1X2 Pin Head	Description	Designator		LibRef	Quantity
		[NoValue], 12V	2X1 Males Header	1x2 Male Header	1
		12.4	HEADER,	Header, Male,	
2x2 Shrouded RT Ang	Header, Male,		MALE,	2x2 Conn,	
	2x2, Pitch:		Shrouded,	Shrouded,	
	0.1" (2.54mm), THT	<-Torpedo, Step	4POS, 2MM, RT ANG,THT	THT, 2MM RT ANG TIN	
	100µF 35V	steb	RI ANO, ITI	ANG TIN	
	Aluminum				
	Electrolytic				
	Capacitors			100uF, 35V,	
	Radial, Can - SMD 1000 Hrs		Radial_CAN_6		
	@ 105°C	C1	.6mm	SMD	1
	0.1µF ±20%				
0.1uF. 50V.	Ceramic			0.1uF. 50V.	
0.1uF, 50V, 10%, X7R,	Capacitor X7R 0603 (1608		CAPC1608N(0		
0603	Metric)	C2, C5, C6	603")	0603	3
	1µF ±10%				
	Ceramic				
	Capacitor X5R 0805 (2012		CAPC2012N(0	1	
1μF	Metric)	C3, C4, C7	805")	SMD, Ceramic	
1μr 470μF	470µF 50V	00, 04, 07	000 /	DIVID, Octamic	,
	Aluminum				
	Electrolytic				
	Capacitors]		470.5 501	
	Radial, Can 5000 Hrs @]	12.5mm Dia	470uF, 50V, 20%, Alum,	
	105°C	C8	Radial THD	SMD	,
	150µF 35V				<u> </u>
150µF	Aluminum]			
	Electrolytic]			
	Capacitors Radial, Can -]			
	Radial, Can - SMD 160]			
	mohm @]		150uF, 35V,	
	100kHz 2000]	6.3mm Dia	20%, Alum,	
	Hrs @ 105°C	C9	Radial SMD	SMD	
	1x6 Header				
	x2 1x8 Header				
	1x8 Header 1x5 Header				
	Reduced Pin				
	Version -				
	Does not				
	connect to all				
	pin on the Arduino				
	Pitch: 0.1"				
	(2.54mm),				
Header to	Contact				
plug into	Length 0.394"		Arduino Shield	Arduino	
Arduino Board	(10.00mm) Through hole	CN1	Reduced Pin	Shield Header Reduced Pin	١.,
Connector for		CIVI	A4988	Connector for	
A4988	Female, 2x8,		Stepper	A4988	
Stepper	Pitch: 0.1"		Motor Driver	Stepper	
Stepper Motor Driver	(2.54mm),THT	CN2	Header	Stepper Motor Driver	
	(2.54mm),THT Junction	CN2			
Motor Driver	(2.54mm),THT		Header	Motor Driver	
Motor Driver	(2.54mm),THT Junction Diode 2A	CN2 D1, D2			
Motor Driver	(2.54mm),THT Junction Diode 2A 600V Diode Schottky 50V		Header	Motor Driver	
Motor Driver JD 2A 600V	(2.54mm),THT Junction Diode 2A 600V Diode Schottky 50V 5A Surface		Header	Motor Driver JD 2A 600V	
Motor Driver JD 2A 600V TSSA5U50E3G	(2.54mm),THT Junction Diode 2A 600V Diode Schottky 50V 5A Surface Mount DO-	D1, D2	Header DO-214AA	Motor Driver JD 2A 600V TSSA5U50E3G	:
Motor Driver JD 2A 600V	(2.54mm),THT Junction Diode 2A 600V Diode Schottky 50V 5A Surface Mount DO- 214AC (SMA)		Header	Motor Driver JD 2A 600V TSSA5U50E3G CT-ND	1
Motor Driver JD 2A 600V TSSA5U50E3G	(2.54mm),THT Junction Diode 2A 600V Diode Schottky 50V 5A Surface Mount DO- 214AC (SMA) SMD Fuse, 2A,	D1, D2	DO-214AA	JD 2A 600V TSSA5U50E3G CT-ND SMD Fuse, 2A,	
