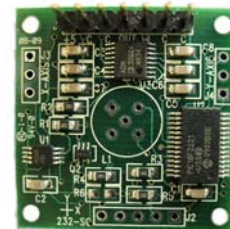


RS232 Mini Signal Conditioner Board (Part Number: 6200-006) Data Sheet

Specifications:

Power supply voltage	3 to 5 VDC (regulated)
Power supply current	16mA @ 5VDC
.....	11mA @ 3.3VDC
Operating temperature range (board only).....	-40°C to +85°C
Storage temperature range (board only)	-55°C to +100°C
Angle Range	0-100% of sensor range (16 bit, 65535 counts max)
Board dimensions.....	1.25 x 1.25 inches or 32mm x 32mm square
Mounting hole and spacing.....	0.089 inches diameter and 1.05 inches (center to center)
Temperature sensor range.....	-40°C to +125°C (10 bit resolution)



Signal descriptions J1:

Pin #	Signal name	Direction	Description
1	Vcc	Input	Supply voltage input: +3 to +5 vdc regulated
2	GND	-	Ground - The reference for the digital signals and the supply voltage
3	GND	-	Ground - The reference for the digital signals and the supply voltage
4	TX	Output	RS232 transmit output Response time: 25 msec (max) after command for complete ascii data string output
5	RX	Input	RS232 receive input
6	GND	-	Ground - The reference for the digital signals and the supply voltage
7	GND	-	Ground - The reference for the digital signals and the supply voltage

RS232 Communications port setup:

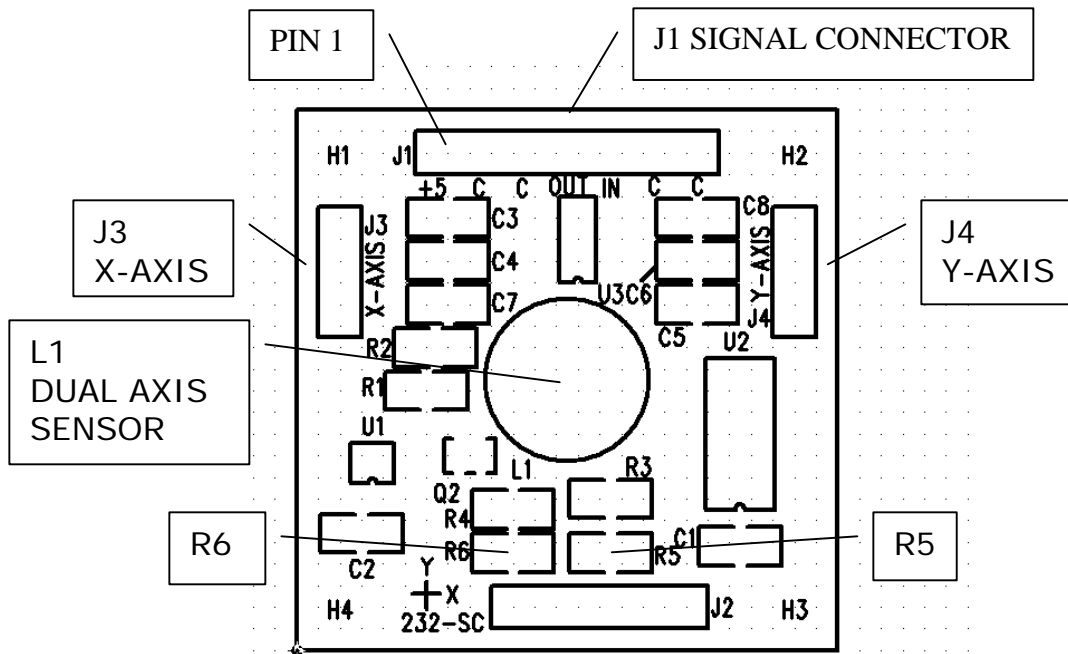
Baud rate	Data bits	Parity	Stop bits
9600	8	none	1

Command format:

Command (ascii - not case sensitive)	Response (ascii)
'X'	X axis value (16 bit – 65535 max)
'Y'	Y axis value (16 bit – 65535 max)
'T'	Temperature value (10 bit – 1023 max)
'S'	Outputs X axis, Y axis, Temperature at set intervals
'R'	Reset the 'S' command
'1' to '5'	Set delay for 'S' command, 1 to 5 seconds (default = 1 second)

NOTE: To convert the 10 bit data returned from the on board MCP9700 use the following formulas,
MCP9700 output voltage = 10 bit value / 1023 * supply voltage
Temperature C = (MCP9700 output voltage – 0.5) / 0.010

RS232 Mini Signal Conditioner Board (Part Number: 6200-006) Data Sheet



RS232 signal conditioner board assembly

Sensor configuration	Description
Dual Axis sensor mounted on board (standard configuration)	Dual axis sensor is mounted in location L1 R5 is 10.0K ohms R6 is not installed
Single axis sensors mounted off board	Single axis sensors are connected to J3 (x-axis) and J4 (Y-axis) No sensor is installed in L1 R5 is not installed R6 is 1.0K ohms Note: If R5 is not removed then R6 must be less than 100 Ohms

Note: J2 is for factory use only.