

MSI STD BUS Embedded Series

MSI-C400 and MSI-C412 CMOS ANALOG I/O CARDS

MSI-C400 ANALOG I/O CARD

The MSI-C400 is an 8-bit CMOS analog I/O card which provides an economical solution for industrial applications requiring medium resolution analog inputs and outputs. The card is designed for use with all STD BUS processor cards. The unit provides eight channels of analog input and two channels of analog output with ± 1 LSB accuracy. The card incorporates an Analog Devices AD7581KN 8-channel A/D converter for analog inputs and an AD7528 dual-channel D/A converter for the analog outputs. Input and output ranges are selectable for 0-5V and 0-10V. Input buffer amplifiers are provided on each input for enhancing input impedance. The buffered inputs are typically in excess of 1 M Ω . The analog output buffers are type AD644 dual op-amps. A clock prescale network is provided to allow operation of the card for clock frequencies up to 5 MHz. The card is I/O mapped on 16 byte boundaries with wire-wrap headers provided for ease of address selection. Analog



FEATURES

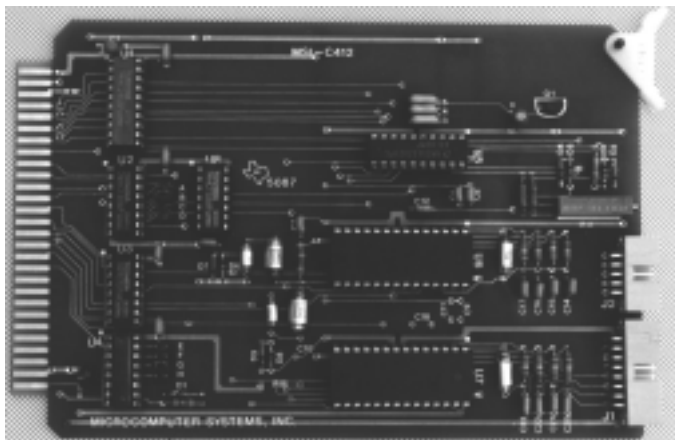
- ◆ Eight 8-bit analog inputs and two 8-bit analog outputs with ± 1 LSB accuracy.
- ◆ Selectable 0-5V or 0-10V I/O ranges.
- ◆ Input buffer amplifiers for high input impedance.

I/O is provided by a 20-pin AMP type 103311-5 connector. Request the *MSI-C400 User Manual* for detailed information.

MSI-C412 ANALOG I/O CARD

FEATURES

- ◆ Eight 12-bit analog inputs and four 8-bit analog outputs with ± 1 LSB accuracy.
- ◆ 0-5V or 0-20 mA inputs and 0-5V outputs.
- ◆ Input conversion rates of 100 μ s/channel.



The MSI-C412 is an analog I/O card that provides eight channels of 12-bit analog input and four channels of 8-bit analog output with ± 1 LSB accuracy. The card is I/O mapped for 8-bit addressing with IOEXP and requires 32 bytes of I/O address space. The card incorporates two Analog Devices AD7582KN 4-channel successive-approximation A/D converters for inputs and an AD7526 4-channel D/A converter for analog outputs. An LM336 provides a precision reference voltage source for the conversion devices. Input and output ranges are 0-5V with provisions for 250 Ω precision resistors for 0-20 mA inputs. Input conversion rates are 100 μ s/channel with an auto-zero cycle for low offset voltages. Inputs and outputs are provided by 16-pin and 10-pin connectors (AMP 103311-3 and 103311-1), respectively. The card requires +5V and ± 12 V or ± 15 V.

Request the *MSI-C412 User Manual* for detailed information.



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