

**Parts used in "AVR Workshop" by John Boxall.**

**Last update 12th April 2022**

*Supplier and their part number (SKU etc)*

Item	Quantity	pmdway.com	Digikey	SparkFun
USB ASP AVR Programmer	1	263343		
(or) Freetronics USBasp ICSP Programmer		<a href="https://www.freetronics.com.au/products/usbasp-icsp-programmer-fc">https://www.freetronics.com.au/products/usbasp-icsp-programmer-fc</a>		
830-point solderless breadboard	2+	29946801	2183-352-ND	PRT-12615
Breadboard wire pack	1	99201014		PRT-00124
Breadboard power supply board	1	20250303		PRT-13032 (kit)
Microchip ATtiny85-20PU DIP8 Microcontroller	2	693802	ATTINY85-20PU-ND	COM-09378
5mm LEDs - various colors	20	99860300	1528-2952-ND	COM-09881
560R 1/4W resistor	20	2600RK	S560CATR-ND	COM-10969
10K 1/4W resistor	10	2600RK	RNMF14FTC10K0	above
4K7 1/4W resistor	10	2600RK	S4.7KCACT-ND	above
Male to male jumper wires	pack	77190006	1528-1967-ND	PRT-11026
Male to female jumper wires	pack	77190005	1528-1964-ND	PRT-12794
6 x 6mm Tactile buttons	10	66514458		COM-00097
Microchip ATmega328P-PU DIP28 Microcontroller	2	1017432	ATMEGA328P-PU-ND	COM-09061
7 Segment Common Cathode LED Displays	2	FND500X	MAN6280EL-ND	
Analog Devices TMP36 Analog Temperature Sensor	1	40010036	TMP36GT9Z-ND	SEN-10988
0.1uF ceramic capacitor	5	202862827	BC1148CT-ND	COM-08375
22pf ceramic capacitors	2	above	399-13930-1-ND	COM-08571
16MHz HC49U Crystal	1	8262321	631-1108-ND	COM-00536
16x02 HD44780-compatible LCD module	1	6121370B		LCD-00255
inline header pins (solder to LCD)	1x16+	1242070A		PRT-00116
10k breadboard trimpot	4	29119925		COM-09806
USB - Serial cable (e.g. PL2303HX USB cable)	1	727859	1528-2591-ND	CAB-17831
27mm prewired piezo disc	2	95900047	use 445-2525-1-ND	SEN-10293
Diffused 5 to 10mm Common Cathode RGB LED	2	ZR1001		COM-09264
Small DC or fan motor - maximum 12V DC	1	11172244		ROB-11696
Matching power supply for motor, 9 to 12V DC. Such as 6 x AA battery holder		49810001		
2N7000 N-MOSFET TO92	10	2N7000XX	2156-2N7000-ND	

DC Cooling fan	1	59119182		
L293D Motor Driver IC	2	L293DA	497-2936-5-ND	COM-00315
1N4004 Power Diode	1	64825368	641-1310-1-ND	COM-14884
2WD Robot Chassis with battery holder and mouting hardware	1	74341999		
74HC595 Shift Register IC	5	74HC595A	296-1600-5-ND	COM-13699
Eight digit MAX7219-compatible LED Display Module	1	4099723		
470uF 16V electrolytic capacitor	1	428378	732-8799-1-ND	use COM-00096
Microchip MCP3008 ADC IC	1	MCP3008	MCP3008-I/P-ND	
Microchip MCP23017 I/O Expander IC	1	MCP23017A	MCP23017-E/SP-ND	
Microchip 24LC512 DIP8 EEPROM	1	24LC512A	24LC512-I/P-ND	
DS3231-compatible Real Time Clock module with battery backup	1	883422		
SG90-type servo	1	70909581		ROB-09065
Soldering Iron Starter Set	1	49209741		

<b>Altronics</b>	<b>Jaycar</b>
Z6540	XC4627
or-avr-arduino	
P1005A	PB8815
P1014A	PB8850
	XC4606
Z5105	ZZ8721
Z0002	search website for 5mm LED
R7552	RR0566
R7582	RR0596
R7574	RR0588
P1016	WC6024
P1017	WC6028
S1120	SP0601
Z5125	ZZ8727
Z0190	ZD1855
R2865	RG5125
R2814	RC5316
V1289A	ZZ8727
Z7013	QP5521
P5430	
Z6522A	XC4464 + jumpers
use S6140	
	ZD0270
J0026	YM2712
S5032+P0455	PH9206
Z1555	ZT2400

Z2900  
Z0109  
K1090  
Z8924

ZK8880  
ZR1004  
KR3160

R5164

XC3714  
RE6195  
ZK8868

ZZ8485 (256 not 512)

Z6392  
T2162

XC4450 OK  
YM2758  
TS1465