Motor Driver JD 2A 600V TSSA5U50E3G CT-ND	(2.54mm),THT Junction Diode 2A 600V Diode Schottky 50V 5A Surface Mount DO- 214AC (SMA)	D1, D2	Header DO-214AA	Motor Driver JD 2A 600V TSSA5U50E3G CT-ND	1
Motor Driver JD 2A 600V TSSA5U50E3G CT-ND 2A 2x1 Term	(2.54mm),THT Junction Diode 2A 600V Diode Schottky 50V 5A Surface Mount DO- 214AC (SMA) SMD Fuse, 2A,	D1, D2	DO-214AA DO-214AC 1206 SMD 2X1 Terminal Blocks	Motor Driver JD 2A 600V TSSA5U50E3G CT-ND SMD Fuse, 2A, 63V,	1
Motor Driver JD 2A 600V TSSA5U50E3G CT-ND 2A 2x1 Term	(2.54mm),THT Junction Diode 2A 600V Diode Schottky 50V 5A Surface Mount DO- 214AC (SMA) SMD Fuse, 2A,	D1, D2 D3 F1	DO-214AA DO-214AC 1206 SMD 22X1 Terminal Blocks Header, Male,	Motor Driver JD 2A 600V TSSA5U50E3G CT-ND SMD Fuse, 2A, 63V, 2x1 Terminal	1
Motor Driver JD 2A 600V TSSA5U50E3G CT-ND 2A 2x1 Term Block	(2.54mm),THT Junction Diode 2A 600V Diode Schottky 50V 5A Surface Mount DO- 214AC (SMA) SMD Fuse, 2A, 63V,	D1, D2 D3 F1	DO-214AA DO-214AC 1206 SMD 2X1 Terminal Blocks Header, Male, 1x3, Pitch:	Motor Driver JD 2A 600V TSSA5U50E3G CT-ND SMD Fuse, 2A, 63V, 2x1 Terminal Block	:
Motor Driver JD 2A 600V TSSA5U50E3G CT-ND 2A 2x1 Term Block 1x3 Male	(2.54mm),THT Junction Diode 2A 600V Diode Schottky 50V SA Surface Mount DO- 214AC (SMA) SMD Fuse, 2A, 63V,	D1, D2 D3 F1	DO-214AA DO-214AC 1206 SMD 2X1 Terminal Blocks Header, Male, 1x3, Pitch: 0.1"	Motor Driver JD 2A 600V TSSA5U50E3G CT-ND SMD Fuse, 2A, 63V, 2x1 Terminal Block 1x3 Male	
Motor Driver JD 2A 600V TSSA5U50E3G CT-ND 2A 2x1 Term Block 1x3 Male	(2.54mm),THT Junction Diode 2A 600V Diode Schottky 50V 5A Surface Mount DO- 214AC (SMA) SMD Fuse, 2A, 63V,	D1, D2 D3 F1	DO-214AA DO-214AC 1206 SMD 2X1 Terminal Blocks Header, Male, 1x3, Pitch:	Motor Driver JD 2A 600V TSSA5U50E3G CT-ND SMD Fuse, 2A, 63V, 2x1 Terminal Block 1x3 Male	
Motor Driver JD 2A 600V TSSA5U50E3G CT-ND 2A 2x1 Term Block	(2.54mm),THT Junction Diode 2A 600V Diode Schottky 50V 5A Surface Mount DO- 214AC (SMA) SMD Fuse, 2A, 63V,	D1, D2 D3 F1	DO-214AA DO-214AC 1206 SMD 2X1 Terminal Blocks Header, Male, 1x3, Pitch: 0.1"	Motor Driver JD 2A 600V TSSA5U50E3G CT-ND SMD Fuse, 2A, 63V, 2x1 Terminal Block 1x3 Male	
Motor Driver JD 2A 600V TSSA5U50E3G CT-ND 2A 2x1 Term Block 1x3 Male	(2.54mm),THT Junction Diode 2A 600V Diode Schottky 50V SA Surface Mount DO- 214AC (SMA) SMD Fuse, 2A, 63V, 1x3 Male Jumper 47µH Shielded Wirewound	D1, D2 D3 F1	DO-214AA DO-214AC 1206 SMD 2X1 Terminal Blocks Header, Male, 1x3, Pitch: 0.1"	Motor Driver JD 2A 600V TSSA5U50E3G CT-ND SMD Fuse, 2A, 63V, 2x1 Terminal Block 1x3 Male	
