J11 SPINDLE			
TOOL OUT	1	2	GND
TOOLDIR OUT	3	4	GND
0-10V-OUT	5	6	GND-0-10V
24V	7	8	PWM1-OUT (OC)

J10 PROBE			
24V	1	2	GND
IN-SYNC (spindle pulse)	3	4	NC
24V	5	6	GND
PROBE	7	8	NC
24V	9	10	GND-24V
PROBE	11	12	NC
(Use NPN or Normally open switch in case 2 probes/toolsetters are used)			
(Probe inputs are parallel)			

J8 SAFETY			
24V	1	2	EXTERR-IN
ESTOP_K1_IN (24V)	3	4	ESTOP-K1-OUT
ESTOP-K2-IN	5	6	IN-ESTOP-K2-OUT
24V-SPINDLE	7	8	OUT_SYSTEMREADY1 (OC)
24V-SPINDLE	9	10	OUT_SYSTEMREADY2 (OC)
24V-SPINDLE	11	12	GND-24V-SPINDLE
(Use pin 3-6 if you have 1 ESTOP contact, 3-4 and 5-6 for 2 ESTOP contacts)			

J9 ANALOG			
AIN-1 PT100	1	2	GND-A
AIN-2 PT100	3	4	GND-A
24V	5	6	GND-IO
Isolated AIN-5 0-10V	7	8	Isolated AIN-5-GND
Isolated AIN-5 4-20mA	9	10	GND-IO
24V	11	12	PWM2 (OC)
24V	13	14	PWM3 (OC)
Analog Out-2 (Vakuum)	15	16	GND-AOUT
Isolated analogi in 5 can be used for PLASMA THC			

J13 Pendant			
IN-RUN	1	2	IN-PAUSE
IN-HW1-A	3	4	IN-HW1-A/
IN-HW1-B	5	6	IN-HW1-B/
AIN-3	7	8	AGN
AIN-4	9	10	AGND
5,2V-EXT	11	12	GND-5V
For RUN/PAUSE connect switch to input and GND-5V			

USB
Only for formware upgrade

Ethernet
For industrial robustness

Home Sensor or Micro switch			
24V-HOME	1	2	GND-IO
IN-HOME	3	4	NC
Open collector outputs 24V or 5V			
ENA+	1	2	ENA-
STEP+	3	4	STEP-
DIR+	5	6	DIR-
ALARM+	7	8	ALARM-
INPOS+	9	10	INPOS-

Jumper, Select 5V or 24V drive signals

ISO CHIP OUPUTS J6 AUX OUT, COOLANTS, AMP-ENABLE			
GND-IO	24	23	AUX_OUT_8
GND-IO	22	21	AUX_OUT_7
GND-IO	20	19	AUX_OUT_6
GND-IO	18	17	AUX_OUT_5
GND-IO	16	15	AUX_OUT_4
GND-IO	14	13	AUX_OUT_3
GND-IO	12	11	AUX_OUT_2
GND-IO	10	9	AUX_OUT_1
GND-IO	8	7	COOL2
GND-IO	6	5	COOL1
GND-IO	4	3	OUT-AMPEN
GND-IO	2	1	OUT-AMPEN

ISO CHIP INPUTS J5 AUX IN			
GND-IO	24	23	GND-IO
AUX-IN-8	22	21	AUX-IN-7
24V-AUX	20	19	24V-AUX
GND-IO	18	17	GND-IO
AUX-IN-6	16	15	AUX-IN-5
24V-AUX	14	13	24V-AUX
GND-IO	12	11	GND-IO
AUX-IN-4	10	9	AUX-IN-3
24V-AUX	8	7	24V-AUX
GND-IO	6	5	GND-IO
AUX-IN-2	4	3	AUX-IN-1
24V-AUX	2	1	24V-AUX

J4-MODBUS			
COMMON_MODBUS	8	7	IO_ESTOP
COMMON_MODBUS	6	5	IO_SSTOP
COMMON_MODBUS	4	3	IO_WARN
RS485-B	2	1	RS485-A