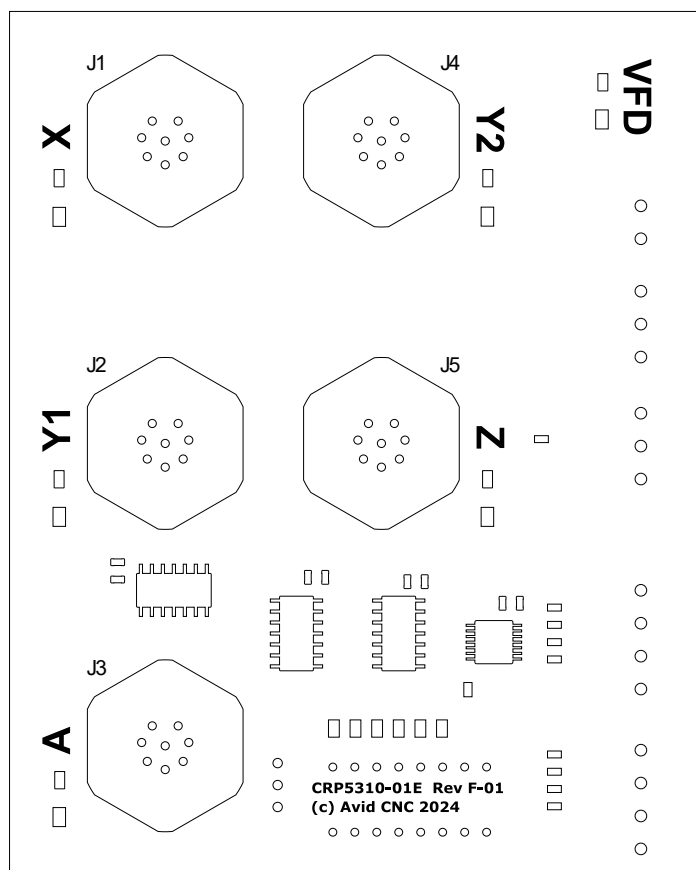


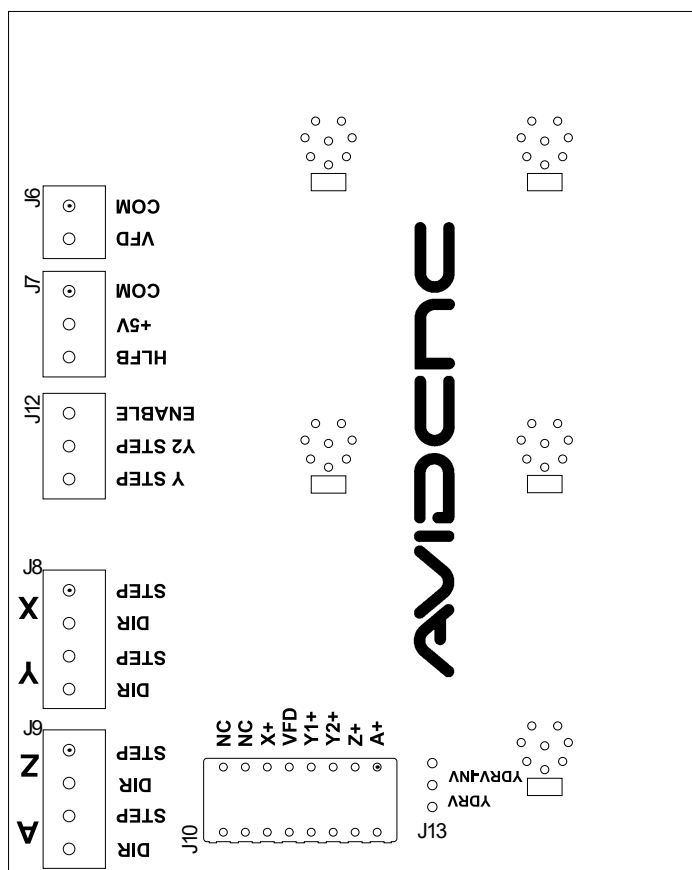
EX Controller Technical Manual

Servo Board

CRP5310-01E



Top



Bottom

Connector Designator	Pin	External Connection	Wire Color	Function	CNC12 I/O Assignment	Voltage
J1	1	Teknic Clearpath SDSK Motor 8-Pin Connector		X Servo HLFB+	IN6	5V
	2			+5V		
	3			+5V		
	4			+5V		
	5			X Servo HLFB-	IN6	
	6			X Servo Step	ST1	
	7			X Servo Dir	DR1	
	8			Enable	ENA1	
J2	1	Teknic Clearpath SDSK Motor 8-Pin Connector		Y1 Servo HLFB+	IN6	5V
	2			+5V		
	3			+5V		
	4			+5V		
	5			Y1 Servo HLFB-	IN6	
	6			Y1 Servo Step	ST2	
	7			Y1 Servo Dir	DR2	
	8			Enable	ENA1	
J3	1	Teknic Clearpath SDSK Motor 8-Pin Connector		A Servo HLFB+	IN6	5V
	2			+5V		
	3			+5V		
	4			+5V		
	5			A Servo HLFB-	IN6	
	6			A Servo Step	ST4	
	7			A Servo Dir	DR4	
	8			Enable	ENA1	
J4	1	Teknic Clearpath SDSK Motor 8-Pin Connector		Y2 Servo HLFB+	IN6	5V
	2			+5V		
	3			+5V		
	4			+5V		
	5			Y2 Servo HLFB-	IN6	
	6			Y2 Servo Step	ST2	
	7			Y2 Servo Dir	DR2	
	8			Enable	ENA1	

Connector Designator	Pin	External Connection	Wire Color	Function	CNC12 I/O Assignment	Voltage
