

Document reference: Nov/26/2024 Ver. 1				Product reference: EVLDRIVE102BP			 life. augmented
Company: www.st.com							
STMicroelectronics							
Index	Quantity	Reference	Part Value	Description	Package	Manufacturer	Part Number
1	1	CN1	3P Screw Terminal	Horizontal Entry Modular w. Rising Cage Clamp, Serie 2135 - 5.08 mm	Pitch 5.08 mm	WURTH ELEKTRONIK	691213510003
2	1	CN2	STRIP 1x2	Strip connector 2 pos, 2.54 mm	1x2 pins	WURTH ELEKTRONIK	61300211121
3	1	CN3	2P Screw Terminal	Horizontal Entry Modular w. Rising Cage Clamp, Serie 2135 - 5.08 mm	Pitch 5.08 mm	WURTH ELEKTRONIK	691213510002
4	1	CN4	STRIP 1x5	Strip connector 5 pos, 2.54 mm	1x5 pins	WURTH ELEKTRONIK	61300211121
5	2	CN7, CN10	Header F 19x2	Elevated Socket Strip, 0.100" Pitch	2x19 pins	Samtec	ESQ-119-37-L-D
6	3	C1, C7, C8	4.7 uF / 25 V	SMT ceramic capacitor	Size 0603		
7	3	C2, C18, C23	47 nF / 25 V	SMT ceramic capacitor	Size 0603	WURTH ELEKTRONIK	885012206069
8	4	C3, C11, C12, C13	220 nF / 100 V	SMT ceramic capacitor	Size 0805		
9	1	C4	1 uF / 50 V	SMT ceramic capacitor	Size 0603	WURTH ELEKTRONIK	885012206126
10	2	C5, C6	22 nF / 25 V	SMT ceramic capacitor	Size 0603	WURTH ELEKTRONIK	885012206067
11	2	C9, C10	100 nF / 100 V	SMT ceramic capacitor	Size 0603	WURTH ELEKTRONIK	885012206120
12	2	C14, C15	1 uF / 100 V	SMT ceramic capacitor	Size 1206		
13	2	C16, C17	220 uF / 63 V	THT Electrolytic Capacitor	Radial THT Diam. 10 mm pitch 5 mm	WURTH ELEKTRONIK	860020775019
14	3	C19, C20, C21	1.5 nF / 25 V	SMT ceramic capacitor	Size 0603	WURTH ELEKTRONIK	885012206060
15	6	C22, C24, C25, C26, C28, C29	330 pF / 25 V	SMT ceramic capacitor	Size 0603	WURTH ELEKTRONIK	885012006041
16	1	C27	220 nF / 25 V	SMT ceramic capacitor	Size 0603	WURTH ELEKTRONIK	885012206073
17	4	D1, D2, D3, D4	BAT30	Small signal Schottky diodes	SOD-523	STMicroelectronics	BAT30KFILM
18	14	JP1, JP4, JP7, JP9, JP10, JP11, JP12, JP13, JP14, JP15, JP16, JP17, JP18, JP19	short pin 1-2	SMT solder jumper 2 ways/ 3 pads			
19	3	JP2, JP3, JP5	open	SMT solder jumper			
20	2	JP6, JP8	short	SMT solder jumper			
21	1	LED1	RED	WL-SMCW SMT Mono-color Chip LED Waterclear	Size 0805	WURTH ELEKTRONIK	150080RS75000
22	1	LED2	YELLOW	WL-SMCW SMT Mono-color Chip LED Waterclear	Size 0805	WURTH ELEKTRONIK	150080YS75000
23	1	LED3	GREEN	WL-SMCW SMT Mono-color Chip LED Waterclear	Size 0805	WURTH ELEKTRONIK	150080GS75000
24	1	NTC1	10 kΩ	NTC Thermistor	Size 0603	Murata	NCP18XH103F03RB
25	6	Q1, Q2, Q3, Q4, Q5, Q6	STL220N6F7	60V, 1.2 mOhm, 120A, N-Channel, STripFET F7 Power MOSFET in a PowerFLAT 5x6 package	PowerFLAT 5x6	STMicroelectronics	STL220N6F7
26	4	R1, R2, R3, R5	33 kΩ	SMT resistor	Size 0603		
27	3	R4, R6, R10	2.2 kΩ	SMT resistor	Size 0603		
28	1	R7	120 kΩ	SMT resistor	Size 0603		
29	1	R8	56 kΩ	SMT resistor	Size 0603		
30	2	R9	3.3 kΩ	SMT resistor	Size 0603		
31	3	R11, R12, R13	5 mΩ / 3 W	SMT resistor	Size 2512	Bourns	CRE2512-FZ-R005E-3
32	1	R14	47 kΩ / 0.33 W	SMT resistor	Size 0805		
33	3	R15, R16, R17	4.7 kΩ	SMT resistor	Size 0603		
34	1	R18	75 kΩ	SMT resistor	Size 0603		
35	3	R19, R20, R21	330 Ω	SMT resistor	Size 0603		
36	3	R22, R27, R31	22 kΩ	SMT resistor	Size 0603		
37	3	R23, R28, R33	1.5 kΩ	SMT resistor	Size 0603		
38	1	R24	4.3 kΩ	SMT resistor	Size 0603		
39	1	R25	220 Ω	SMT resistor	Size 0603		
40	3	R26, R29, R34	1 kΩ	SMT resistor	Size 0603		
41	1	R30	1.2 kΩ	SMT resistor	Size 0603		
42	1	R32	91 Ω	SMT resistor	Size 0603		
43	1	R35	6.8 kΩ	SMT resistor	Size 0603		
44	5	R36, R37, R38, R39, R40	0 Ω	SMT resistor	Size 0603		
45	2	R41, R42	Not mounted	SMT resistor	Size 0603		
46	28	TP1, TP2, TP3, TP4, TP6, TP7, TP8, TP9, TP10, TP11, TP12, TP13, TP14, TP15, TP16, TP17, TP18, TP19, TP20, TP23, TP24, TP25, TP26, TP27, TP28, TP29, TP30, TP31		Test point SMD 50 mils (1.27 mm) SMD PAD			
47	3	TP5, TP21, TP22	TP-SMD-S1751-46R	65x128 mils SMD Hardware Test Points	SMD 65x128 Pad	HARWIN or equivalent	S1751-46R
48	1	U1	STDRIIVE102BP	Three-phase gate driver	QFN 6x6 pitch 0.4 mm	STMicroelectronics	STDRIIVE102BP