

# Stückliste

Serienstatus

Projekt-File:	BiDiB_GBM_Boost_1.8.sch
Projekt:	OpenDCC GBM
Modul:	GBMboost
Revision:	Version 1.8.1
Kunde:	--
Bearbeiter:	C.Schörner

## SMD-Bausatz:

Bauteile werden vom Platinenhersteller bestückt

alternatives Package zu vorheriger Komponente

manuelle Bestückung durch den Anwender

Bauteile werden nicht bestückt



## Löt-Bausatz:

Der Anwender muss die Bauteile der Farben GRÜN und GRAU bestücken.

Alle Bauteile herstellerunabhängig, wenn Eintrag in der Spalte Hersteller nicht mit !! beginnt.

Stücklisten Version 2.5

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Pos	Menge	Bezeichnung	Wert	Beschreibung	Bauform	Hersteller	Hinweis
1	0	C12	n.f.	Capacitor ceramic X7R, 10%	C0603	Kemet	
2	1	C15	100n	Capacitor ceramic X7R, 10%	C0603	Kemet	
3	1	C16	100n	Capacitor ceramic X7R, 10%	C0603	Kemet	
4	1	C17	100n	Capacitor ceramic X7R, 10%	C0603	Kemet	
5	1	C18	22µ/10V	Capacitor ceramic X5R, 20%	C0603	TDK	
6	1	C20	100n	Capacitor ceramic X7R, 10%	C0603	Kemet	
7	1	C21	100n	Capacitor ceramic X7R, 10%	C0603	Kemet	
8	1	C22	150u/25V	Capacitor, Polymer, I(ripple) > 1A, 20V (better 25V) (120uF also possible)	F12	Sanyo o. Nichicon	bevorzugt bitte den Typ PCV1E151MCL1GS
9	1	C23	100n	Capacitor ceramic X7R, 10%	C0603	Kemet	
10	1	C24	100n	Capacitor ceramic X7R, 10%	C0603	Kemet	
11	1	C25	100n	Capacitor ceramic X7R, 10%	C0603	Kemet	
12	1	C27	100n	Capacitor ceramic X7R, 10%	C0603	Kemet	
13	1	C28	1µ/20V	Capacitor ceramic X7R	C0603	TDK	
14	1	C29	100n	Capacitor ceramic X7R, 10%	C0603	Kemet	
15	1	C32	100n	Capacitor ceramic X7R, 10%	C0603	Kemet	
16	1	C33	22µ/10V	Capacitor ceramic X5R, 20%	C0603	TDK	
17	1	C34	10µ/20V	Capacitor ceramic	C1206		
18	1	C50	100n	Capacitor ceramic X7R, 10%	C0603	Kemet	
19	1	C51	100n	Capacitor ceramic X7R, 10%	C0603	Kemet	
20	1	C52	100n	Capacitor ceramic X7R, 10%	C0603	Kemet	
21	1	C53	100n	Capacitor ceramic X7R, 10%	C0603	Kemet	
22	1	C54	100n	Capacitor ceramic X7R, 10%	C0603	Kemet	
23	1	C55	100n	Capacitor ceramic X7R, 10%	C0603	Kemet	
24	1	C56	100n	Capacitor ceramic X7R, 10%	C0603	Kemet	
25	1	C57	100n	Capacitor ceramic X7R, 10%	C0603	Kemet	
26	1	C58	22µ/10V	Capacitor ceramic X5R, 20%	C0603	TDK	
27	1	C59	100n	Capacitor ceramic X7R, 10%	C0603	Kemet	
