

ref (highlighted part=SMD)	value	footprint	Description	Manufacturer	Manufacturer PN
BT1	BATT HOLDER	CR2032	HOLDER BATTERY COIN 20MM DIA THM	Keystone Electronics	3003
BT2	BATT_COIN	--	BATTERY LITHIUM COIN 3V 20MM	Panasonic - BSG	CR2032
C1 - C15, C17, C20, C21, C23, C24, C25	100n	C2	CAP FILM 0.1UF 63VDC RADIAL	Kemet	R82DC3100AA50J
C16	100n	c_0805	CAP CER 0.1UF 25V 10% X7R 0805	Kemet	C0805C104K3RACTU
C18, C22	2u2 Tant	cnp_3mm_disc	CAP TANT 2.2UF 16V 10% RADIAL	AVX Corporation	TAP225K016SCS
C19, C26	100u,16V	CP_6.3x7mm	CAP ALUM 100UF 16V 20% RADIAL	Panasonic	ECE-A1CKA101
D1, D4	1N4001	diode_do41	DIODE GEN PURPOSE 50V 1A D041	Fairchild	1N4001
D2, D3	1N5225B	diode_do35	DIODE ZENER 3.0V 500MW D035	Vishay Semiconductor	1N5225B-TR
D5, D6, D7, D8	5V0, 3V3, BLINK, 12V	led_5mm_clear	LED SS 5MM 625NM RED DIFF	Kingbright Corp	WP7113ID
DIP1	SOCKET_28X0.3	DIP-28	CONN IC SOCKET VERT 28POS TIN	TE Connectivity	1-390261-9
M1	MANIFOLD	Manifold2	Distribution block for air path	Wyolum	--
P1, P5, P11, P26	AREF, FTDI, VSeI_Vlv, 5V_LINK	Header_A_REF	CONN HEADER 50POS .100" SGL GOLD	Samtec Inc	TSW-150-07-L-S
P4	ICSP	Header_ICSP	CONN HEADER 6POS .100 STR 15AU	FCI	67996-206HLF
P6, P9, P10, P25	Pulse, C3SB, C3SB, U6_0E	pin_strip_3-90	CONN HEADER 16POS .100 R/A 30AU	FCI	68016-116HLF
P7	GAGE_PR	HCEM500GUH9P3	Miniature amplified pressure sensor	SensorTechnics	HCEM500GUH9P3
P8	ABSO_PR	HDIB002AUY8H5	Amplified pressure sensor	SensorTechnics	HDIB002AUY8H5
P14	X_VALVE	Valve	Miniature Pneumatic Solenoid Valve	Parker Hannifin	X-1-05-S-F
P15	FLOW_CONN	Conn_Flow	CONN HEADER 2MM 8POS TIN	Molex Connector	53014-0810
P16	FLOWMETER	FlowMeter	Mass Flow Meter for Gases	Sensirion	EM1NR4R0V_1A
P19	PUMP_CONN_FLEX	Conn_Pump_Flex	CONN FFC/FPC 6POS IMM VERT SMD	Molex Inc	526100671
P22	Temp	STS21	Temperature Sensor, I2C	Sensirion	STS21
P23	PUMP	Pump	Intelligent Pump	XAVITECH	P200_GAS
P24	12V	JACK_ALIM	CONN POWER JACK MALE 2.5MM CLSD	CUI Inc	PJ-002B
P27	BCM2835_GPIO	Header_GPIO	CONN HEADER FMAL 26PS .1" DL TIN	Sullins Connector	PPTC132LFBN-RC
PCB1	PCB	PCB	Main board	seeed studio	--
Q1	TIP112G	T0220-3-V	TRANS DARL NPN 2A 100V T0220AB	ON Semiconductor	TIP112G
R1, R2, R3, R4, R7, R11, R12	10K	rc03_vert	RES 10K OHM 1/8W 5% CF AXIAL	Stackpole	CF18JT10K0
R5, R6	220E	rc03_vert	RES 220 OHM 1/8W 5% CF AXIAL	Stackpole	CF18JT220R

