

Sheet1

Source: C:\teemo\PROJEKTID\TBMAX_CHARGER\Schematics_KiCad\TBMAX_Charger\ver2.6\TBMAX_Charger.sch

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Tool: Eeschema (5.0.0)

GeneratorC:\Program Files\KiCad5\bin\scripting\plugins\bom_csv_grouped_by_value.py

Componen 156

Item	Qty	Reference(s)	Value	LibPart	Footprint
1	1	BZ1	Buzzer	Device:Buzzer	w_misc_comp:buzzer_tmb
2	9	C1, C2, C3, C4, C5, C8, C12, C15, C17	0.1	Device:C_Small	Capacitor_SMD:C_1206_3216Metric_Pad1.42x1.75mm_HandSolder
3	2	C6, C7	470* 35V	Device:CP	w_capacitors:CP_10x20mm_hor
4	1	C11	10uF* 16V	Device:CP	w_capacitors:CP_5x11mm_hor
5	2	C13, C14	10p	Device:C_Small	Capacitor_SMD:C_0603_1608Metric
6	11	D1, D2, D3, D4, D8, D9, D10, D11, D12, D14, D15	1N4148	Diode:1N4148	Diode_SMD:D_MiniMELF
7	1	D5	SR560	Diode:SR560	Diode_SMD:D_MELF-RM10_Universal_Handsoldering
8	2	D6, D13	TL432DBZ(komponendil markeering:"BB9YC")	Reference_Voltage:TL432DBZ	Package_TO_SOT_SMD:SOT-23
9	1	D7	MBRF20100CT	Diode:MBRF20100CT	Package_TO_SOT_THT:TO-220-3_Horizontal_TabUp
10	1	D_LCD1	DISPLAY_HD44780_header	display_lcd:DISPLAY_HD44780	Teemo_display:lcd_16x2_for_TBMAX_charger
11	1	J1	battery+ header	Connector:Conn_01x01_Female	Teemo_conn:Banana_socket_horizontal
12	1	J2	battery- header	Connector:Conn_01x01_Female	Teemo_conn:Banana_socket_horizontal
13	1	J3	Power inputheader	Connector:Barrel_Jack_Switch	w_conn_misc:dc_socket
14	1	J4	Temp. sensor_header	Connector:Screw_Terminal_01x03	Connector_PinHeader_2.54mm:PinHeader_1x03_P2.54mm_Horizontal
DNP!15	1	J5	FAN_header	Connector:Conn_01x02_Male	Connector_PinHeader_2.54mm:PinHeader_1x02_P2.54mm_Vertical
16	1	J6	Balancer_header	Connector_Generic:Conn_01x07	teemo2:Balancer_board
DNP!17	1	J7	UART_header	Connector:Screw_Terminal_01x02	Connector_PinHeader_2.54mm:PinHeader_1x02_P2.54mm_Vertical
18	1	J8	ICSP_connector_header	Connector_Generic:Conn_02x03_Odd_Even	Connector_PinHeader_2.54mm:PinHeader_2x03_P2.54mm_Vertical
19	1	J9	Tplug_male_header	Connector_Generic:Conn_01x02	Teemo_conn:Tplug
20	1	L1	29uH	Device:L_Core_Ferrite	teemo2:Inductor_toroid_20x8_horizontal
21	17	Q1, Q2, Q4, Q5, Q8, Q9, Q10, Q11, Q13, Q15, Q17, Q18, Q19, Q20, Q21, Q22, Q31	2N7002 (komponendil markeering:"tCM99")	Transistor_FET:2N7002	Package_TO_SOT_SMD:SOT-23
22	2	Q3, Q7	AO4468	Transistor_FET:AO4468	Package_SO:SOIC-8_3.9x4.9mm_P1.27mm
23	2	Q6, Q30	TIP120	Device:Q_NPN_Darlington_BCE	Package_TO_SOT_THT:TO-220-3_Horizontal_TabUp
24	8	Q12, Q14, Q23, Q24, Q25, Q26, Q27, Q28	SS8550 (Komponendil markeering:"Y2")	Transistor_BJT:MMBT3906	Package_TO_SOT_SMD:SOT-23
25	1	Q16	AO4409	Transistor_FET:AO4409	Package_SO:SOIC-8_3.9x4.9mm_P1.27mm
26	1	Q29	IRFZ44N	Transistor_FET:IRFZ44N	Package_TO_SOT_THT:TO-220-3_Horizontal_TabUp
27	18	R1, R2, R4, R10, R12, R13, R25, R26, R30, R37, R42, R47, R50, R65, R74, R80, R99, R100	10k	Device:R	Resistor_SMD:R_1206_3216Metric
28	6	R3, R7, R8, R35, R41, R49	30k	Device:R	Resistor_SMD:R_1206_3216Metric

29	15	R5, R11, R28, R34, R40, R48, R52, R54, R55, R56, R58, R61, R63, R67, R69	150k	Device:R	Resistor_SMD:R_1206_3216Metric
30	10	R6, R9, R14, R15, R20, R29, R38, R39, R44, R51	2.2k	Device:R	Resistor_SMD:R_1206_3216Metric
31	8	R16, R18, R81, R82, R83, R84, R85, R86	470	Device:R	Resistor_SMD:R_1206_3216Metric
32	5	R17, R19, R27, R45, R46	13	Device:R	Resistor_SMD:R_1206_3216Metric
33	2	R21, R22	2 3W	Device:R	Resistor_THT:R_Axial_DIN0614_L14.3mm_D5.7mm_P15.24mm_Horizontal
34	2	R23, R24	0.1 1W	Device:R	Resistor_THT:R_Axial_DIN0411_L9.9mm_D3.6mm_P12.70mm_Horizontal
35	6	R93, R94, R95, R96, R97, R98	20	Device:R	Resistor_THT:R_Axial_DIN0414_L11.9mm_D4.5mm_P15.24mm_Horizontal
36	1	SW1	STOP	Switch:SW_Push	Button_Switch_THT:SW_PUSH_6mm_H7.3mm
37	1	SW2	DEC	Switch:SW_Push	Button_Switch_THT:SW_PUSH_6mm_H7.3mm
38	1	SW3	INC	Switch:SW_Push	Button_Switch_THT:SW_PUSH_6mm_H7.3mm
39	1	SW4	START	Switch:SW_Push	Button_Switch_THT:SW_PUSH_6mm_H7.3mm
40	2	U1, U5	LM324	Amplifier_Operational:LM324	Package_SO:SOIC-14_3.9x8.7mm_P1.27mm
41	2	U2, U7	CD4051	4xxx:4051	Package_SO:SOIC-16_3.9x9.9mm_P1.27mm
42	1	U3	LM393	Comparator:LM393	Package_SO:SOIC-8_3.9x4.9mm_P1.27mm
43	1	U4	ATmega32A-AU	MCU_Microchip_ATmega:ATmega32A-AU	Package_QFP:TQFP-44_10x10mm_P0.8mm
44	1	U6	L7805	Regulator_Linear:L7805	Package_TO_SOT_THT:TO-220-3_Horizontal_TabUp
45	1	Y1	16MHz	Device:Crystal	Crystal:Crystal_HC49-4H_Vertical