28	1	C60	10µ/10V	Capacitor	C1206		
29	1	C61	15p	Capacitor ceramic NP0, 10%	C0603		
30	1	C62	15p	Capacitor ceramic NP0, 10%	C0603		
31	1	C63	100n	Capacitor ceramic X7R, 10%	C0603	Kemet	
32	1	C64	1µ/20V	Capacitor ceramic X7R	C0603	TDK	
33	1	C70	100n	Capacitor ceramic X7R, 10%	C0603	Kemet	Xpressnet Schnittstelle
34	1	C90	100n	Capacitor ceramic X7R, 10%	C0603	Kemet	
35	1	C91	100n	Capacitor ceramic X7R, 10%	C0603	Kemet	
36	1	C93	10µ/10V	Capacitor	C1206		
37	1	D3	BAS70-04A	Standard Diode (BAV99, BAT54S may be used as well)	SOT23		
38	1	D37	BAS70-04A	Silicon Schottky Diodes, Dual, Series, 100mA (alternative BAT54S)	SOT23	NXP	
39	1	D38	BAS70-04A	Silicon Schottky Diodes, Dual, Series, 100mA (alternative BAT54S)	SOT23	NXP	
40	1	D39	SSA33L	Schottky Diode, 30V, 3A	DO214AC	Vishay	
41	1	D43	3V9	Z-Diode, 5%, 500mW	SOD80		
42	1	D44	SM712.TCT	Semtech, Dual TVS Diode for RS486	SOT23	Semtech	
43	1	D45	SM712.TCT	Semtech, Dual TVS Diode for RS487	SOT24	Semtech	
44	1	D50	SSA33L	Schottky Diode, 30V, 3A	DO214AC	Vishay	
45	1	D51	SSA33L	Schottky Diode, 30V, 3A	DO214AC	Vishay	
46	1	D52	SSA33L	Schottky Diode, 30V, 3A	DO214AC	Vishay	
47	0	F1	1A	Fuse	SMD_SF		
48	0	F2	1A	Fuse	SMD_SF		
49	1	IC2	ISL3175EIBZ	RS485 Interface Transceiver, 3V3, 500kBaud, halfduplex	SOIC8	Intersil	
50	1	IC3	ISL3175EIBZ	RS485 Interface Transceiver, 3V3, 500kBaud, halfduplex	SOIC8	Intersil	
51	1	IC70	ISL3175EIBZ	RS485 Interface Transceiver, 3V3, 500kBaud, halfduplex	SOIC8	Intersil	Xpressnet Schnittstelle
52	0	IC2, IC3, IC70	SN65HVD12	RS485 Transceiver 500kBaud, 3V3,	SOIC8	Texas Instruments	
53	1	IC4	74HC02D	Quad 2-input NOR gate	SO14		
54	0	IC5	7812	Positive VOLTAGE REGULATOR 12V	TO220V		
55	1	IC11	BTM7752	Infineon H-Bridge, 8A peak	PG-DSO-36-29	Infineon	
56	1	IC50	ATXMEGA128A	8-Bit, 32MHz, AVR	TQFP100	Atmel	
57	1	IC51	TPS62177	DC/DC-Schaltregler 28V 0.5A SD Cntr	WS0N-10	TI	
58	0	IC52	LP2950CZ3.3	Voltage Regulator, Lowdrop, 3,3V, 100mA	TO92	TaiwanSemi	
59	1	IC90	FT232RL	USB UART	SSOP28DB	FTDI	
60	1	J2	J-06-2MM-2X	HEADER JACK PINS	HDR-2MM-2X03_D08		
61	1	J3	J-02-S		SIP-100-02		
62	1	J4	J-10-2MM-2X	HEADER JACK PINS	HDR-2MM-2X05_D08		
63	1	J5	J-02-S		SIP-100-02		
64	1	J7	P-04-SIP-10	HEADER PLUG PINS, single row, 4 Pins	SIP-100-04		

