



## VX442C 96 Channel Static Digital

The VX442C module provides 96 channels of general purpose digital input/output with drive/sense/mask with interrupt on failure. Input values can be read on-the-fly or be latched on software command, on receipt of an external trigger, or on a comparison error following a trigger. Data can be latched immediately on a trigger or after a programmed delay. Versatile triggering allows synchronization of multiple boards across the backplane. Interrupts can be generated on the occurrence of a trigger or on a comparison error.

### Specifications:

#### Input Characteristics:

|                 |                |
|-----------------|----------------|
| Device type     | 74ALS245       |
| V <sub>IH</sub> | 2.0V min       |
| V <sub>IL</sub> | 0.7V max       |
| I <sub>IH</sub> | 20 $\mu$ A max |
| I <sub>IL</sub> | -0.1mA max     |

#### Output Characteristics:

|                 |           |
|-----------------|-----------|
| Device type     | 74ABT126  |
| V <sub>OH</sub> | 3.0V min  |
| V <sub>OL</sub> | 0.35V max |
| I <sub>OH</sub> | -32mA max |
| I <sub>OL</sub> | 64mA max  |

Inputs have 100K $\Omega$  pull-up resistors, which may have a minor (50 $\mu$ A) effect on the input characteristics.

Pull-up resistors on the inputs provide a stable high level for unconnected inputs.

All input (drive) and output (sense) devices are socketed for easy replacement.

#### I/O Ports:

- I/O divided into six 16-bit ports
- Ports synchronized via common triggers

#### Trigger Sources:

- Software board trigger
- Software port trigger
- VXI TTLTRIG signals
- Front panel signals

Triggers can be applied immediately (rising or falling edge) or delayed from 125ns to 16 $\mu$ s.

#### Interrupts (programmable):

- IRQ1-7 or disabled
- From any board trigger
- Rising or falling trigger edge

#### Connectors:

Three 78-pin metal shell DSUB receptacles (HD-22 w/screwlocks)

#### Temperature:

|            |               |
|------------|---------------|
| Operating: | 0°C to 55°C   |
| Storage:   | -40°C to 75°C |

**Power:** +5V @ 1.8 A

### VXIbus Compliance

Complies with VXIbus Spec. Rev. 1.4 for single-slot C-size modules.

|                  |                 |
|------------------|-----------------|
| Device Type:     | Register Based  |
| Addressing:      | A16             |
| Data Transfers:  | D16 Slave       |
| Memory Space:    | None            |
| Interrupts:      | Programmable    |
| Triggers:        | Supported       |
| Bus Arbitration: | BRx tied to BGx |

### Applications

- General Purpose Digital I/O
- Static Digital Test

### Ordering Information

**Part Number** 11028630-0001

### Additional Information

User Manuals for C&H carriers and this module can be found on our website at [www.chtech.com](http://www.chtech.com).