

Ref Name	Qty	Component	Value	Package	Manufacturer	Reichelt Part Nr	Farnell Part Nr	Voelkner	Description
T1	1	2N2222	BC337	TO92A		BC 337-40	1574379		NPN TRANSISTOR
OK1, OK2	2	6N136	6N136, HCPL4502	DIL		6N136	1469469		Opto Coupler with open collector
IC6	1	74xx1G08	74AHCT1G08	SOT23-5			3120350		AND-Gate
IC4	1	78XXS	78L05	TO92		MC 78L05 ACPG LP2950 ACZ5,0			VOLTAGE REGULATOR
J1	1	520250-3		520250-3	Molex 95501-2661	(other height MEBP 6-6S)	1536490	Econ Connect MEB6/6PL Voelkner Y726811	RJ12 Connector 6/6P
IC5	1	ATmega328-TQFP		SMD	Atmel	ATMEGA 328P-AU			8-bit AVR Microcontroller 8Kb Prog Flash
C13, C16	2	C2,5-3	100n	C025					CAPACITORnaming: grid - package width
C14	1	Capacitor	4,7µ	0805		KEM X5R0805 4,7U			Capacitor
C1	1	Capacitor	10n	0603		WAL 0603B103K500			Capacitor
C4, C5	2	Capacitor	47p	0603		NPO-G0603 47P		S601721	Capacitor
C2, C6, C7, C15, C17, C18	6	Capacitor	100n	0603		X7R-G0603 100N			Capacitor
C12	1	CPOL_RM2_D5	4.7µ	E2_D5		RAD 4,7/35			ELECTROLYTIC CAPACITOR grid 2mm, diameter 5mm
C11	1	CPOL_RM2.5_D7	47uF/35V	THT		RAD 47/35			ELECTROLYTIC CAPACITOR grid 2.54 mm, diameter 7 mm
D4, D5	2	Diode bedrahtet	1N4148	diod04		1N 4148			Diode
L1	1	Ferrite	600R@100M	0603		BLM18AG 601			EMI Suppression Filter
IC1	1	FT230XS-U		SOP64P599X175-16N	FTDI Chip	FT230XS-U			USB Interface IC USB to Basic Serial UART IC SSOP-16
R17	1	FUSE PTC RM5	PTC/100mA	THT		PFRA 010	9350365		PTC-Fuse
JP1, JP2, JP3, JP4	4	JP1E		Octa-Pads		SL 1X40G 2,54			JUMPER
S1	1	KMR2		SMD		KMR231 G LFS	1437636	KMR231 Voelkner S679772	OMRON SWITCH
D2, D3, D6, D7	4	LED3MM	LED3MM	3mm					LED3 mm, round, high intensity, colored
IC2	1	LM317X	LM317L	TO92		LM 317 LZ			VOLTAGE REGULATOR
IC3	1	LM393N	LM393N	DIL		LM 393 DIP			COMPARATOR
J4	1	MICRO USB		SMD horizontal		MIC USB BBU			Micro USB connector
J2	1	ML6	AVR ISP6	ML6		WSL 6G			Box Header, 6 pin
R8	1	R-EU_0204/7	1k depends on luminosity	0204/7					RESISTOR, European symbol
R21	1	R-EU_0204/7	4k7 depends on luminosity	0204/7					RESISTOR, European symbol
R16	1	R-EU_0204/7	3k3	0204/7					RESISTOR, European symbol
R7, R14	2	R-EU_0204/7	4K7	0204/7					RESISTOR, European symbol
R4, R9	2	R-EU_0204/7	10K	0204/7					RESISTOR, European symbol
R3	1	R-EU_0204/7	22K	0204/7					RESISTOR, European symbol
R5	1	R-EU_0204/7	47K	0204/7					RESISTOR, European symbol
R22	1	R-EU_0204/7	82R	0204/7					RESISTOR, European symbol
R6	1	R-EU_0204/7	150K	0204/7					RESISTOR, European symbol
R2	1	R-EU_0204/7	220K	0204/7					RESISTOR, European symbol
R15	1	R-EU_0204/7	560R	0204/7					RESISTOR, European symbol
R10	1	R-EU_0204/7	680R	0204/7					RESISTOR, European symbol
R18	1	Resistor SMD small	4k7 depends on luminosity	0603					RESISTOR, European symbol
R19, R20	2	Resistor SMD small	2k2 depends on luminosity	0603					RESISTOR, European symbol
R12, R13, R23	3	Resistor SMD small	10k	0603					RESISTOR, European symbol
R1, R11	2	Resistor SMD small	27R	0603					RESISTOR, European symbol
X1	1	Resonator		CSTNE_V	CSTNE16M0V53C000R0 CSTNE16M0V51Z000R0	CSTCE 16,0	4127623 4127654		Resonator, 16,0 MHz,
	1	Case				SP 2090 SW			