



Bill of Materials

Datum:	9. April 2020
Zeit:	9:07:35
Variant:	None
Bezeichnung:	BERT-2
Revision:	0.3

Quantity	Designator	Footprint	Bemerkung	Value	MFT	Order-Code	shotech
1	BATT1	6032 201 501 Varta	Varta Li-Knopfz. 3V 230mAh SLF stehend	3V 230mAh	Varta	6032 201 501	
	BU1	DC10B		DC005		DC005-Gelb	000923
	C1	CAPPR2-5x11 - RM2.5	10uF/50V/20%/RM2.5/105 °C /2000h	10µF/50V	Chang	RL1H100MC110B25CEH	001339
	C2, C3	CAP_Radial_2.54MM	Ker-Ko 10pF 100V RM2,54 5% NPO	10pF	RICHWELL	TCH2A100J05S205N	001599
	C4, C5, C17, C18, C19	CAPPR2-5x11	1uF/50V/20%/2000h/RM 2	1µF/50V	Würth Elektronik	860020672005	001550
	C6	CAPPR2-5x11 - RM2.5	22uF/63V/20%/2000h/RM2.5/85 °C	22µF/63V	Samwha	SD1J226M05011PC359	001338
	C7, C8, C9, C10, C11, C12, C13, C14, C15, C16, C20, C29	CAP_Radial_5MM	Keramik-Vielschichtkondensator MLCC – bedrahtet 0.1uF 50volts 10% X7R 5mm LS	100nF/50V	Vishay / BC Components	K104K15X7RF53H5	001347
	C24, C25	CAPPR5-5x7	KS 33uF 25V 20% 5x7/2,5	33µF/25V	Chang Yang	KS1E330MC070B25CV0	001346
	C30	CAP_Radial_2.54MM	Vs-Kond 470nF 63V Z5U RM2,54	470nF	KEMET	C320C474M5U5TA	001598
	D1	DO-35	Dioden (Allzweck, Leistung, Schaltung) Vr/75V Io/150mA T/R	1N4148	On Semiconductors	1N4148TR	001594
	D2	DO41	Schottky Dioden & Gleichrichter 1.0A 40V	1N5819	Taiwan Semiconductor	1N5819 R0	001568
	D3	LED3MM	LED diffus rot 80mcd 45° 3mm	LED 3mm ROT	Everlight	204-10SURD/S530-A3	001321
	D4, D5	DO-35	Schottky 30V 0,2A DO35	BAT42	Taiwan Semiconductor	BAT42 R0	001240
	J1	DSUB1.385-2H9	D-Sub-Bu. 9polig Lötstift 90° FP8,08mm	DSUB9-BU	MPE Garry	597-3-009F-NB0NS-BS0	001578
	J3	CON-A-USBSB	USB-Buchse B print 90°	USB-B	Assmann WSW	A-USBSB	001618
	KK1		U-Kühlkörper Alu blank TO220 35x17x13	SK13/35/AL/220	Fischer Elektronik	SK13/35/AL/220	001592
	KL1		ISO-Crystal, LED-Halter, IC-Fassungen	Small material	frei		
	LP1			LP	shotech	BERT-2-PCB-20202403	001595
	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	Lötstift quadr. 1,05x10mm verzinnt	RTM1364E-Z	Vogt	1364E.68	001570
	Q1	HC49/4H_SMX	Quarze 7.3728MHz 20pF 30ppm -40C 85C	7,3728MHz	CTS Electronic Components	ATS073-E	001274
	Q2, Q3	SC_TO-92	N-VMOS 60V 0,5A 0,83V 5R TO92	BS170	ON Semiconductor	BS170	001171
	R1, R3, R4, R21	RES10-7.8X2.8 - 2k2	WIDERSTAND, 207, axial, 1%	2k2	frei	RMGK002.2	001238
	R2	RES10-7.8X2.8	WIDERSTAND, 207, axial, 1%	4k7			001587
	R5, R6, R15, R16, R17	RES10-7.8X2.8 - 1k	Metallsch. 0207 1/4W 1%	1k	frei	RMGK001	001235
	R7, R8, R9, R10, R11, R12, R13, R14	RES10-7.8X2.8 - 3k3	WIDERSTAND, 207, axial, 1%	3k3			001589
	R20	RES10-7.8X2.8 - 330R	WIDERSTAND, 207, axial, 1%	330R			001588
	SW1	DIP-12	DIP/DIL-Schalter Standard 6pol.	EDG06S	ECE Excel Cell	EDG06S	001572
	SW2	TMG-325	SMD-Taster 1NO 12V 50mA 4,3mm 130gf	Tact Switch Yellow	China	Product ID: 1813303037	001478
	U1, U4, U5	N020	OCTAL D-TYPE TRANSPARENT LATCHES AND EDGE-TRIGGERED FLIP-FLOPS	SN74LS373N	Texas Instruments	SN74LS373N	001593
	U2	PDIP24	EPROM 4KBx8	U2732C	DDR	U2732C	
	U3, U7	PDIP24	SRAM 2KB x 8 Bit	BR6116-12	ROHM	BR6116-12	001318
	U6	PDIP28	8KB x 8 EPROM	M27C64		M27C64	001302
	U8	PDIP40	Z86C93 Series 236 B RAM 20 MHz CMOS	Z86C9320PSG	Zilog	Z86C9320PSG	000876
	U9, U11	N016	6-bit buffers and line drivers, N0016A, TUBE	SN74LS368AN	Texas Instruments	SN74LS368AN	001567
	U10, U18	N016	3-Line to 8-Line Decoder / Demultiplexer	74LS138N	NXP	74LS138N	001540
	U12	PE16	RS232/V.24 Schnittstelle DIP16	MAX232N	Texas Instruments	TS232CPE	001579
	U13	N014	Quadruple 2-Input Positive-NAND Gate	DL000D	RFT	DL000D	001546
	U15	TO-220A - SK13 35	U-Reg +5V 1A TO220	TS7805CZ	Taiwan Semiconductor	TS7805CZ C0G	001573
	U17	PDIP28	SRAM LLPow as 5V 32kx8 55ns DIP28	AS6C62256-55PCN	Alliance	AS6C62256-55PCN	001384
	U19	N014	Dual 4-Input Positive-AND Gate DIP14	SN74LS21N	Texas Instruments	SN74LS21N	
	U20	DIP-14	USB 2.0 to I2C/UART Protocol Converter with GPIO , PDIP-14	MCP2221A	Microchip	MCP2221A-I/P	001596
	W1, W2, W3	JP2	Jumper 3pin	Jumper 3pin	frei	frei	001564
	W4	JP1	Jumper RM2,54, rot	JUMP-RT		JUMP-RT	001564
	X1	AK500/2	AR-Klemmen 250V 2pol grau	ARK500/2	PTR-Messtechnik	AK500/2DS-5,0-V/GRAU	001576
	X2	2X25	2x25pol. Buchsenleiste, gerade, RM 2,54, Höhe: 8,5mm	CON-50	frei	BL 2X25G8 2,54	
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