Pos	Menge	Bezeichnung	Wert	Beschreibung	Bauform	Hersteller	Hinweis
65	1	J8	P-04-SIP-10	HEADER PLUG PINS, single row, 4 Pins	SIP-100-04		
66	1	J50	AVR-ISP-6	AVR ISP-6 Serial Programming Haeder	AVR-ISP-6		
67	1	J51	J-06-2MM-2X	HEADER JACK PINS	HDR-2MM-2X03_D08		
68	1	J52	J-06-2MM-2X	HEADER JACK PINS	HDR-2MM-2X03_D08		
69	1	J53	J-06-2MM-2X	HEADER JACK PINS	HDR-2MM-2X03_D08		
70	1	J54	J-08-2MM-2X	HEADER JACK PINS	HDR-2MM-2X04		
71	1	J55	AVR-JTAG-10	AVR JTAG Debug/Programming Header	AVR-JTAG-10		
72	1	J70	RJ12, SMT or THT 555077-1	AMP connector	555077-1		only Master Xpressnet Schnittstelle
73	1	J71	RJ12, SMT or THT 555077-1	AMP connector	555077-1		only Master Xpressnet Schnittstelle
74	1	J72	J-02-S	HEADER JACK PINS, 2x1, Grid 2,54	SIP-100-02		only Master Xpressnet Schnittstelle
75	1	J80	RJ45, THT	AMP connector	520260-4		
76	1	J81	RJ45, THT	AMP connector	520260-4		
77	1	J90	Mini B	USB-B Mini, SMD, 5-polig	USB-MB-S	FCI	
78	1	J91	P-06-SIP-10	HEADER PLUG PINS	SIP-100-06		
79	1	L2	40R/100MHz	SMD EMI Suppression Ferrite Beads, 0.3A	0603	Wuerth	
80	1	L4	10µH	3,8 x 3,8mm, H 1,7mm, R(dc)=0,165Ohm, I(dc) 740mA, I(sat) 560mA	WE-TPC	Wuerth	
81	0	L3	10µH	WE-LQ SMD Inductor / 0,8A	BF1812	Wuerth	
82	1	L90	40R/100MHz	SMD EMI Suppression Ferrite Beads, 0.3A	0603	Wuerth	
83	1	LED21	red	LED, SMD, red, 8mcd@2mA	0603	Osram	
84	1	LED50	green	LED, SMD, green, 4mcd@2mA	0603	Liteon	
85	1	LED51	green	LED, SMD, green, 4mcd@2mA	0603	Liteon	
86	1	LED52	green	LED, SMD, green, 4mcd@2mA	0603	Liteon	
87	1	LED53	green	LED, SMD, green, 4mcd@2mA	0603	Liteon	
88	0	OC3	HCPL0500	High Speed OC, SO8	SOIC08	HP	
89	1	Q5	BSS123	BSS123 (or NTR4501)	SOT23		
90	1	Q6	BSS123	BSS123	SOT23		
91	1	Q7	BSS123	BSS123	SOT23		
92	1	Q8	IFR7416	P-Channel MOSFET, 20V, 8A (Si4401, Si9435)	SO-08	Vishay	
93	1	Q50	8MHz	(alternativ)	TAITIEN_XQ	TAITIEN	
94	1	Q51	8MHz	CRYSTAL, 8MHz	HC49UP		
95	1	R30	120	RESISTOR, European symbol	R0603		
96	1	R31	470	RESISTOR, European symbol	R0603_SJ		
97	1	R32	470	RESISTOR, European symbol	R0603_SJ		
98	1	R33	120	RESISTOR, European symbol	R0603		
99	1	R34	1k	RESISTOR, European symbol	R0603_SJ		
100	1	R35	20k	RESISTOR, European symbol	R0603		
101	1	R36	1k	RESISTOR, European symbol	R0603		
102	1	R37	22	RESISTOR, European symbol	R0603		
103	0	R39	0R	RESISTOR, European symbol	R0603_SJ		
104	0	R41	0R	RESISTOR, European symbol	R0603_SJ		
105	1	R44	10k	RESISTOR, European symbol	R0603_SJ		
106	1	R45	10k	RESISTOR, European symbol	R0603_SJ		
107	1	R46	10k	RESISTOR, European symbol	R0603_SJ		
108	1	R47	10k	RESISTOR, European symbol	R0603_SJ		
109	1	R48	1k5	RESISTOR, European symbol	R0603_SJ		
110	1	R49	470	RESISTOR, European symbol	R0603		
