

Specifications:

Weight: 1.69 oz / 48.1 g

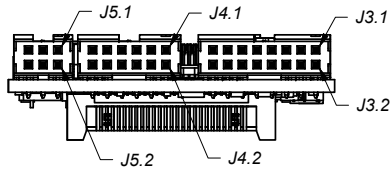
Operating Temperature: -40C to +70C (default)
-40C to +85C (factory option)

The environmental specifications are ensured by design and lot testing but not guaranteed or individually tested unless specifically requested by the customer.

Voltage Levels (nominal):

Analog Input Voltage: 0-3.0V
Analog Output Voltage: 0-2.5V
Digital Logic Inputs: 0-3.3V (max 0-5V)
Digital Logic Outputs: 0-3.3V
AUX ADC Input: 0-2.0V
RS232/RS485 I/O: +/-12V
VPWRAMP and VPREAMP Supplies: 3.3V, 50mA Max
3.3V OUT Supply: 3.3V, 100mA Max

For additional specifications please refer to the Micromodem manual.



J3 - Serial Port User

FCI PN: 98464-G61-16LF

Pin	Description
1	GND
2	GND
3	COM1 RS232 TX
4	COM2 RS232 TX
5	COM1 RS232 RX
6	COM2 RS232 RX
7	COM1 RS232 /RTS
8	COM4 RS232/485 /RTS / TX+
9	COM1 RS232 /CTS
10	COM4 RS232/485 TX / TX-
11	EXTPPS
12	COM4 RS232/485 RX / RX+
13	EXTWAKE (active low)
14	COM4 RS232/485 /CTS / RX-
15	TXTRIGGER
16	GND

All RS232 / RS485 serial lines referenced to the Micromodem

RS232 / RS485 functionality selection on COM4 requires software configuration. Please refer to the Micromodem manual.

J1 - Analog and User I/O

FCI PN: 98464-G61-14LF

Pin	Description
1	TACTIVE
2	GPIO3
3	GND
4	RXACTIVE
5	TXINHIBIT
6	RXPENDING
7	GPIO4
8	GPIO5
9	VPWRAMP OUT
10	AGND
11	VPREAMP OUT
12	ANALOG TX OUT
13	ANALOG RX IN +
14	ANALOG RX IN -

J4 - Logic Level User I/O

FCI PN: 98464-G61-12LF

Pin	Description
1	GND
2	3.3V OUT
3	COM3 Logic TX
4	I2C SCL
5	COM3 Logic RX
6	I2C SDA
7	COM3 Logic /RTS
8	GPIO1
9	COM3 Logic /CTS
10	GPIO2
11	AUX ADC +
12	AUX ADC -

COM3 is 3.3V logic only. Use of RS232 on COM3 may permanently damage the Micromodem

J5 - Power

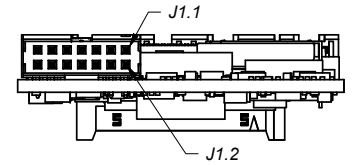
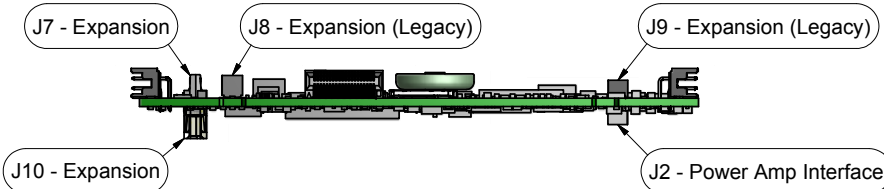
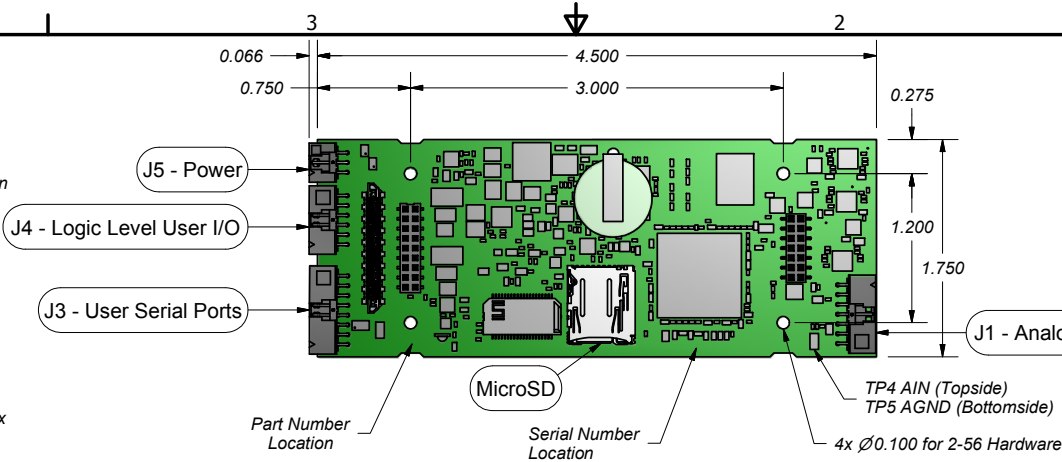
FCI PN: 98464-G61-06LF

Pin	Description
1	GND
2	VIN (3.6VDC - 35VDC)
3	GND
4	VIN (3.6VDC - 35VDC)
5	GND
6	VIN (3.6VDC - 35VDC)

Mating Connector Info:

Mate for	FCI PN
J5	90311-006LF (6-pin)
J4	90311-012LF (12-pin)
J1	90311-014LF (14-pin)
J3	90311-016LF (16-pin)
Pins	77138-101LF
Crimp Tool	HT-151

Note: The mating connectors listed do not have a Pin 1 indicator that matches the connectors on the Micromodem. The FCI 10068573 series does have the correct Pin 1 indicator to match the Micromodem but availability of this series has been limited if at all. Please take the necessary precautions to make sure any wiring that interfaces the Micromodem matches the pinout of the connectors installed on the Micromodem board.



Power Consumption:

Figures for Micromodem DSP Only

Idle: 497mW @ 12V
Receive: 497mW @ 12V
Transmit: 497mW @ 12V
Hibernate: 155uW @ 5V, 500uW @ 12V

Figures are for typical operation only.

Board Spacing for Connector Mating:

For new style boards mating via J7 and J10

Below Micromodem: 0.275" / 7mm
Above Micromodem: 0.275" / 7mm

For legacy boards mating via J8 and J9

Above Micromodem: 0.313" / 8mm (Legacy)

Chassis spacers are available from WHOI.

Unless Otherwise Noted:
1. Tolerances: Decimal .XX ± 0.01 Angular ± 1 Deg
.XXX ± 0.005
2. Dimensions are in Inches
3. Break All Sharp Edges
4. Surface Finishes Critical for O-Ring Surfaces
5. Material: Default
6. Finish:

Woods Hole Oceanographic Institution
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Drawing Title:
Micromodem 2.0

Designer: Keenan Ball	11/14/2013	Size: B	Cage Code: 88846	Drawing Number: 201005	Rev: B
Engineer: Keenan Ball	11/14/2013	Sheet 1 of 1			