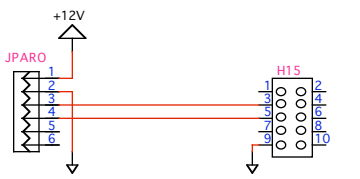


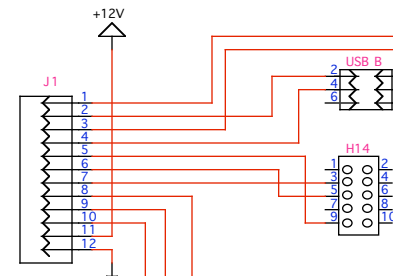
JPARO Connects To Parosci controller
 1: 6-16 VDC, typ 6 VDC @ 10 mA
 2: Signal and power ground
 3: RS232 RX (parosci receive)
 4: RS232 TX (parosci xmt)
 Remove Pin 5 on J5 and add key to position 5 on mating plug



H15 connects to BL1700 H15 (Com B)
 3: RS232 TXB (BL1700 xmit)
 5: RS232 RX (BL700 rx)
 9: Signal gnd

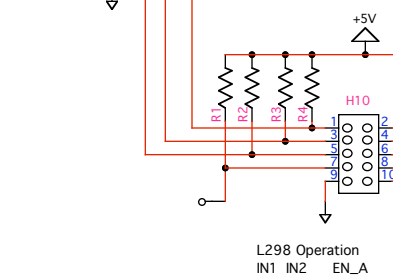
USB B receptacle
 1: NET 5V
 2: DM
 3: DP
 4: GND
 5: N/C
 6: N/C
 Remove pins 5,6 on USB B and add key to positions 5,6 on mating plug

J1 Connects to CG5 Digital J1
 1: USB NET5V
 2: USB DM
 3: USB DP
 4: GND
 5: GND
 6: RS232 TXD1C (from CG5)
 7: RS232 RXD1C (to CG5)
 8: CG5 SYNC
 9: CG5 CPUON
 10: CG5 RESET
 11: CPU Power, 7-15VDC
 12: Power GND



H14 connects to BL1700 H14 (COM A)
 3: RS232 TXB (BL1700 xmit)
 5: RS232 RX (BL700 rx)
 9: Signal gnd

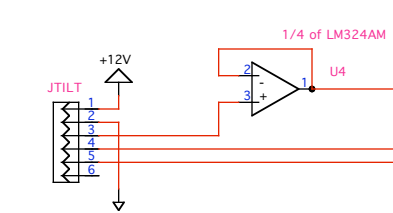
H10 Connects to BL1700 H10
 1: HVB00 to CG5 SYNC
 2: HVB04 to Input 1 and 2 (XP)
 3: HVB01 to CG5 CPUON
 4: HVB05 to Enable A (XE)
 5: HVB02 to CG5 RESET
 6: HVB06 to Input 3 and 4 (YP)
 7: HVB03 - N/C
 8: HVB07 to Enable B (YE)
 9: GND
 10: K



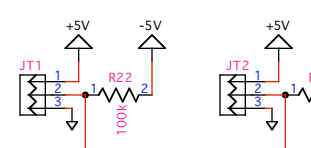
L298 Operation

IN1	IN2	EN_A	Output
1	0	1	forward
0	1	1	reverse
IN1=IN2	1		fast stop
X	X	0	free stop

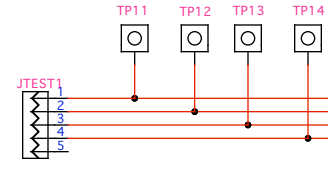
JTILT connects to 906T Tiltmeter
 1: 8-24 VDC Red
 2: Com Black
 3: Tilt. Temp Yellow
 4: X Coarse Tilt Green
 5: Y Coarse Tilt Blue
 6: NC
 Remove Pin 6 on J1 and add key to position 6 on mating cable
 Mating Cable is NOT 1:1 - see cable diagram



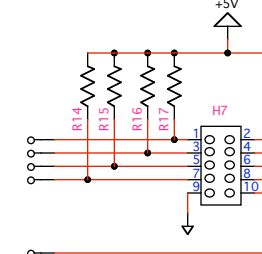
JT1, JT2 connect to LM35 Centigrade sensors (TO92 package)



JTEST1 connects to CG5 analog JTEST1
 1: Bottom heater VDC
 2: Side heater VDC
 3: Top heater VDC
 4: Inner Heater VDC
 5: NC
 Remove pin 5 on JTEST 1 and add key to position 5 on mating cable



H7 Connects to BL1700 H7
 1: HVB08 - N/C
 2: HVB12 to Mux A0
 3: HVB09 - N/C
 4: HVB13 to Mux A1
 5: HVB10 - N/C
 6: HVB14 to Mux Enable
 7: HVB11 - N/C
 8: HVB15 - N/C
 9: GND
 10: K

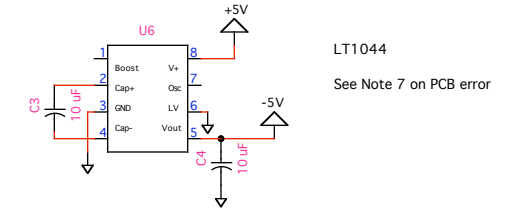


DG509 Operation

A0	A1	EN	Select
X	X	0	None
0	0	1	S1A, S2A
0	1	1	S1B, S2B
1	0	1	S1C, S2C
1	1	1	S1D, S2D