111	0	R50	22k	RESISTOR, European symbol	R0603		
112	1	R51	1k	RESISTOR, European symbol	R1206		
113	1	R52	4k7	RESISTOR, European symbol	R0603_SJ		
114	0	R53	10k	RESISTOR, European symbol	R0603_SJ		
115	1	R54	1k	RESISTOR, European symbol	R0603_SJ		
116	1	R55	4R7	RESISTOR, European symbol	R0603_SJ		
117	1	R57	1k5	RESISTOR, European symbol	R0603		Masterwiderstand (Jumper)
118	1	R58	1k5	RESISTOR, European symbol	R0603		Masterwiderstand (Jumper)
119	1	R62	4R7	RESISTOR, European symbol	R1206		
120	1	R63	4R7	RESISTOR, European symbol	R1206		
121	1	R64	4R7	RESISTOR, European symbol	R1206		
122	1	R65	4R7	RESISTOR, European symbol	R1206		
123	0	R66	4R7	RESISTOR / THT Alternative	R0414/15		
124	1	R67	470	RESISTOR, European symbol	R0603		
125	1	R68	470	RESISTOR, European symbol	R0603		
126	1	R74	120	RESISTOR, European symbol	R0603		Xpressnet Schnittstelle
127	1	R75	47k	RESISTOR, European symbol	R0603		Xpressnet Schnittstelle
128	1	R76	47k	RESISTOR, European symbol	R0603		Xpressnet Schnittstelle
129	1	R92	4k7	RESISTOR, European symbol	R0603		
130	1	R93	10k	RESISTOR, European symbol	R0603		
131	1	R94	10k	RESISTOR, European symbol	R0603		
132	0	R95	10k	RESISTOR, European symbol	R0603		
133	1	R99	10k	RESISTOR, European symbol	R0603		
134	1	R100	1k	RESISTOR, European symbol	R1206		Masterwiderstand (Jumper)
135	1	RN11	1k	Array Chip Resistor, 10%	1206-CRAM		
136	1	RN50	1k	Array Chip Resistor, 10%	1206-CRAM		
137	1	S2	SMD	9314 SMD type	9314_SMD	Schurter	
138	0	SJ	-	SMD solder JUMPER	R0603_SJ		
139	0	SJ1	-	SMD solder JUMPER	R0603_SJ		
140	0	SJ2	-	SMD solder JUMPER	R0603_SJ		
141	0	SJ5	-	SMD solder JUMPER	SJX		
142	0	SJ6	-	SMD solder JUMPER	SJX		
143	0	SJ31	-	SMD solder JUMPER	R0603_SJ		
144	0	SJ40	-	SMD solder JUMPER	SJ		
145	0	SJ57	-	SMD solder JUMPER	SJ		Jumper für Masterwiderstand
146	0	SJ58	-	SMD solder JUMPER	SJ		Jumper für Masterwiderstand
147	0	SJ91	-	SMD solder JUMPER	SJ		
148	0	SJ99	-	SMD solder JUMPER	SJ		Jumper für Variante 2 (Spezial)
149	0	SJ100	-	SMD solder JUMPER	SJ		Jumper für Masterwiderstand

Pos	Menge	Bezeichnung	Wert	Beschreibung	Bauform	Hersteller	Hinweis
150	1	K1	Heatsink	fischer elektronik, height: 10mm, length 13mm	LF-13	Fischer Elektronik	
151	0	X12		SMD Löt pads	SMD_PAD100		
152	0	X13	PR10	Single Pad	PAD_1.0		
153	0	X15	PR10	Single Pad	PAD_1.0		
154	0	X17	PR10	Single Pad	PAD_1.0		
155	0	X19	PR10	Single Pad	PAD_1.0		
156	0	X21	PR10	Single Pad	PAD_1.0		
157	0	X27	PR10	Single Pad	PAD_1.0		
158	0	X28	PR10	Single Pad	PAD_1.0		
159	0	X29	PR10	Single Pad	PAD_1.0		
160	0	X30		RIA Anschlussklemme Typ 59, Raster 3,5mm, Polzahl 2	2POL35		
161	1	X34		WAGO SREW CLAMP, Grid 5,08, 4polig	W237-4P	or equivalent	
162	1	PCB	PCB	PCB OpenDCC GBM			