Motor Driver JD 2A 600V TSSA5U50E3G CT-ND 2A 2x1 Term Block 1x3 Male	(2.54mm),THT Junction Diode 2A 600V Diode 2A 600V Diode Schottky 50V 5A Surface Mount DO- 214AC (SMA) SMD Fuse, 2A, 63V, 1x3 Male Jumper 47µH Shielded Wirewound Inductor 3.8A	D1, D2 D3 F1	DO-214AA DO-214AC 1206 SMD 2X1 Terminal Blocks Header, Male, 1x3, Pitch: 0.1"	Motor Driver JD 2A 600V TSSA5U50E3G CT-ND SMD Fuse, 2A, 63V, 2x1 Terminal Block 1x3 Male	
Motor Driver JD 2A 600V TSSA5U50E3G CT-ND 2A 2x1 Term Block 1x3 Male	(2.54mm),THT Junction Diode 2A 600V Diode 2A 600V Schottky 50V 5A Surface Mount DO- 214AC (SMA) SMD Fuse, 2A, 63V, 1x3 Male Jumper 47µH Wirewound Inductor 38A 60 mOhm	D1, D2 D3 F1	DO-214AA DO-214AC 1206 SMD 2X1 Terminal Blocks Header, Male, 1x3, Pitch: 0.1"	Motor Driver JD 2A 600V TSSASU50E3G CT-ND SMD Fuse, 2A, 63V, 2x1 Terminal Block 1x3 Male Jumper	1
Motor Driver JD 2A 600V TSSA5U50E3G CT-ND 2A 2x1 Term Block 1x3 Male Jumper	(2.54mm),THT Junction Diode 2A 600V Diode 2A 600V Diode Schottly 50V 5A Surface Mount DO- 214AC (SMA) SMD Fuse, 2A, 63V. 1x3 Male Jumper 47µH Shielded Wirewound Inductor 3.8A 60 mOhm Max	D1, D2 D3 F1 J1	Header DO-214AA DO-214AC 1206 SMD SMI Terminal Blocks Header, Male, 1x3, Pitch: 0.1* (2.54mm),THT	Motor Driver JD 2A 600V TSSASU50E3G CT-ND SMD Fuse, 2A, 63V, 2x1 Terminal Block 1x3 Male Jumper	
Motor Driver JD 2A 600V TSSA5U50E3G CT-ND 2A 2x1 Term Block 1x3 Male	(2.54mm),THT Junction Diode 2A 600V Diode 2A 600V Diode Schottly 50V 5A Surface Mount DO- 214AC (SMA) SMD Fuse, 2A, 63V, 1x3 Male Jumper 47µH Inductor 3.8A 60 mOhm Max Monstandard	D1, D2 D3 F1 J1	DO-214AA DO-214AC 1206 SMD 2X1 Terminal Blocks Header, Male, 1x3, Pitch: 0.1"	Motor Driver JD 2A 600V TSSA5U50E3G CT-ND SMD Fuse, 2A, 63V, 221 Terminal Block 1x3 Male Jumper 47µH 3.8A Inductor	
Motor Driver JD 2A 600V TSSA5U50E3G CT-ND 2A 2x1 Term Block 1x3 Male Jumper	(2.54mm),THT Junction Diode 2A 600V Diode 2A 600V Diode Schottly 50V 5A Surface Mount DO- 214AC (SMA) SMD Fuse, 2A, 63V. 1x3 Male Jumper 47µH Shielded Wirewound Inductor 3.8A 60 mOhm Max	D1, D2 D3 F1 J1 JP1	Header DO-214AA DO-214AC 1206 SMD SMI Terminal Blocks Header, Male, 1x3, Pitch: 0.1* (2.54mm),THT	Motor Driver JD 2A 600V TSSA5U50E3G CT-ND SMD Fuse, 2A, 63V, 221 Terminal Block 1x3 Male Jumper 47µH 3.8A Inductor 1RR, 1%, 170W, 0603, 0603	
