



Bearbeiter: S. Hofmann
Tel: 040 /
Fax: 040 / 76906856
Email: shop@shotech.de

Bill of Materials

Datum:	10. November 2020
Zeit:	13.06.58
Variante:	None
Bezeichnung:	BERT_2
Revision:	0.5

Quantity	Designator	Footprint	Bemerkung	Value	MFT	Order-Code	shotech
1	BATT1	VBH2032-1	Batteriehalter vertikal 2032	3V 230mAh	Renata	VBH2032-1	001702
1	BU1	DC108		DC205		DC205-GeB	000923
1	C1	CAPPR2-5x11 - RM2.5	10uF/50V/20%/RM2.5/105 °C /2000h	10uF/50V	Chang	RL1H100MC110B25CEH	001339
2	C2, C3	CAP_Radial_2.54MM	Ker-Ko 10pF 100V RM2.54 5% NPO	10pF	RICHWELL	TCH2A100J05S205N	001599
5	C4, C5, C17, C18, C19	CAPPR2-5x11	1uF/50V/20%/2000h/RM2	1uF/50V	Würth Elektronik	860020672005	001550
1	C6	CAPPR2-5x11 - RM2.5	22uF/63V/20%/2000h/RM2.5/85 °C	22uF/63V	Samwha	SD1J226M05011PC359	001338
12	C7, C8, C9, C10, C11, C12, C13, C14, C15, C16, C20, C29	CAP_Radial_5MM	Keramik-Vielerschichtkondensator MLCC - bedrahtet 0.1uF 50volts 10%	100nF/50V	Vishay / BC Components	K104K15X7RF53H5	001347
1	C21	CAP_Radial_5MM	CAP CER 1UF 50V X7R RADIAL	1uF	KEMET	C330C105M5R5CA7303	001414
2	C24, C25	CAPPR5-5x7	KS 33uF 25V 20% 5x7/2.5	33uF/25V	Chang Yang	KS1E330MC070B25CV0	001346
1	C30	CAP_Radial_2.54MM	Vs-Kond 470nF 63V Z5U RM2.54	470nF	KEMET	C320C474M5U5TA	001598
1	D1	DO-35	Dioden (Allzweck, Leistung, Schaltung) Vr/75V Io/150mA T/R	1N4148	On Semiconductors	1N4148TR	001594
1	D2	DO41	Schottky Dioden & Gleichrichter 1.0A 40V	1N5819	Taiwan Semiconductor	1N5819 R0	001568
1	D3	LED3MM	LED diffus rot 80mcd 45° 3mm	LED 3mm ROT	Everlight	204-10SURD/SS30-A3	001321
2	D4, D5	DO-35	Schottky 30V 0.2A DO35	BAT42	Taiwan Semiconductor	BAT42 R0	001240
1	J1	DSUB1.385-2H9	D-Sub-Bu. 9polig Lötlift 90° FP8,08mm	DSUB-BU	MPE Gerry	S97-3-009F-NB0NS-BS0	001578
1	J3	CON-A-USB9B	USB-Buchse B print 90°	USB9B	Asmann WSW	A-USB9B	001616
1	KK1		U-Kühlskörper Alu blank TO220 35x17x13	SK13/35/AL/220	Fischer Elektronik	SK13/35/AL/220	001592
1	KL1		ISO-Crystal, LED-Halter, IC-Fassungen	Small material	frei		
1	LP1			LP	shotech	BERT-2-PCB-20202403	001595
51	PP1, PP2, PP3, PP4, PP5, PP6, PP7, PP8, PP9, PP10, PP11, PP12, PP13, PP14, PP15, PP16, PP17, PP18, PP19, PP20, PP21, PP22, PP23, PP24, PP25, PP26, PP27, PP28, PP29, PP30, PP31, PP32, PP33, PP34, PP37, PP38, PP39, PP40, PP41, PP42, PP43, PP44, PP45, PP46, PP47, PP48, PP49, PP50, PP51, PP52, PP53	PP-RTM1364E-Z	Lötlift quadr. 1.05x10mm verzinkt	RTM1364E-Z	Voigt	1364E_68	001570
