz clock inputs.
- Programmable square wave, or complex wave form generator.
- Software re-triggered counting sequence.

The **C24** can interface to a host TERN controller via J1 and J2 bus headers.



W40S

W40P

The **W40™** or **W20™** is a low cost Pin-Screw terminal adaptor. W40 converts standard 0.1" lead spacing 20x2 pin headers to 40 screw terminals for easy field wiring. W20 has 20 screw terminals and 20 pins. The **W40P** has a 20x2 pin-header for using a flat ribbon cable. The **W40S** has a 20x2 socket for mounting on top of pin-headers.

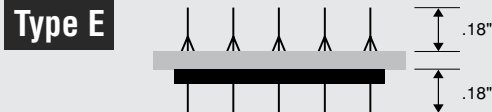
## Ordering Information

<b>C24</b> high speed 16-bit counters .....	\$99
<b>W40/20P</b> (40/20 screw terminals to pin header) .....	\$20/10
<b>W40/20S</b> (40/20 screw terminals to socket) .....	\$20/10
Cable DB9-IDE10 serial cable (DEBUG Cable) .....	\$10
Wall Transformer (AC to DC 9V, 500 mA) .....	\$15
16x2 character LCD, 85x30 mm .....	\$40
20x4 character LCD, 98x60 mm .....	\$60
<b>ACTF Flash</b> a) 128KB/b) 512KB .....	\$20/\$30
DEBUG ROM .....	\$20
<b>VE232</b> .....	\$49
Ejecting Mechanism .....	\$10

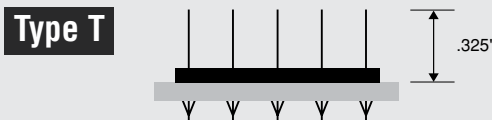
# Header Installation Types

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

The four types of header installations are as follows:

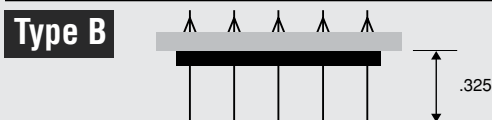


**Type E** is for evaluation boards, with signal accessible on both top (component) and bottom (solder) sides of the PCB. **Type E** is available with the **EV-P or DV-P Kits**.

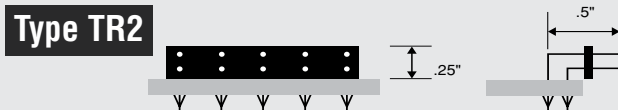


**Type T** puts the long leads with plastic spacer on the top side of the board. The short pins are soldered at the bottom side of the board.

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



**Type B** puts the long leads with plastic spacer on the bottom side of the board. 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.**