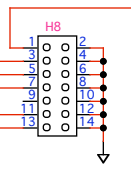
Notes:

- 1) U1 - Run trace from unused pins to 3 solder pads with thru hole. Add jumpers to ground unused inputs
- 2) U4 - Run trace from unused pins to 3 solder pads
- 3) Add thru holes on 0.100" x 0.100" grid for prototypes in unused area. Add testpoints for +24V, +12V, +5V and ground on perimeter.
- 4) Separate digital and analog sections as much as possible
- 5) Ground unused channels of U7 and A/D inputs
- 6) -5V provided to bias LM35 temperature sensor output for negative Centigrade output. Feature can be disabled by
 - a) removing U6
 - b) jumper negative rails of U7 and U4 to ground
 - c) remove R22 and R23
- 7) Rev 2.10 PCB has error, U6 pin 3 tied to TP13. See notes on PCB repair
- 8) Secure U2 and U3 tabs to board with #6 machine screws - use locktite on nut

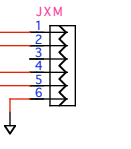


LT1044
 See Note 7 on PCB error

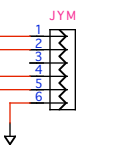
H8 Connects to BL1700 H8
 1: AIN4 to multiplexed heaters
 3: AIN5 to air pressure gauge
 5: AIN6 to spare 1
 7: AIN7 to spare 2
 9: +5ANA
 11: ADRF
 13: AIN9 X Slide Pot



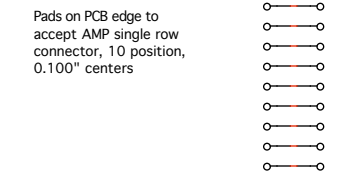
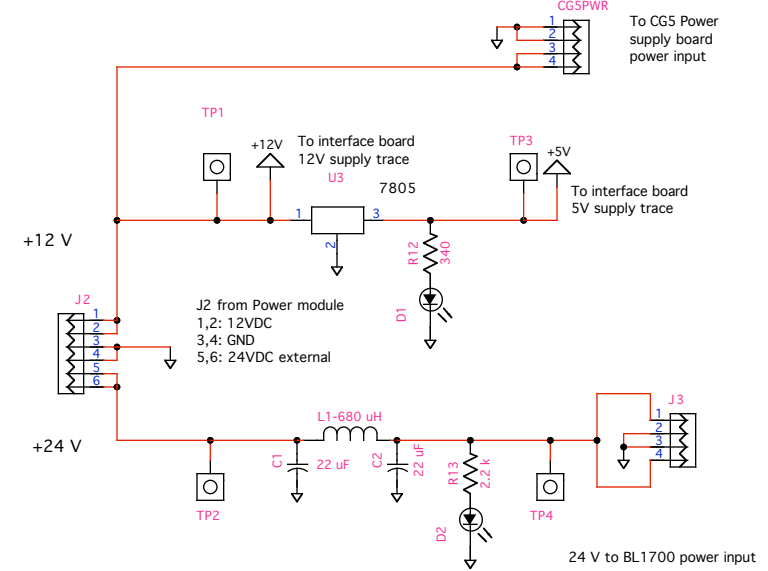
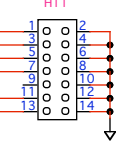
JXM connects to X Axis Motor
 1: + Motor input
 2: - Motor input
 3: NC
 4: A/D Reference
 5: Slidepot Voltage
 6: Common
 Remove pin 3 on J7 and add key to position 3 on mating plug



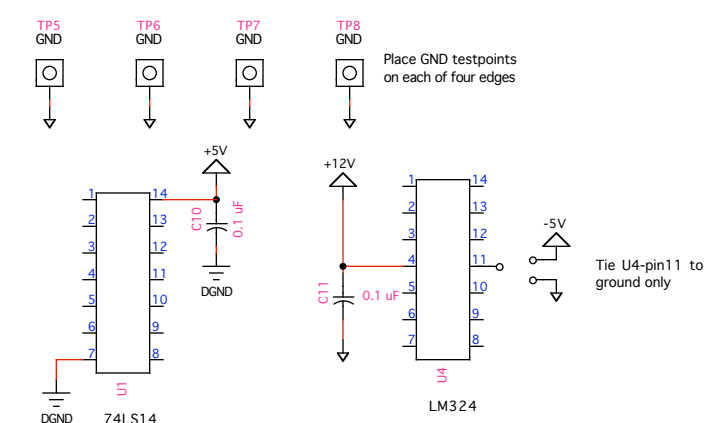
JYM connects to Y Axis Motor
 1: + Motor input
 2: - Motor input
 3: NC
 4: A/D Reference
 5: Slidepot Voltage
 6: Common
 Remove pin 3 on J8 and add key to position 3 on mating plug



H11 connects to BL1700 H11
 1: AIN0 Leak Detect
 3: AIN1 Tiltmeter Temperature
 5: AIN2 X Axis Coarse Tilt
 7: AIN3 Y Axis Coarse Tilt
 9: +5ANA
 11: ADRF
 13: AIN8 Y SlidePot



Pads on PCB edge to accept AMP single row connector, 10 position, 0.100" centers



Rovdog
 DWG 1024
 CG5 Interface Board
 Revision 2.10
 11 Jan. 2005
 G. Sasagawa