

Description	Model Name	Quantity needed
Note: Teensy and Arduino will be facing downwards and there will be female header pins. The schematic and board will be mirrored		
3 pin molex connectors (for Hall sensors)		4
2 pin molex connectors (for Thermistors)		4
10k Ohms 1/8W Resistors (for Thermistors)		4
330 Ohms 1/8W Resistors (as upper Resistors for Hall Sensors)		4
560 Ohms 1/8W Resistors (as lower Resistors for Hall Sensors)		4
8 pin IC holder (for Can controller)	MCP2551 (P) not (SN)	1
CAN controller IC	MCP2551 (P) not (SN)	1
3 pin molex connector (for CAN Bus)		1
120 Ohms 1/8W Resistor (for CAN termination)		1
10k Ohms 1/8W Resistor (for CAN RS pin)		1
3 pin molex connector (for H Bridge of Linear Actuator))		1
16 pin IC holder (for ADC)	MCP3008 (P) not (SL)	1
ADC IC	MCP3008 (P) not (SL)	1
2 pin molex connector (for Opto of Clutch)		1
N channel Enhancement MOSFET (for Contactor)	IRLB8721	1
56E, 1/4W Resistor for Gate		1
1/2W Resistor for drain		
2 pin molex connector (for Contactor)		1
4 pin molex connector (for Debug)		1
24*2 Female Headers (for Teensy 3.6 - used pins downwards)		1 set
Teensy 3.6		1
4 pin Molex Connector (for I2C temperature and pressure sensors)		1
4.7k Ohms 1/8W Resistors (for I2C pullups)		2
2 pin Molex Connector (for DC motor serial data to driver)		1
P channel Enhancement MOSFET (for Back Stepper Motors)	IRF5210	3
56E 1/4W Resistor for gate		3
24V connector	256-402/333-000	1
LED		1
1.5k Ohms 1W resistor (for LED)		1
Switching Voltage Regulator	78SRH-5/2-C	1
47uF / 50V Aluminium Polymer Capacitor	870055775005	2
4 pin Molex Connector (for Front stepper motor Driver)		1
3 pin Molex Connector (for Back stepper motor Driver to control node)		1
12*2 + 6*1 Female Headers (for Arduino Pro Mini - a bit different)		1
4 Pin Molex Connector (for Arduino Debug)		1
6 Pin Molex Connector (for VDS)		4
1.5k Ohms 1/4W Resistors (for Opto photodiodes)		16
10k Ohms 1/8W Resistors (for Opto pullups)		16
6 pin IC holder (for Optocouplers)	4N25M	16
Optocouplers	4N25M	16
10k 1/8W (lower resistor for Voltage divider)		1
40k 1/8W (upper resistor for Voltage Divider)		1
		124

Present Quantity	To be bought	Datasheet Link
		https://drive.google.com/open?id=0B4PBstU5QzL GaGszWDctNzRNTTg
		https://drive.google.com/open?id=0B4PBstU5QzL GaGszWDctNzRNTTg
	8	Not Required
	8	Not Required
	8	Not Required
		http://ww1.microchip.com/downloads/en/DeviceDoc/21667f.pdf
		https://drive.google.com/open?id=0B4PBstU5QzL GaGszWDctNzRNTTg
	2	Not Required
	2	Not Required
		https://drive.google.com/open?id=0B4PBstU5QzL GaGszWDctNzRNTTg
		http://ww1.microchip.com/downloads/en/DeviceDoc/21295C.pdf
		https://drive.google.com/open?id=0B4PBstU5QzL GaGszWDctNzRNTTg
	2	Not Required
		https://drive.google.com/open?id=0B4PBstU5QzL GaGszWDctNzRNTTg
		https://drive.google.com/open?id=0B4PBstU5QzL GaGszWDctNzRNTTg
		https://www.pjrc.com/store/teensy36.html
		https://drive.google.com/open?id=0B4PBstU5QzL GaGszWDctNzRNTTg
	4	Not Required
		https://drive.google.com/open?id=0B4PBstU5QzL GaGszWDctNzRNTTg
	6	Not Required
		https://drive.google.com/open?id=0B4PBstU5QzL GaUNWOWhXWmkwd1k
	2	Not Required
	2	Not Required
		http://www.mouser.com/ds/2/281/mpm_78sr-2a_a00-42390.pdf
		http://katalog.we-online.de/pbs/datasheet/870055775005.pdf
		https://drive.google.com/open?id=0B4PBstU5QzL GaGszWDctNzRNTTg
		https://drive.google.com/open?id=0B4PBstU5QzL GaGszWDctNzRNTTg
		https://drive.google.com/open?id=0BzyG6lce_hXtcmRxWmdyYIU3T1k
		https://drive.google.com/open?id=0B4PBstU5QzL GaGszWDctNzRNTTg
		https://drive.google.com/open?id=0B4PBstU5QzL GaGszWDctNzRNTTg
	32	Not Required
	32	Not Required
		https://www.vishay.com/docs/83725/4n25.pdf
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		Not Required
		Not Required
	Total	

