



TTL Inputs

Digital Signal Conditioning Board for VMEbus and Mini-Module Systems

Features

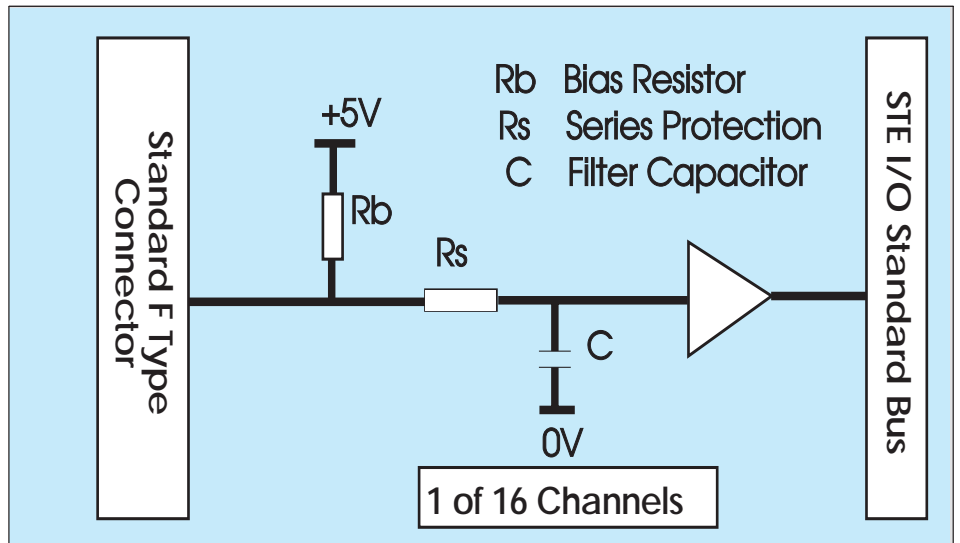
- 16 digital input channels
- Inputs from TTL levels to +100 Volts
- Input filter option (user configurable)
- Input over voltage protection
- Compatible with LED Status Monitor
- Compatible with F-Screw board
- Industrial standard I/O bus
- TTL compatible
- Single height euro-card

Description

The D-140 is a digital signal conditioning input card which detects voltage inputs and buffers them onto the standard digital I/O bus. The input devices have series resistors feeding into CMOS gates with TTL input thresholds. The resistors provide up to 100 Volt protection. A second resistor biases the inputs to their off state so that a contact closure detection requires no additional parts. The card has 16 identical input channels.

Any input which brings the voltage down to 0 Volts (< 0.5 Volts) will be read as ON. If the input is not connected or, if the input voltage is greater than 2.4 Volts, the input will be read as OFF. A resistor is used to limit input currents and clamping diodes allow inputs of +/- 100 Volts to be used without danger to the system. A low pass RC filter can be put on each input by fitting the capacitors as required.

The I/O bus connects to the board by a



50 way IDC ribbon cable connector. The channels used on this board are link selectable. Screw terminal connections to external plant are provided on a F-Screw board which mates with the DIN 41612 type 'F' connector on the board.

Applications include industrial, factory and laboratory applications where a pair of contacts are to be detected or dc ON states need to be monitored. Such applications include proximity detectors, relays, tilt switches, opto-switches, fluid level and limit switches.

Specification

- Number of inputs**
16 digital, fully buffered
- Input types**
TTL, 28, 48 Volts DC
- Input thresholds**
Low V < 0.5 Volts
High V > 2.4 Volts
- Maximum input voltage**
+/- 100 Volts

Input filter
User configurable RC filter

Input protection
100k ohm series resistor
Input clamping diodes

Channel selection
Link selectable

Connectors
50 way IDC I/O bus
48 way DIN 41612 type 'F'

Power requirements
+5 Volts @ 40mA (max.)

Temperature range
0 to 55 deg C

Humidity
0 to 90% RH (non condensing)

Size
3U euro-card 100*160mm

Order Codes

D-140	16 Channel TTL Input board
F-010	F-Screw board
D-100	8 Channel LED Monitor

Miscellaneous

MD-140	Technical Manual
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D140 940321

Cambridge Microprocessor Systems Limited,

Unit 17 - 18 Zone 'D',
Chelmsford Road Ind. Est.,
Great Dunmow,
ESSEX, U.K. CM6 1XG
Tel 01 371 875644
FAX 0 1371 876077