

# Data Sheet 2CM2 Controller

## ELECTRICAL CHARACTERISTICS

### Absolute Maximum Ratings†

Battery (B+)	33V
All digital inputs with respect to ground	▼ 200V @ 15% D.C.
All analog inputs with respect to ground	▼ 90V
Sensor 5 Volt source current	50mA
Outputs (back feed condition)	Battery +0.7V
Storage temperature	-65°C to +150°C
Ambient temperature with power applied	-40°C to +85°C
ESD protection on all pins	4 kV

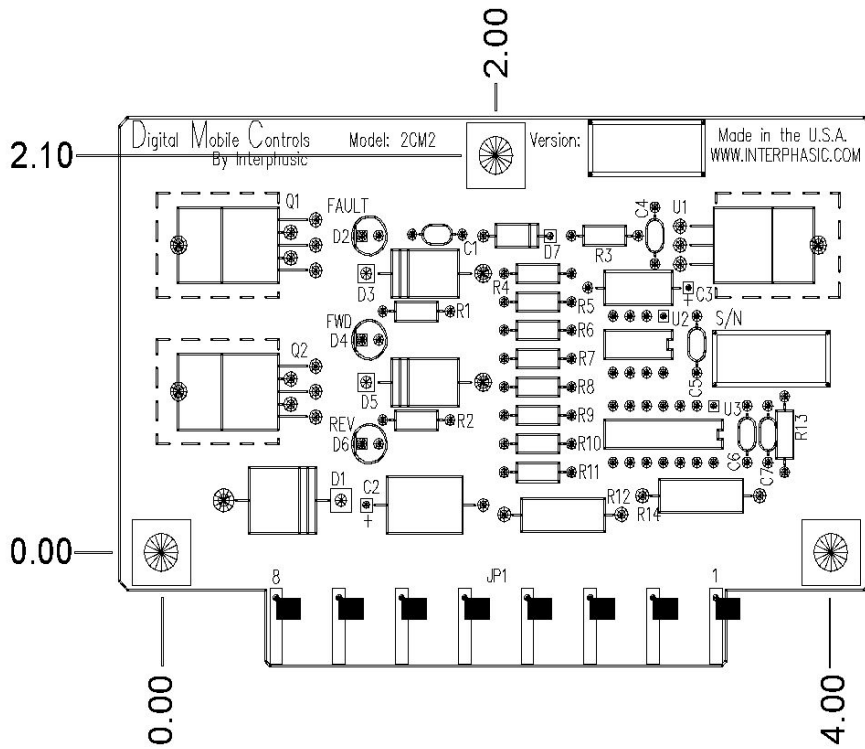
† **NOTICE:** Stress above those listed under “Absolute Maximum Ratings” may cause permanent damage to the controller. This is a stress rating only and functional operation of the controller at these or any other conditions above those indicated in the operational listings of this specification is not implied. Exposure to Absolute Maximum Rating conditions for extended periods may affect controller reliability.

**Specifications:** This is a LEAD-FREE (Pb) assembly.



Power supply input - nominal	9-30 VDC
Reverse polarity protection	Yes
Transient suppression	1500W@36 VDC
<b>Digital inputs</b>	All digital inputs active high
Input voltage span	▼ 30 VDC
Input impedance	3.3K ↕
High-level input voltage threshold (1)	2.75 VDC
Low-level input voltage threshold (0)	1.75 VDC
<b>Analog input</b>	
Input voltage span	0-5 VDC
Input impedance	50K ↕
Cutoff Frequency filter pole location	-3dB/Dec @90Hz
<b>Sensor supply voltage</b>	
Supply voltage (filtered)	5 volts
Nominal source current	35mA





### Connection Detail

#### TB1 Connector Pins:

- TB1-1 = INPUT 1, Digital
- TB1-2 = +5 Volt Supply
- TB1-3 = INPUT 2, Analog Input
- TB1-4 = OUTPUT, V1
- TB1-5 = INPUT 3, Digital
- TB1-6 = POWER B+
- TB1-7 = OUTPUT, V2
- TB1-8 = GROUND