

Bill Of Materials for DC_MOTOR_simple_SCH

1 Modules

<u>Quantity</u>	<u>References</u>	<u>Value</u>	<u>description</u>
1	M1		DC Motor

Sub-totals:

5 Capacitors

<u>Quantity</u>	<u>References</u>	<u>Value</u>	<u>description</u>
5	C1-C5	10uF	Capacitor SMD1206

Sub-totals:

6 Resistors

<u>Quantity</u>	<u>References</u>	<u>Value</u>	<u>description</u>
1	R1	47K	Resistor SMD1206
1	R2	180K	Resistor SMD1206
3	R3,R5-R6	21K	Resistor SMD1206
1	R4	0.1	

Sub-totals:

3 Integrated Circuits

<u>Quantity</u>	<u>References</u>	<u>Value</u>	<u>description</u>
1	U1	INA168	2.7 to 60V, 800kHz Variable gain current sense amplifier
1	U2	24C32A	4kx8 Serial CMOS EEPROM
1	U3	LM35	Analogue Temperature Sensor

Sub-totals:

2 Transistors

<u>Quantity</u>	<u>References</u>	<u>Value</u>	<u>description</u>
1	Q1	MTP10N10EL	LOGIC LEVEL POWER FET 10 AMPERES 100 VOLTS TO220
1	Q2	2N7000	Logic Level N-channel MOSFET Transistor

Sub-totals:

18 Miscellaneous

<u>Quantity</u>	<u>References</u>	<u>Value</u>	<u>description</u>
1	A1	IRM10-12	AC/DC Power Modules 12V 0.85A 10.2W
1	D1	SRF20100CT	20A 100V Schottky Barrier Rectifier Diode with ITO-220AB
1	IR1	IR OBSTACLE SENSOR	HW-201
3	J1,J4-J5	CON2	2-pin Connector
2	J2-J3	CON3	3-pin Connector
1	LCD1	LCD 20X4 I2C DISPLAY	I2C LCD Display
1	LCD2	LCD 20X4	I2C LCD Display
1	NANO1	ARDUINO NANO V3	
1	RL1	XT484012	Relay DPDT 10A 12V Coil
1	RV1	10k	Potentiometer
1	RV2	10K	Trimmer
4	SW1-SW4		Tactile Switch