

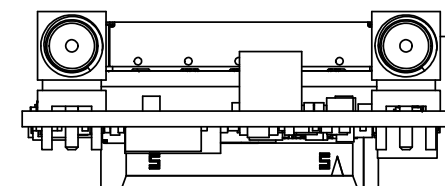
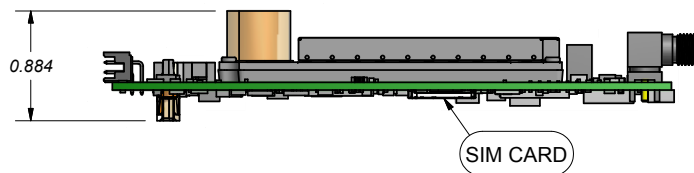
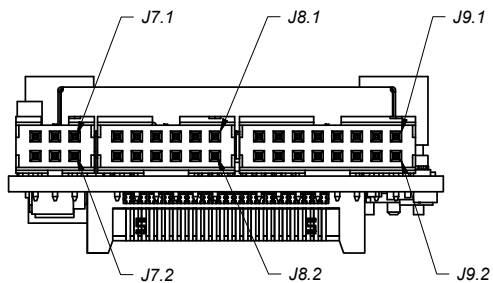
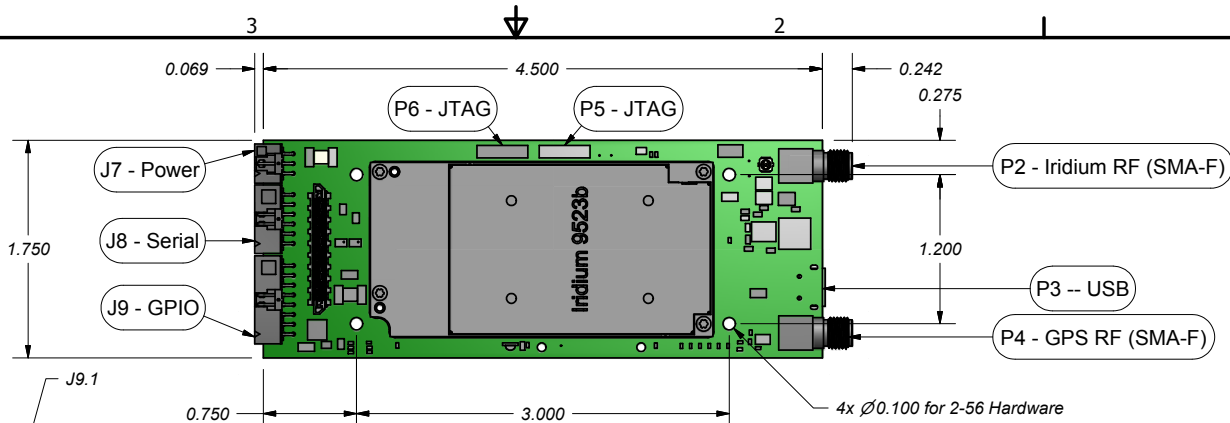
Specifications:

Weight: 2.68 oz / 76 g
 Operating Temperature: -20C to +70C
 Successful testing to -40C at WHOI has been performed.

Iridium: Iridium 9523
 GPS: u-blox MAX-7Q-0
 Microcontroller: Atmel SAM3S4CA-AU
 FPGA: Actel AGLN250V2-VQG100

Power Consumption:

As of October 2014
 Idle: ~100mW @ 12V
 Iridium RX: ~600mW @ 12V
 Iridium TX: ~7W @ 12V
 Hibernate: 1.3mW @ 12V



J9: 3.3V GPIO (5V Tolerant)*

FCI 98464-G61-16LF

- Pin 1 GPIO 1 / logic-level TX
- Pin 2 GPIO 2 / logic-level RX
- Pin 3 GPIO 3 / logic-level CTS
- Pin 4 GPIO 4 / logic-level DCD
- Pin 5 GPIO 5 / logic-level DSR
- Pin 6 GPIO 6 / logic-level RI
- Pin 7 GPIO 7 / logic-level RTS
- Pin 8 GPIO 8 / logic-level DTR
- Pin 9 Edge PPS (output)
- Pin 10 I2C #ALERT (I/O)
- Pin 11 Edge 3.3V (output)
- Pin 12 I2C SCL (output)
- Pin 13 Power On Control (input See User Manual)
- Pin 14 I2C SDA (I/O)
- Pin 15 GND
- Pin 16 GND

J8: Serial*

FCI 98464-G61-12LF

- Pin 1 COM1 TX / COM9 DCD (output)
- Pin 2 COM2 TX / COM9 TX (output)
- Pin 3 COM1 RX / COM9 RX (input)
- Pin 4 COM2 RX / COM9 DTR (input)
- Pin 5 GND
- Pin 6 COM3 TX / COM9 DSR (output)
- Pin 7 COM3 RX / COM9 RTS (input)
- Pin 8 RS232 PPS / COM9 CTS (output)
- Pin 9 Debug TX / COM9 RI (output)
- Pin 10 GND
- Pin 11 RS485 A
- Pin 12 RS485 B

J7: Power

FCI 98464-G61-06LF

- Pin 1 GND
- Pin 2 VIN (10V-33V)
- Pin 3 GND
- Pin 4 VIN (10V-33V)
- Pin 5 GND
- Pin 6 VIN (10V-33V)

Mating Connector Info:

- P2/P4 -- SMA-M 50 Ohm
- J6 -- 90311-006LF
- J7 -- 90311-012LF
- J8 -- 90311-016LF

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.

Unless Otherwise Noted:
 1. Tolerances: Decimal .XX ± 0.01 Angular ± 1 Deg
 .000 ± 0.005
 2. Dimensions are in Inches
 3. Break All Sharp Edges
 4. Surface Finishes Critical for O-Ring Surfaces
 5. Material: Generic
 6. Finish:



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| | | | |
|---|------------|-------------------------------|---------------------|
| Drawing Title: Iridium 9523 Interface | | | |
| Designer: Keenan Ball | 10/24/2014 | Size: B | Cage Code: 88846 |
| Engineer: Keenan Ball | 10/24/2014 | Drawing Number: 205102-ASM | Rev: C |
| Sheet 1 of 1 | | | |

* Many of the GPIO and Serial pins are configurable and dependent on the FPGA image that is installed.