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R8	330E	rc03_vert	RES 330 OHM 1/8W 5% CF AXIAL	Stackpole	CF18JT330R
R9	120E	rc03_vert	RES 120 OHM 1/8W 5% CF AXIAL	Stackpole	CF18JT120R
R10, R13	1k	rc03_vert	RES 1k OHM 1/8W 5% CF AXIAL	Stackpole	CF18JT1K00
SW1	Reset	SW_PB_V_H	SWITCH TACTILE SPST-NO 0.05A 12V	TE Connectivity	FSM2JH
U1	TXB0104D	TXB0104D	IC VOLT-LEVEL TRANSLATOR 14-SOIC	Texas Instruments	TXB0104DR
U2	TXS0102DCT	TXS0102DCTR	IC VOLT-LVL TRANSL 2BIT BI SM8	Texas Instruments	TXS0102DCTR
U3	NCP1117ST50T3G	SOT223	IC REG LDO 5V 1A DPAK-3	ON Semiconductor	NCP1117DT50G
U4	NCP1117DT33G	SOT223	IC REG LDO 3.3V 1A DPAK-3	ON Semiconductor	NCP1117DT33RKG
U5	DS3231N	DS3231	IC RTC W/TCXO 16-SOIC	Maxim Integrated	DS3231S#
U6	TSX0108	TXS0108EPWR	IC 8BIT NON-INV TRANSLTR 20TSSOP	Texas Instruments	TXS0108EPWR
U7	ATMEGA8-P	DIP-28_300_ELL	IC MCU AVR 32K FLASH 28PDIP	Atmel	ATMEGA328-PU
X1	16MHz	XTAL	CER RESONATOR 16.00MHZ	ECS Inc	ZTT-16.00MX

DNP					
C2, C3	22p	cnp_3mm_disc	CAP CER 22PF 50V 5% RADIAL	Vishay BC Components	K220J15C0GF5TH5
P2, P3	ANALOG_5V0	Header_6x1			
P12, P13	Valve_Conn	Header_5V_Link			
P17, P18	Pump_Conn	Header_FTDI			
P20, P21	Temp_Conn	SIL-4			
P28	VLV_90_M	2X06/90			
P29	VLV_90_F	Header_F_6x2			
SC1 - S26	SCREW	vite_3mm			
SHIELD1	ARDUINO_SHIELD	ARDUINO_SHIELD_2_040pins			

Distributor (Link)	Distributor PN	NOTE
Digikey	3003K-ND	
Digikey	P189-ND	
Digikey	399-5863-ND	
Digikey	399-1168-1-ND	SMD
Digikey	478-1868-ND	
Digikey	P833-ND	
Digikey	1N4001FSCT-ND	
Digikey	1N5225BCT-ND	
Digikey	754-1264-ND	
Digikey	A100210-ND	
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Digikey	SAM1031-50-ND	
Digikey	609-3210-ND	
Digikey	609-3317-ND	
SensorTechnics	HCEM500GUH9P3	SMD
SensorTechnics	HDIB002AUY8H5	SMD
Parker Hannifin	X-1-05-S-F	
Digikey	WM18971-ND	
Sensirion	EM1NR4R0V_1A	
Digikey	WM7633CT-ND	SMD
Sensirion	STS21	SMD
XAVITECH	P200_GAS	
Digikey	CP-002B-ND	
Digikey	S7081-ND	
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Digikey	TIP112G0S-ND	
Digikey	CF18JT10K0CT-ND	
Digikey	CF18JT220RCT-ND	

Distributor (Link)	Distributor PN	NOTE
Digikey	CF18JT330RCT-ND	
Digikey	CF18JT120RCT-ND	
Digikey	CF18JT1K00CT-ND	
Digikey	450-1649-ND	
Digikey	296-21928-1-ND	SMD
Digikey	296-21978-1-ND	SMD
Digikey	NCP1117DT50G0S-ND	SMD
Digikey	NCP1117DT33RK0SCT-ND	SMD
Digikey	DS3231S#-ND	SMD
Digikey	296-23011-1-ND	SMD
Digikey	ATMEGA328-PU-ND	
Digikey	X908-ND	

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