Motor Driver JD 2A 600V TSSA5U50E3G CT-ND 2A 2x1 Term Block 1x3 Male Jumper	(2.54mm),THT Junction Diode 2A 600V Diode 2A 600V Diode Schottly 50V 5A Surface Mount DO- 214AC (SMA) SMD Fuse, 2A, 63V, 1x3 Male Jumper 1x3 Male Jumper 47µH Shielded Wirewound Inductor 3.8A 60 mOhm Max Nonstandard 1RR, 1%, 1/10W, 0603, SMD	D1, D2 D3 F1 J1	Header DO-214AA DO-214AC 1206 SMD 2X1 Terminal Blocks Blocks 1x3, Pitch: 0,1* (2.54mm),THT	Motor Driver JD 2A 600V TSSA5U50E3G CT-ND SMD Fuse, 2A, 63V, 2x1 Terminal Block 1x3 Male Jumper 47µH 3.8A Inductor Inductor	1 1
Motor Driver JD 2A 600V TSSA5U50E3G CT-ND 2A 2x1 Term Block 1x3 Male Jumper	(2.54mm),THT Junction Diode 2A 650V Diode 5A 55A Surface Mount DO- 214AC (SMA) SMD Fuse, 2A 65V, 1x3 Male Jumper 47µH Shielded Wirewound Inductor 3A 60 mOhm Max Nonstandard 1xR, 1%, 1/10W, 0603, SMD 2 Channel	D1, D2 D3 F1 J1 JP1	DO-214AA DO-214AC 1206 SMD 2XI Terminal Blocks 113, Pitch: 0.1" (254mm),THT	Motor Driver JD 2A 600V TSSA5U50E3G CT-ND SMD Fuse, 2A, 63V, 221 Terminal Block 1x3 Male Jumper 47µH 3.8A Inductor 1RR, 1%, 170W, 0603, 0603	1 1 1
Motor Driver JD 2A 600V TSSA5U50E3G CT-ND 2A 2x1 Term Block 1x3 Male Jumper	(2.54mm),THT Junction Diode 2A 600V Diode 2A 600V Diode Schottly 50V 5A Surface Mount DO- 214AC (SMA) SMD Fuse, 2A, 63V, 1x3 Male Jumper Typic Mirewound Inductor 3.8A 60 mOhm Max Nonstandard IkR, 1%, 1/10W, 0603, SMD 2 Channel High Side	D1, D2 D3 F1 J1 JP1	DO-214AA DO-214AC 1206 SMD 2XI Terminal Blocks 113, Pitch: 0.1" (254mm),THT	Motor Driver JD 2A 600V TSSA5U50E3G CT-ND SMD Fuse, 2A, 63V, 221 Terminal Block 1x3 Male Jumper 47µH 3.8A Inductor 1RR, 1%, 170W, 0603, 0603	
Motor Driver JD 2A 600V TSSA5U50E3G CT-ND 2A 2x1 Term Block 1x3 Male Jumper	(Z-54mm),THT Junction Diode 2A 650V Diode 2A 650V Diode Schottly 50V 5A Surface Mount DO- 214AC (SMA) SMD Fuse, 2A 63V, 1x3 Male Jumper 47pH Wirewound Inductor 3 8A 65 mOhm Max Nonstandard 1xR, 1%, 1710W, 6603, SMD Drive High Side Drive	D1, D2 D3 F1 J1 JP1	DO-214AA DO-214AC 1206 SMD 2XI Terminal Blocks 113, Pitch: 0.1" (254mm),THT	Motor Driver JD 2A 600V TSSA5U50E3G CT-ND SMD Fuse, 2A, 63V, 221 Terminal Block 1x3 Male Jumper 47µH 3.8A Inductor 1RR, 1%, 170W, 0603, 0603	
Motor Driver JD 2A 600V TSSASU50E3G CT-ND 2A 2x1 Term Block 1x3 Male Jumper 47µH	(2.54mm),THT Junction Diode 2A 600V Diode 2A 600V Diode Schottly 50V 5A Surface Mount DO- 214AC (SMA) SMD Fuse, 2A, 63V, This Shielded Jumper Wirewound Inductor 3.8A 60 mOhm Max Nonstandard IRR, 1% 1/10W, 0603, SMD 2 Channel High Side Drive MOSFET	D1, D2 D3 F1 J1 JP1	DO-214AA DO-214AC 1206 SMD 2XI Terminal Blocks 113, Pitch: 0.1" (254mm),THT	Motor Driver JD 2A 600V TSSASU50E3G CT-ND SMD Fuse, 2A, 63V, 2a1 Terminal Block 1x3 Male Jumper 47µH 3.8A Inductor 1kR, 1%, 7/10W, 0603, SMD	
