

FREDI-SMD by Sim&IT

Version 2020, adapted from FREDI-1.8

Ref Name	Qty	Component	Value	Package	Manufacturer	MPN	Farnell	Reichelt	Sonstiges	Description
S3, S4, S5, S6, S7, S8, S9, S10	8	10-XX		B3F-10XX				TASTER 3301B		Kurzhubtaster 6x6mm, Höhe: 9,5mm, 12V, vertikal
S1	1	255SB		255SB				KIPP 1A11		Kippschalter Ein-Aus-Ein optional für Analogvariante
J1	1	520425-3		520425-3	Molex	95501-2661	1536490		Econ Connect MEB6/6P	Modular Jack R12 6/6, THT, Low Profile
T2	1	BC850	BC817-40	SOT23	NXP	BC817-40		BC 817-40 SMD		NPN TRANSISTOR
C12	1	Capacitor	1n	0603				RND 1500603B1023		Capacitor
C8, C9	2	Capacitor	10n	0603				X7R-G0603 10N		Capacitor
C6	1	Capacitor	47p	0603				RND 1500603N4702		Capacitor
C4, C10, C11, C13, C14	5	Capacitor	100n	0603				KEM Y5V0603 100N		Capacitor
C7	1	CPOL-EUC	10µ	PANASONIC_C	Jamicon Panasonic	EEE1VA100SR		SMD ELKO 10/35 S-V 10U 35		POLARIZED CAPACITOR, Ø5mm
C16	1	CPOL-EUC	22µ	PANASONIC_C	Jamicon Panasonic	EEE1CA220SR		SMD ELKO 22/16 S-V 22U 16		POLARIZED CAPACITOR, Ø5mm
D1, D2, D3	3	DIODE_SOD-323	BAT54J	SOD2514X100N	NXP	BAT54J		BAT 54J NXP		
R11 (S2b)	1	ENC-POTI	ENC-POTI	ENC-POTI	Bourns	51AAA-B28-D18L		(BOU 91R1AR22B18L)	149 SXG 565 503 SP	Potentiometer 50kOhm, linear, optional für Analogvariante, 6,35mm Achse
S2 (S2a)	1	ENC-POTI	ENC-POTI	ENC-POTI	Alps Bourns	EC11B152442D EC11E15244G1 PEC11L-4215F-S0015	1191734 2064986	STEC11B03		Drehimpulsgeber 15 Pulse/30 Rastungen, Uhrzeigersinn: A vor B
IC2	1	LP2951	LP2951-33D	SO8	TI	LP2951-33D	3122132	(LP 2950 CZ-3.3)		LP2951-33D (TI) LP2951CD-3.3 (OnSemi) LDO 3,3V (dreipinnige Alternative THT->SMD-Pad)
LED1, LED2	2	LED3MM	green	LED3MM				KBT L-7104MGC KBT L-7104MGD		LED ca. 700mcd klar ca. 200mcd diffus, ggf. R8 und R9 anpassen
LED3	1	LED3MM	red	LED3MM				KBT L-7104SURC KBT L-7104SRD-E		LED ca. 1000mcd klar ca. 200mcd diffus, ggf. R12 anpassen
IC1	1	MEGA8-FREDI	ATmega328P-AU	SMD	Microchip	ATmega328P-AU		ATMEGA 328P-AU		MICROCONTROLLER 8 Kbytes FLASH, 1 kbytes SRAM, 512 bytes EEPROM
SV1	1	ML6	AVR ISP6	ML6				WSL 6G		Box Header, Wannenstecker, Kabelgehäuse, 6polig
R1, R2	2	R-EU_R1206	12R	R1206				RND 1206 1 12		Resistor
R14	1	Resistor_small	0R0	0603				RND 0603 0		Resistor, alternativ 0R05
R13	1	Resistor_small	68R	0603				SMD-0603 68		Resistor
R7, R8, R9, R12	4	Resistor_small	2k2	0603				RND 0603 1 2,2K		Resistor
R4, R6, R10, R32	4	Resistor_small	4k7	0603				RND 0603 1 4,7K		Resistor
R31	1	Resistor_small	82k	0603				RND 0603 1 82K		Resistor
R5	1	Resistor_small	100k	0603				RND 0603 1 100K		Resistor
XTAL1	1	Resonator	CSTCR7M37G53-R0	CSTCR	Murata	CSTCR7M37G53-R0	2913648			Resonator
SJ1	1	SJ2W		SJ_2						SMD solder JUMPER
Gehäuse	1				Strapubox	129-2090		SP 2090 SW		Kunststoffgehäuse Typ 2090
Drehknopf	1				ELMA	020-4420	1209764			Knopf schwarz, Knopf grau = 020-4410, für 6mm-Encoder-Achse
Drehknopf	1				ELMA	021-4520	1209788			Knopf schwarz mit Linie, Knopf grau = 021-4510, für 6,35mm-Poti-Achse
Kappe	1				ELMA	040-4020	1209812			Kappe schwarz, Kappe grau = 040-4010,
Warenkorb										