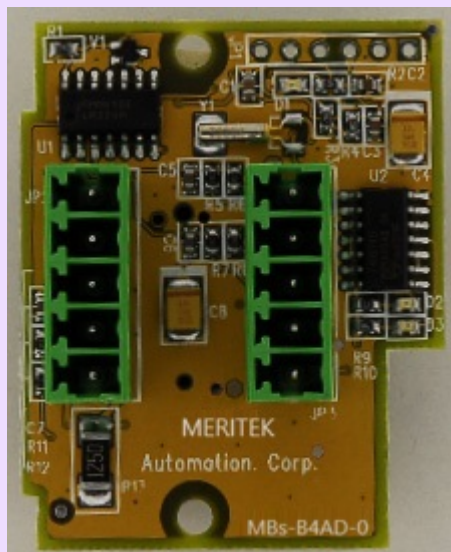




Introduction

MBs-B4AD is one of the analog Input expansion boards of MERITEK MBs series PLC. For analog input it provides 4 channels of A/D inputs with 12-bit (coded in 14 bits) resolution. The Input signal types (voltage or current) can be selected by the field wiring.

Pin Assignment

Analogue Input		Analogue Input	
V10	●	●	V12
I10	●	●	I12
V11	●	●	V13
I11	●	●	I13
Gnd	●	●	Gnd

Specification

Analog Input

Total Channels : 4 Channels

Resolution : 12 bits

Coding Format : 14 bits (0 ~ 16380)

Signal Resolution : 2.44mV(Voltage), 4.88uA(Current)

Registers Occupied : 4 Registers (D4072 ~ D4075)

Conversion Time : Updated each scan

Accuracy : $\pm 1\%$

Max. Absolute Input Rating :

$\pm 15\text{V}$ (Voltage), 30mA(Current)

Input Impedance : 100K Ω (Voltage), 125 Ω (Current)

Measurement Range : 0 ~ 10V(Voltage)

0 ~ 20mA(Current)

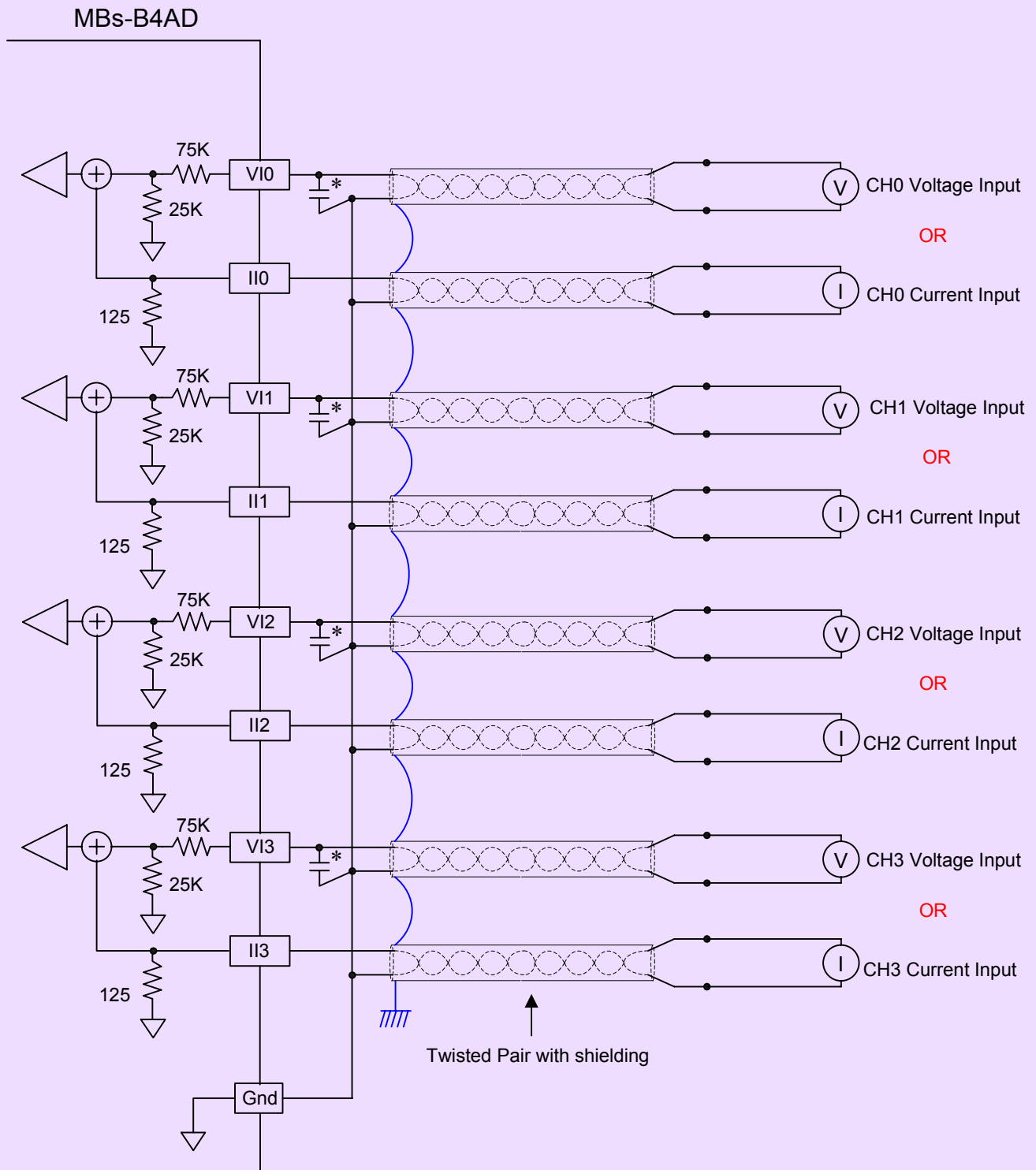
Indicator(s) : No

Internal Power Consumption : 5V, 100mA (Max. Load)

Operating Temperature : 0 ~ 60 $^{\circ}\text{C}$

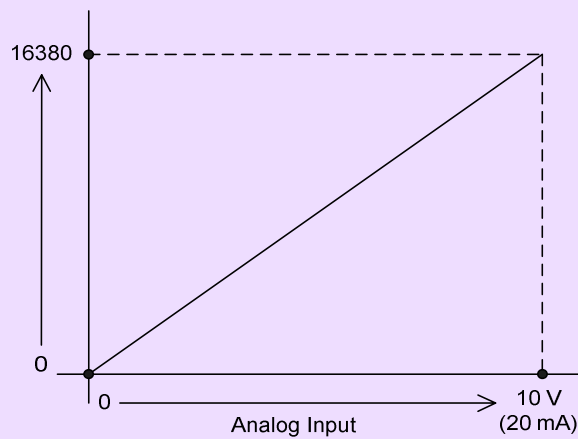
Storage Temperature : -20 ~ 80 $^{\circ}\text{C}$

Wiring Diagram



* 0.1~0.47 uF capacitor (to filter noise).....Advice to Install, but not necessary!!

Characteristics Charts



Registers allocation Map

Channel No.		Mapped Register
Analog Input	CH0	D4072 (0 ~ 16380)
	CH1	D4073 (0 ~ 16380)
	CH2	D4074 (0 ~ 16380)
	CH3	D4075 (0 ~ 16380)