Motor Driver JD 2A 600V TSSASU50E3G CT-ND 2A 2x1 Term Block 1x3 Male Jumper 1k 47µH 1k	(Z-54mm),THT Junction Diode 2A 650V Diode 2A 650V Diode Schottly 50V 5A Surface Mount DO- 214AC (SMA) SMD Fuse, 2A 63V, 1x3 Male Jumper 47pH Wirewound Inductor 3 8A 65 mOhm Max Nonstandard 1xR, 1%, 1710W, 6603, SMD Drive High Side Drive	D1, D2 D3 F1 J1 JP1	DO-214AA DO-214AC 1206 SMD 2XI Terminal Blocks 113, Pitch: 0.1" (254mm),THT	Motor Driver JD 2A 600V TSSA5U50E3G CT-ND SMD Fuse, 2A, 63V, 221 Terminal Block 1x3 Male Jumper 47µH 3.8A Inductor 1RR, 1%, 170W, 0603, 0603	
Motor Driver JD 2A 600V TSSASU50E3G CT-ND 2A 2x1 Term Block 1x3 Male Jumper 1k 47µH 1k	(2.54mm),THT Junction Diode 2A 600V Diode Schottly 50V SA Surface Mount DO- 214AC (SMA) SMD Fuse, 2A, 63V, 1x3 Majer ArpiH Shielded Wirewound Inductor 3 &A 60 mOhm Max Nonstandard 1kR, 1%, 1/10W, 0603, SMD Drive Controlable by logic	D1, D2 D3 F1 J1 JP1	DO-214AA DO-214AC 1206 SMD 2XI Terminal Blocks 113, Pitch: 0.1" (254mm),THT	Motor Driver JD 2A 600V TSSASU50E3G CT-ND SMD Fuse, 2A, 63V, 2a1 Terminal Block 1x3 Male Jumper 47µH 3.8A Inductor 1kR, 1%, 1/10W, 0603, SMD 2CH High Side Drive 8A	
Motor Driver JD 2A 600V TSSASU50E3G CT-ND 2A 2x1 Term Block 1x3 Male Jumper 47µH 1k	(2.54mm),THT Junction Diode 2A 600V Diode Schottly 50V SA Surface Mount DO- 214AC (SMA) SMD Fuse, 2A, 63V, 1x3 Majer A7pH Shielded Wirewound Inductor 3.8A 60 mOhm Max Nonstandard 1kR, 1% 1/10W, 0603, SMD Drive Controlable by logic signal 12-Pin Buck	D1, D2 D3 F1 J1 L1 R1, R2	DO-214AA DO-214AC 1206 SMD 2X1 Terminal Blocks Header, Male, 13, Pitch: 0,1" (2,54mm),THT 12mm SMD RESC160BN(0 6037)	Motor Driver JD 2A 600V TSSASU50E3G CT-ND SMD Fuse, 2A, 63V, 2a1 Terminal Block 1x3 Male Jumper 47µH 3.8A Inductor 1kR, 1%, 1/10W, 0603, SMD 2CH High Side Drive 8A	
Motor Driver JD 2A 600V TSSASU50E3G CT-ND 2A 2x1 Term Block 1x3 Male Jumper 47µH 1k	(2.54mm),THT Junction Diode 2A 600V Diode 2A 600V Diode Schottly 50V 5A Surface Mount DO- 214AC (SMA) SMD Fuse, 2A, 63V, 1x3 Male Jumper 1x3 Male Jumper 1x3 Male Jumper 1x3 Male Jumper 1x4 Mirewound Inductor 3.8A 60 mOhm Max Nonstandard 1RR, 1%, 1710W, 0603, SMD 2 Channel High Side Drive Drive Signal 12-Pin Buck Switching	D1, D2 D3 F1 J1 L1 R1, R2	DO-214AA DO-214AC 1206 SMD 2X1 Terminal Blocks Header, Male, 13, Pitch: 0,1" (2,54mm),THT 12mm SMD RESC160BN(0 6037)	Motor Driver JD 2A 600V TSSASU50E3G CT-ND SMD Fuse, 2A, 63V, 2a1 Terminal Block 1x3 Male Jumper 47µH 3.8A Inductor 1kR, 1%, 1/10W, 0603, SMD 2CH High Side Drive 8A	
