



Title		
Size	Number	Revision
A3		
Date:	15.02.2020	Sheet of
File:	D:\GITHUB\Sheet1.SchDoc	Drawn By:

Designator	Comment	Quantity	Description	Footprint	Value	Voltage
C1, C5, C6, C14	1uF	4	Chip capacitor	CAPC2012X135N	1uF	25V
C2, C16, C18, C20	10uF	4	Chip capacitor	CAPC1608X90N	10uF	25V
C3, C4, C15, C23, C24, C26, C27, C29, C30, C31, C32, C34, C35	100nF	13	Chip capacitor	CAPC1608X90N	100nF	25V
C7, C36	2.2uF	2	Chip capacitor	CAPC1608X90N	2.2uF	25V
C8	100pF	1	Chip capacitor	CAPC1608X90N	100pF	25V
C9	10uF	1	Chip capacitor	CAPC1608X90N	10uF	50V
C10, C11, C33	10nF	3	Chip capacitor	CAPC2012X135N	10nF	250V
C12, C13	10nF	2	Chip capacitor	CAPC1608X90N	10nF	25V
C17	20nF	1	Chip capacitor	CAPC1608X90N	20nF	50V
C19, C38	1uF	2	Chip capacitor	CAPC1608X90N	1uF	25V
C21, C22, C25, C28	10pF	4	Chip capacitor	CAPC1608X90N	10pF	25V
C37	Cap2	1	Capacitor	CAPR5-4X5	100uF	
D1	BAS521	1		SOD523F	BAS521	
D2, D7	BAS5202	2	Schottky Diode	SOD523F		
D3	MTAPD-07	1	APD photodiode	LCC3	MTAPD-07-013	
D4	Laser SPL PL90_3	1	TO-18 Laser	SPL_PL90	SPL PL90_3	
D6	BAV99	1	Silicon Switching Diode Array for High-Speed Switching	SOT-23		
DA1	MIC2288YD5-TR	1	Step Up	SOT23-5		
DA2	LD1117S33TR	1	LOW DROP FIXED AND ADJUSTABLE POSITIVE VOLTAGE REGULATORS	SOT223	LD1117S33TR	
DA3	MAX3658	1	Transimpedance Amplifier	TDFN-8_0.65		
DA4, DA5	ADCM6400	2	Fast comparator	SOT23-5		
DA6	UCC27511DBVR	1	Single-Channel High-Speed Low-Side Gate Driver (with 4-A Peak Source and 8-A Peak Sink), DBV0006A	SOT23-6_M		
DA7	DRV11873PWP	1	Integrated Circuit	SOP65P640X120-17N		
DD1	TDC-GP21	1	TDC	QFN32 5x5mm		
DD2	STM32F303CBT6	1	Microcontroller	LQFP-48_N		
J1, J2	U.FL	2	U.FL Connector	TE C-1909763		
L1	BEAD	1	Ferrit Bead	INDC1608N	BLM18AG102S N1D	
L2, L4, L6, L7, L8, L9, L10, L11	BEAD	8	Ferrit Bead	INDC1608N	BEAD	
L3	Inductor	1	Inductor	V0805HD	10uH	
L5	Inductor	1	Inductor	INDC3216	47uH	
LED1	LED	1	LED_0603	LED_0603		
LH1	CS Lens Holder	1	CS Lens Holder	Lens Holder CS		
LH2	Lens Holder	1	M12 Lens Holder	LENS_HOLDER_20MM_ADJ		
P1, P2	Power pad	2	Pad for wire	Ext_power_pad		
P4, P5, P7, P8, P9, P10, P11	Pad	7	Pad for wire	Ext_pad_2		
P6, P13, P14	Pad	3	Pad for wire	Ext_hole		
P15	Motor	1	Header, 3-Pin	HDR1X3		
P16	Pad	1	Pad for wire	Ext_pad_small		
Q1	BSS131	1	N-Channel SiPMOS Small-Signal-Transistor, 240 V VDS, 0.11 A ID, -55 to 150 degC, PG-SOT23, Reel, Green	INF-PG-SOT23_N		
Q2	BSZ165N04NSG	1	N-Channel OptiMOS 3 Power-Transistor, 40 V VDS, 31 A ID, -55 to 150 degC, PG-TSDSON-8-1, Reel, Green	INF-PG-TSDSON-8-1_A_V		
R1, R15, R16, R17, R26, R33, R39, R40, R41	1K	9	Chip resistor	RESC1608X55N	1K	
R2, R7	47	2	Chip resistor	RESC1608X55N	47	
R3, R5	47K	2	Chip resistor	RESC1608X55N	47K	
R4, R25, R28	10K	3	Chip resistor	RESC1608X55N	10K	
R6, R10, R13, R23, R31, R35	4.7K	6	Chip resistor	RESC1608X55N	4.7K	
R8	2M	1	Chip resistor	RESC2012X70N	2M	
R9	20K	1	Chip resistor	RESC1608X55N	20K	
R11, R32, R34	NC	3	Chip resistor	RESC1608X55N	NC	
R12	82	1	Chip resistor	RESC1608X55N	82	
R14	20K	1	Chip resistor	RESC2012X70N	20K	
R18	270	1	Chip resistor	RESC1608X55N	270	
R19	0.1	1	Chip resistor	RESC2012X70N	0.1	
R20, R27, R30, R36, R38	0	5	Chip resistor	RESC1608X55N	0	
R21	22	1	Chip resistor	RESC1608X55N	22	
R22	100K	1	Chip resistor	RESC1608X55N	100K	
R24	10M	1	Chip resistor	RESC1608X55N	10M	
R29	10K NTC	1	Chip resistor	RESC1608X55N	10K NTC	
R37	3.3K	1	Chip resistor	RESC1608X55N	3.3K	
X1	32kHz	1	Quartz	QUARTZ_32K		
X2	Quartz	1	Quartz_SX-6 (SMD06035C4)	SX-6 QUARTZ	8 MHz	