J5	1	Teknic Clearpath SDSK Motor 8-Pin Connector		Z Servo HLFb+	IN6	5V
	2			+5V		
	3			+5V		
	4			+5V		
	5			Z Servo HLFb-	IN6	
	6			Z Servo Step	ST3	
	7			Z Servo Dir	DR3	
	8			Enable	ENA1	
J6	1	Gland plate, SP/THC Pin 1	Blue	VFD fault COM	IN6	5V
	2	Gland plate, SP/THC Pin 2	White	VFD fault		
J7	1	CRP5210-01E, J20 GND		COM		5V
	2	CRP5210-01E, J20 5V		+5V		
	3	CRP5210-01E, J20 HLFb		HLFB	IN6	
J8	1	Acorn ST1	White	X Step	NA	5V
	2	Acorn DR1	Black	X Dir		
	3	Acorn ST2	Green	Y Step		
	4	Acorn DR2	Blue	Y Dir		
J9	1	Acorn ST3	Yellow	Z Step	NA	5V
	2	Acorn DR3	Orange	Z Dir		
	3	Acorn ST4	Brown	A Step		
	4	Acorn DR4	Red	A Dir		
J10	A+	HLFB		HLFB jumper, A axis	IN6	5V
	Z+	HLFB		HLFB jumper, Z axis		
	Y2+	HLFB		HLFB jumper, Y2 axis		
	Y1+	HLFB		HLFB jumper, Y1 axis		
	VFD	HLFB		HLFB jumper, VFD fault		
	X+	HLFB		HLFB jumper, X fault		

Connector Designator	Pin	External Connection	Wire Color	Function	CNC12 I/O Assignment	Voltage
J12	1	Acorn ENA1	Grey	Enable		5V
	2	Jumpered, Y Step		Y2 Step		
	3	Jumpered, Y2 Step		Y1 Step		
J13	YDRV-INV (Pin 1)	U1A, Pin 2		Y1 Direction, Inverted		5V
	Y2 DIR (Center, Pin 2)	J4, Pin 7		Y2 Direction Select		
	YDRV (Pin 3)	J8, Pin 4		Y1 Direction		