Motor Driver JD 2A 600V TSSASU50E3G CT-ND 2A 2x1 Term Block 1x3 Male Jumper 47µH 1k	(Z-54mw),THT Junction Diode 2A 650V Diode 2A 650V Diode Schottly 50V 5A Surface Mount DO- 214AC (SMA) SMD Fuse, 2A 65V, 1x3 Male Jumper 47µH Shielded Wirewound Inductor 3A 65 mOhm Max Nonstandard 1kR, 1%, 1/10W, 0603, SMD 2 Channel High Side Drive MOSFET controlable by logic signal 12-Pin Buck Switching rice Switching rice Switching rice Switching rice Switching rice Switching rice Switching Regulator ic	D1, D2 D3 F1 J1 L1 R1, R2	DO-214AA DO-214AC 1206 SMD 2X1 Terminal Blocks Header, Male, 13, Pitch: 0,1" (2,54mm),THT 12mm SMD RESC160BN(0 6037)	Motor Driver JD 2A 600V TSSASU50E3G CT-ND SMD Fuse, 2A, 63V, 2a1 Terminal Block 1x3 Male Jumper 47µH 3.8A Inductor 1kR, 1%, 1/10W, 0603, SMD 2CH High Side Drive 8A	
Motor Driver JD 2A 600V TSSASU50E3G CT-ND 2A 2x1 Term Block 1x3 Male Jumper 47µH 1k	(2.54mm),THT Junction Diode 2A 600V Diode 2A 600V Diode Schottly 50V S	D1, D2 D3 F1 J1 L1 R1, R2	DO-214AA DO-214AC 1206 SMD 2X1 Terminal Blocks Header, Male, 13, Pitch: 0,1" (2,54mm),THT 12mm SMD RESC160BN(0 6037)	Motor Driver JD 2A 600V TSSASU50E3G CT-ND SMD Fuse, 2A, 63V, 2a1 Terminal Block 1x3 Male Jumper 47µH 3.8A Inductor 1kR, 1%, 1/10W, 0603, SMD 2CH High Side Drive 8A	
Motor Driver JD 2A 600V TSSASU50E3G CT-ND 2A 2x1 Term Block 1x3 Male Jumper 1k 47µH 1k	(2.54mm),THT Junction Diode 2A 650V Diode 2A 650V Diode 5A Surface Mount DO- 214AC (SMA) SMD Fuse, 2A, 63V, 1x3 Male Jumper 47pH Shielded Wirewound Inductor 3.8A 65 mOhm Max Nonstandard 1kR, 1%, 1/10W, 0603, SMD 2 Channel High Side Drive MOSFET controlable by logic signal 12-Pin Buck Switching Buck Switching Controlable by logic Switching Controlable Controlable by logic Switching Controlable	D1, D2 D3 F1 J1 L1 R1, R2	DO-214AA DO-214AC 1206 SMD 2X1 Terminal Blocks Header, Male, 13, Pitch: 0,1" (2,54mm),THT 12mm SMD RESC160BN(0 6037)	Motor Driver JD 2A 600V TSSASU50E3G CT-ND SMD Fuse, 2A, 63V, 2a1 Terminal Block 1x3 Male Jumper 47µH 3.8A Inductor 1kR, 1%, 1/10W, 0603, SMD 2CH High Side Drive 8A	
Motor Driver JD 2A 600V TSSASU50E3G CT-ND 2A 2x1 Term Block 1x3 Male Jumper 47µH 1k	(2.54mm),THT Junction Diode 2A 600V Diode 2A 600V Diode Schottly 50V S	D1, D2 D3 F1 J1 L1 R1, R2	DO-214AA DO-214AC 1206 SMD 2X1 Terminal Blocks Header, Male, 13, Pitch: 0,1" (2,54mm),THT 12mm SMD RESC160BN(0 6037)	Motor Driver JD 2A 600V TSSASU50E3G CT-ND SMD Fuse, 2A, 63V, 2a1 Terminal Block 1x3 Male Jumper 47µH 3.8A Inductor 1kR, 1%, 1/10W, 0603, SMD 2CH High Side Drive 8A	