1	Q1	HC49/4H_SMX	Quarze 7.3728MHz 20pF 30ppm -40C 85C	7.3728MHz	CTS Electronic Components	ATS073-E	001274
2	Q2, Q3	SC_TO-92	N-V MOS 60V 0.5A 0.83W SR TO92	BS170	ON Semiconductor	BS170	001171
4	R1, R3, R4, R21	RES10-7.8X2.8 - 2k2	WIDERSTAND, 207, axial, 1%	2k2	frei	RMGK002.2	001238
1	R2	RES10-7.8X2.8	WIDERSTAND, 207, axial, 1%	4k7			001587
5	R5, R6, R15, R16, R17	RES10-7.8X2.8 - 1k	Metalltech, 0207 1/4W 1%	1k	frei	RMGK001	001235
8	R7, R8, R9, R10, R11, R12, R13, R14	RES10-7.8X2.8 - 3k3	WIDERSTAND, 207, axial, 1%	3k3			001589
1	R20	RES10-7.8X2.8 - 330R	WIDERSTAND, 207, axial, 1%	330R			001588
1	SW1	DIP-12	DIP-DI, Schalter Standard 6pol.	EDQ06S	EOE Excel Cell	EDQ06S	001572
1	SW2	TMG-325	SMD-Taster 1NO 12V 50mA 4,3mm 130gf	Tact Switch Yellow	China	Product ID: 1813303037	001478
3	U1, U4, U5	N020	OC-TAL D-TYPE TRANSPARENT LATCHES AND EDGE-TRIGGERED FLIP-FLOPS	SN74LS373N	Texas Instruments	SN74LS373N	001593
1	U2	PDI24	EPROM 4KBx8	U2732C	DDR	U2732C	
2	U3, U7	PDI24	SRAM 2KB x 8 Bit	BR6116-12	ROHM	BR6116-12	001318
1	U6	PDI28	8KB x 8 EPROM	M27C64		M27C64	001302
1	U8	PDI40	Z86C93 Series 236 B RAM 20 MHz CMOS	Z86C9320PSG	Zilog	Z86C9320PSG	000876
2	U9, U11	N016	8-bit buffers and line drivers, N0016A, TUBE	SN74LS368AN	Texas Instruments	SN74LS368AN	001567
2	U10, U18	N016	3-Line to 8-Line Decoder / Demultiplexer	74LS138N	NXP	74LS138N	001540
1	U12	PE16	RS232V.24 Schnittstelle DIP16	MAX232N	Texas Instruments	TS232CPE	001579
1	U13	N014	Quadruple 2-Input Positive-NAND Gate	DL000D	RFT	DL000D	001546
1	U15	TO-220A SK13 35	U-Reg +5V 1A TO220	TS7805CZ	Taiwan Semiconductor	T37805CZ C03	001573
1	U17	PDI28	SRAM LPow as 5V 32kx8 55ns DIP28	AS6C62556-55PCN	Alliance	AS6C62556-55PCN	001394
1	U19	N014	Dual 4-Input Positive-AND Gate DIP14	SN74LS21N	Texas Instruments	SN74LS21N	
1	U20	DIP-14	USB 2.0 to I ² C-UART Protocol Converter with GPIO ,PDIP-14	MCP2221A	Microchip	MCP2221A/P	001596
3	W1, W2, W3	JP2	Jumper 3pin	Jumper 3pin	frei	frei	001564
1	W4	JP1	Jumper RM2.54, rot	JUMP-RT		JUMP-RT	001564
1	X1	AK500/2	AR-Klemmen 250V 2pol grau	ARK500/2	PTR-Messtechnik	AK500/2DS-5,0-V/GRAU	001576
1	X2	2X25	2x25pol. Buchsenleiste, gerade, RM 2.54, Höhe: 8,5mm	CON-50	frei	BL 2X25G8 2.54	
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