

Main Board							
Quantity	Designator	Description	Value	Part #	Manufacturer	Digikey	Notes
1	A1	Arduino MCU	Pro Micro 32U4 5V/16MHZ	DEV-12640	Sparkfun		
1	A2	Bluetooth module	HC-05	HC-05	Many		
7	C1, C2, C5, C7, C8, C15, C16	Capacitor	1uF	FG28X7R1E105KRT06	TDK	445-173583-1-ND	
3	C3, C13, C14	Capacitor	1nF	C315C102J3H5TA9170	Kemet	399-17274-ND	
4	C4, C6, C9, C10	Capacitor	0.47uF	FA24X7R1E474KNU06	TDK	445-180634-1-ND	
2	C11, C12	Polarized Capacitor (Radial)	470uF/25V	MAL214656471E3	Vishay	4473PHBK-ND	
4	D1, D2, D3, D4	High Conductance Fast Diode	1N4148	1N4148	Onsemi	1N4148FS-ND	
1	F1	Fuse	500MA	0251.500NRT1L	Littlefuse	F5998CT-ND	
1	J1	8 Pins connector	Molex 1723162108	1723162108	Molex	WM11868-ND	
1	J2	8 Pins connector	Molex 1723162108	1723162108	Molex	WM11868-ND	
1	JP1	Header, 2-Pin	Jumper				
1	PS1	CPT DC-DC 12V/5V 3A	12V->5V DC-DC		Car Power Technology		
1	Q1	N-Channel MOSFET	2N7000	2N7000	STMicroelectronics	497-3110-ND	
1	R1	Resistor	1K	CF18JT1K00	Stackpole Electronics Inc	CF18JT1K00CT-ND	
2	R2, R7	Resistor	100	CF18JT100R	Stackpole Electronics Inc	CF18JT100RCT-ND	
1	R3	Resistor	10	CF18JT10R0	Stackpole Electronics Inc	CF18JT10R0CT-ND	
1	R4	Resistor	14.92K	CF18JT15K0	Stackpole Electronics Inc	CF18JT15K0CT-ND	
4	R5, R6, R8, R12	Resistor	10K	CF18JT10K0	Stackpole Electronics Inc	CF18JT10K0CT-ND	
1	R9	Resistor	4.7K	CF18JT4K70	Stackpole Electronics Inc	CF18JT4K70CT-ND	
1	R10	Resistor	3.90K	CF18JT3K90	Stackpole Electronics Inc	CF18JT3K90CT-ND	
1	R11	Resistor	1.50K	CF18JT1K50	Stackpole Electronics Inc	CF18JT1K50CT-ND	
2	R13, R16	Resistor	1K	CF18JT1K00	Stackpole Electronics Inc	CF18JT1K00CT-ND	
2	R14, R17	Resistor	2K	CF18JT2K00	Stackpole Electronics Inc	CF18JT2K00CT-ND	
1	U1	Quad bilateral switch	CD4066BE	CD4066BE	TI	296-2061-5-ND	
1	U2	Voltage reference	MCP1502T-40E/CHY	MCP1502T-40E/CHY	Michochip	150-MCP1502T-40E/CHYCT-ND	
Wire harness							
Quantity	Designator	Description	Value	Part #	Manufacturer	Digikey	Notes
2		8 Pos. Housing receptacle	Natural white	1722584108	Molex	WM26327-ND	
16		Ultra-Fit tangless crimp terminal	16-18 AWG	1722537023	Molex	WM26316CT-ND	For sensors and power
16		Ultra-Fit tangless crimp terminal	20-22 AWG	1722537123	Molex	WM26317CT-ND	For head unit
4		Ultra-Fit tangless TPA	Black	1722643004	Molex	WM26348-ND	
1		Wire for sensors and power	5 x 8' + 3 x 3' of 18 AWG				
1	s	Wires for display unit	12 x 12" of 26 AWG				
3		MTA-100 receptacle connector	4 positions 26 AWG	3-643815-4	TE Connectivity (AMP)	A31026-ND	For OLED Displays
Other components							
Quantity	Designator	Description	Value	Part #	Manufacturer	Digikey	Notes
1	S1	Gauge pressure sensor	0 to 15 PSIg	30-2131-15G	AEM		AEM-30-2012 can be used as a second source
1	S2	Temperature sensor	-40C to 150C	12160855	Delphi		
3	DS1, DS2, DS3	0.91 Inch OLED display	128x32 white	FC#WYTP61-WH-3	WayinTop		
1		Main board			PCB Way		
1		Main board enclosure	3d printed ASA				
1		Head unit enclosure	3d printed ASA				
1		Aluminium hose T adapter	34mm with 1/8 NPT threaded hole	U8301-3405	URPG8		
1		Aluminium hose T adapter	18mm with 1/8 NPT threaded hole	11255	FUPPUO		
4		Hex socket screw mushroom head	M4-0.7 x 16mm				For PCB Enclosure
3		Hex socket screw mushroom head	M3-0.5 x 6mm				For display holders
2		Hex socket screw mushroom head	M3-0.5 x 10mm				For DC-DC converter
2		Nut	M3-0.5				For DC-DC converter
1		Silicon based conformal coating		422B-340G	MG Chemical	473-1353-ND	Asalco AE130 can be used as a second source