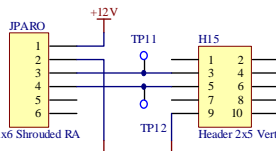


**JPARO connects to Parosci controller**

- 1: 6-16 VDC, typ 6 VDC @ 10mA
- 2: Signal & Power ground
- 3: RS232 Tx (Parosci receive)
- 4: RS232 Rx (Parosci xmit)

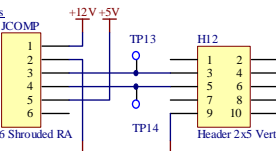


**H15 connects to BL1700 H15 (Com B)**

- 1: RS232 Tx (BL1700 xmt)
- 2: RS232 Rx (BL1700 rx)
- 3: Signal GND

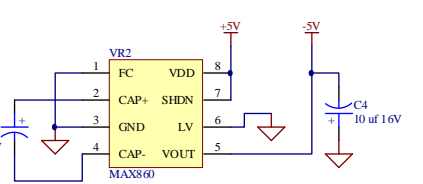
**ICOMP connects to the HMR3000 Compass**

- 1: 6-15 VDC, 35 mA typ \*\*\*
- 2: Signal & Power ground
- 3: RS232 Rx (compass receive)
- 4: RS232 Tx (compass xmit)
- 5: 5 VDC, 35 mA typ \*\*\*
- 6: Signal GND



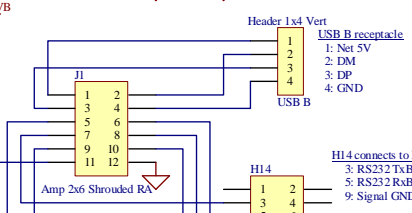
**H12 connects to BL1700 H12 (Com 0)**

- 1: RS232 Tx (BL1700 xmt)
- 2: RS232 Rx (BL1700 rx)
- 3: Signal GND



**J1 connects to CG5 Digital J1**

- 1: USB NET5V
- 2: USB DM
- 3: USB DP
- 4: GND
- 5: GND
- 6: RS232 Tx/D1C (from CG5)
- 7: RS232 Rx/D1C (to CG5)
- 8: CG5 SYNC
- 9: CG5 CPUON
- 10: CG5 RESET
- 11: CPU Power, 7-15 VDC
- 12: Power GND

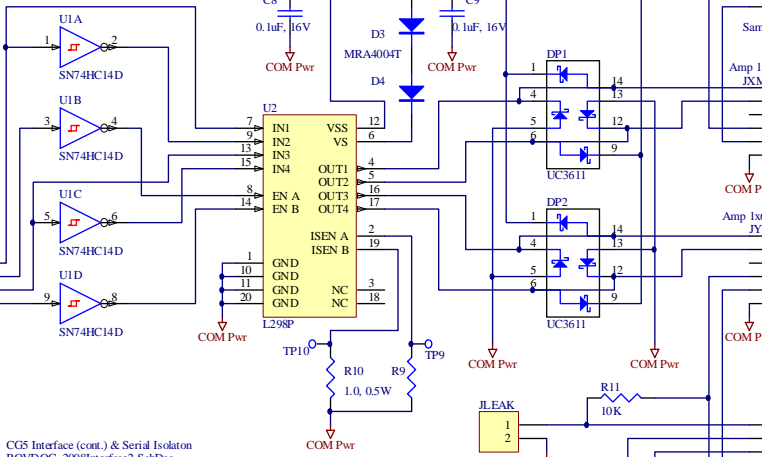
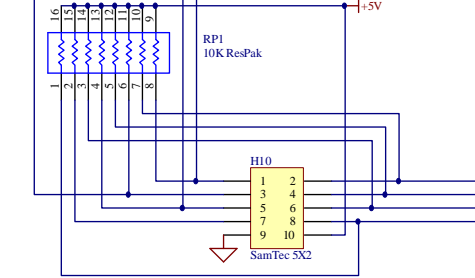


**H14 connects to BL1700 H14 (COM A)**

- 1: RS232 Tx (BL1700 xmt)
- 2: RS232 Rx (BL1700 rx)
- 3: Signal GND

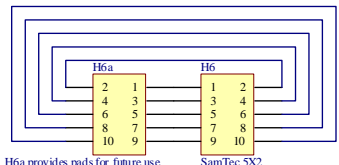
**H10 connects to BL1700 H10**

- 1: HVB00 to CG5 SYNC
- 2: HVB04 to Input 1 & 2 (XP)
- 3: HVB01 to CG5 CPUON
- 4: HVB05 to Enable A (XE)
- 5: HVB02 to CG5 RESET
- 6: HVB06 to Input 3 & 4 (YP)
- 7: HVB03 - NC
- 8: HVB07 to Enable B (YE)
- 9: GND
- 10: K

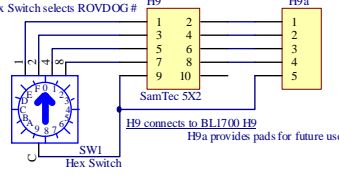


**H8 connects to BL1700 H8**

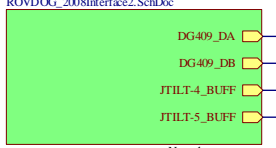
- 1: AIN4 - multiplexed heaters
- 2: AIN5 - air pressure sensor
- 3: AIN6 - spare 1
- 4: AIN7 - spare 2
- 5: +5ANA
- 6: A/D REF
- 7: AIN8 X Slide Pot



**H6-9 & H9-9 are BL1700 common, no connection to this board**

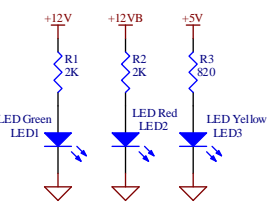
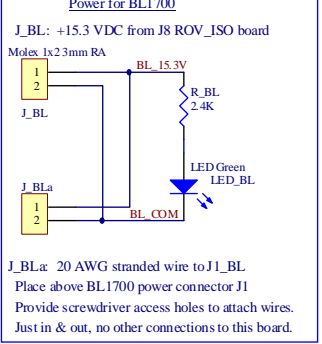


**CG5 Interface (cont.) & Serial Isolation**



Note that many power pins are not shown like VCC, GND, VDD, etc. Place C13 decoupling cap near VCC Pin 14, 74HC14

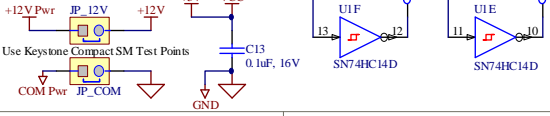
**Power for BL1700**



J.BL.α 20 AWG stranded wire to J1.BL Place above BL1700 power connector J1 Provide screwdriver access holes to attach wires. Just in & out, no other connections to this board.

**Design 4 layer board w/ 2 power planes**

Split the 2 power planes: +12V, +12V Pwr, +5V COM, COM Pwr



**FINAL 012009**

<b>Title ROVDOG CG5 Interface 3.0</b>	
Project ROVDOG	Printed 4/6/2009 3:53:13 PM
Number IGPPmrk012009	Revision A
Drawn by Mike Kirk 3/12/2008 Tel: 858-534-6729	
File: F:\MARKZUMBERGE\2008\ROVDOG\SCHEMATICS\ROVDOG 2008\Interface\ROVDOG 2008\Interface.SchDoc	
Size <b>B</b>	Hydraulics Laboratory Scripps Institution of Oceanography University of California, San Diego 9500 Gilman Drive La Jolla, California 92093-0222
Sheet 1 of 2	

