SIGNAL	7I76E CONNECTION	HAL PIN NAME	HAL SIGNAL NAME	G540 DB25	Relay Board	Opto Board
INPUTS						
E Stop	TB6 Pin 1	hm2_7i76e.0.7i76.0.0.input-00	ESTOP			
X Home	TB6 Pin 2	hm2_7i76e.0.7i76.0.0.input-01	XHOME			
Y1 Home	TB6 Pin 3	hm2_7i76e.0.7i76.0.0.input-02	Y1HOME			
Y2 Home	TB6 Pin 4	hm2_7i76e.0.7i76.0.0.input-03	Y2HOME			
X+ Limit	TB6 Pin 5	hm2_7i76e.0.7i76.0.0.input-05	XLIM			
Y+ Limit	TB6 Pin 6	hm2_7i76e.0.7i76.0.0.input-07	YLIM			
Z+ Limit	TB6 Pin 7	hm2_7i76e.0.7i76.0.0.input-09	ZMAX			
Float Switch (Z- Limit)	TB6 Pin 8	hm2_7i76e.0.7i76.0.0.input-10	ZMIN			
Plate Contact Switch	TB6 Pin 9	hm2_7i76e.0.7i76.0.0.input-11	PLTSENSE			CTL3
Feedhold Switch	TB6 Pin 10	hm2_7i76e.0.7i76.0.0.input-12	FEEDHOLD			
Z Retract Switch	TB6 Pin 11	hm2_7i76e.0.7i76.0.0.input-13	ZRETRACT			
Arc OK	TB6 Pin 12	hm2_7i76e.0.7i76.0.0.input-14	ARCOK			
Drive Fault	TB6 Pin 13	hm2_7i76e.0.7i76.0.0.input-15	DRVFAULT	Pin 15		
Torch Crash	TB6 Pin 14	hm2_7i76e.0.7i76.0.0.input-16	TCRASH			
F+ From THCad	TB3 Pin 7	hm2_7i76e.0.encoder.00.velocity				
F- From THCad	TB3 Pin 8					
OUTPUTS						
E Stop Chain Enable	TB6 Pin 17	hm2_7i76e.0.7i76.0.0.output-00	ESTOPENA		IN3	
X Drive Enable	TB6 Pin18	hm2_7i76e.0.7i76.0.0.output-01	XENA			
Y1 Drive Enable	TB6 Pin 19	hm2_7i76e.0.7i76.0.0.output-02	Y1ENA			
Y2 Drive Enable	TB6 Pin 20	hm2_7i76e.0.7i76.0.0.output-03	Y2ENA			
Z Drive Enable	TB6 Pin 21	hm2_7i76e.0.7i76.0.0.output-04	ZENA			
Plate Contact Relay	TB6 Pin 22	hm2_7i76e.0.7i76.0.0.output-05	ENAPLTSENSE		IN1, IN2	
Torch On	TB6 Pin 23	hm2_7i76e.0.7i76.0.0.output-06	TORCHON		IN4	
Charge Pump Out	TB6 Pin 24	hm2_7i76e.0.7i76.0.0.output-07	CHRGPUMPOUT	Pin 16		
Stepper Drive Signals						
X Direction	TB2 Pin 5	hm2_7i76e.0.stepgen.00.dir	XDIR	Pin 3		
X Step	TB2 Pin 3	hm2_7i76e.0.stepgen.00.step	XSTEP	Pin 2		
Y1 Direction	TB2 Pin 11	hm2_7i76e.0.stepgen.01.dir	Y1DIR	Pin 5		
Y1 Step	TB2 Pin 9	hm2_7i76e.0.stepgen.01.step	Y1STEP	Pin 4		
Y2 Direction	TB2 Pin 17	hm2_7i76e.0.stepgen.02.dir	Y2DIR	Pin 9		

SIGNAL	7I76E CONNECTION	HAL PIN NAME	HAL SIGNAL NAME	G540 DB25	Relay Board	Opto Board
Y2 Step	TB2 Pin 15	hm2_7i76e.0.stepgen.02.step	Y2STEP	Pin 8		
Z Direction	TB2 Pin 23	hm2_7i76e.0.stepgen.03.dir	ZDIR	Pin 7		
Z Step	TB2 Pin 21	hm2_7i76e.0.stepgen.03.step	ZSTEP	Pin 6		
GND	TB2 Pin 1					
GND	TB2 Pin 7					
GND	TB2 Pin 13					
GND	TB2 Pin 19			Pin 19		
Power Supplies						
Field Power +	TB1 Pin 1				DC+	DC+
Field Power +	TB1 Pin 2					
Field Power +	TB1 Pin 3					
Field Power +	TB1 Pin 4					
Field Logic Power	TB1 Pin 5					
NC	TB1 Pin 6					
NC	TB1 Pin 7					
Ground	TB1 Pin 8				DC-	DC-
LOGIC PWR+ IN	TB3 Pin 21					
LOGIC PWR+ IN	TB3 Pin 22					
GND	TB3 Pin 23					
GND	TB3 Pin 24					

SIGNAL	Plasma Interface	Table Connector
INPUTS		
E Stop		
X Home		
Y1 Home		
Y2 Home		
X+ Limit		
Y+ Limit		
Z+ Limit		
Float Switch (Z- Limit)		
Plate Contact Switch		
Feedhold Switch		
Z Retract Switch		
Arc OK		
Drive Fault		
Torch Crash		
F+ From THCad		
F- From THCad		
OUTPUTS		
E Stop Chain Enable		
X Drive Enable		
Y1 Drive Enable		
Y2 Drive Enable		
Z Drive Enable		
Plate Contact Relay		
Torch On		
Charge Pump Out		
Stepper Drive Signals		
X Direction		
X Step		
Y1 Direction		
Y1 Step		
Y2 Direction		

SIGNAL	Plasma Interface	Table Connector
Y2 Step		
Z Direction		
Z Step		
GND		
GND		
GND		
GND		
Power Supplies		
Field Power +		
Field Power +		
Field Power +		
Field Power +		
Field Logic Power		
NC		
NC		
Ground		
LOGIC PWR+ IN		
LOGIC PWR+ IN		
GND		
GND		