

Bill of Materials

Project: 002-H-01 SLS to CAN.PrjPcb
Revision: -
Date: 10/25/2020

Sunflare Solar Team

Drachten, The Netherlands

Designator	Comment	Description	Dielectric	VoltageRating	Tolerance	Footprint	Manufacturer	Manufacturer Part Nc	Farnell Order#	Price	Quantity	Total price	
C1	33 pF	Capacitor	X7R	16V		CAP0805	-	-	-	0.00	1	0	
C2	33pF	Capacitor	X7R	16V		CAP0805	-	-	-	0.00	1	0	
C3, C4, C5, C6, C7, C8, C10, C11, C13, C14, C16, C19, C24, C27, C30, C31	100nF	Capacitor	X7R	16V, 100V		CAP0805	-	-	-	0.00	16	0	
C9, C22, C29	10uF	Capacitor	X7R	16V		CAP1210	TDK	C3225X7R1C106K200/	2112722	1.35	3	4.05	
C12, C15	47pF	Capacitor	C0G	50V		CAP0805	-	-	-	0.00	2	0	
C17	68uF	Capacitor Pol	ELCO	63V		CAPP8383X62N	Panasonic	EEEFK1J680UP	1850126	0.70	1	0.7	
C18	3.3uF	Capacitor	X7R	100V		CAP1210	AVX	12101C335KAZ2A	2507771	1.41	1	1.41	
C20, C23, C25, C26	0.1uF	Capacitor	X7R	16V		CAP0805	-	-	-	0.00	4	0	
C21, C28	22uF	Capacitor Pol	X7R	10V		CAPAE4243X55M	PANASONIC	EEEHA1A220WR	1973288	0.00	2	0	
D1	PESD1CAN	ESD Protection Device, TVS, 70 V, SOT-23, 3 Pins				SOT23-3N	NXP	PESD1CAN	1510703	0.13	1	0.13	
D2, D3	HTA5U100	Diode Schottky				DIODEDO-214AC	Multicomp	HTA5U100	2750942	0.46	2	0.92	
D4	RG	Led RG				CAC-75P125X160-4N	KINGBRIGHT	KPTB-1612LVSURKCC	2846591	0.00	1	0	
L1	51uH	Choke common mode				IND200P450X300-4N	Bourns	SRF4532-510Y	2859108	0.47	1	0.47	
L2	100uH	Inductor				INDP3030X28N	BOURNS	SDR0302-101KL	2212477	0.408	1	0.408	
L3	47uH	Inductor				INDP3030X28N	Bourns	SDR0302-470KL	2328694	0.403	1	0.403	
P1, P3	RJ-45 Vertical	RJ-45 VErtical				Amphenol RJ-45 Vertic	Amphenol	RJHSE-3P80	2709006	0.908	2	1.816	
P2	Header 1X6	Connector 1X6				Header1X6P100	-	-	-	0.00	1	0	
P4, P6	Header 1X3	Connector 1X3				Header1X3P100	-	-	-	0.00	2	0	
P5	IMCV 1.5/ 3-G-3.5	IMCV 1.5/ 3-G-3.5 1830728				Phoenix IMCV 1.5/ 3-G -	-	-	-	0.00	1	0	
P7, P8, P9	MSTBVA 2.5/ 2-G-5,08	MSTBVA 2.5/ 2-G-5,08 1757242				MSTBVA 2.5/ 2-G-5,08 -	-	-	-	0.00	3	0	
R1	1M0	Resistor			1%	RES0805	-	-	-	0.00	1	0	
R2	10K	Resistor			1%	RES0805	-	-	-	0.00	1	0	
R3, R7, R8	470R	Resistor			1%	RES0805	-	-	-	0.00	3	0	
R4, R5	1K0	Resistor			1%	RES0805	-	-	-	0.00	2	0	
R6, R10	15K	Resistor			1%	RES0805	-	-	-	0.00	2	0	
R9	220R	Resistor			1%	RES0805	-	-	-	0.00	1	0	
R11	100K	Resistor			1%	RES0805	-	-	-	0.00	1	0	
R12	39k	Resistor			1%	RES0805	-	-	-	0.00	1	0	
R13, R14, R17, R18	1K	Resistor			1%	RES0805	-	-	-	0.00	4	0	
R15, R16	820R	Resistor			1%	RES0805	-	-	-	0.00	2	0	
U1	DSPIC33EP128GS804	16-Bit Digital Signal Controllers for Digital Power Applications with Interconnected High-Speed PWM, ADC, PGA and Comparators				TQFP80P1200X1200X1	Microchip	DSPIC33EP128GS804	2706170	4.44	1	4.44	
U2	MCP2562	CAN Bus, Transceiver, CAN, LIN, 1, 1, 4.5 V, 5.5 V, SOIC				SOIC-8N	Microchip	MCP2562-E/SN	2362839	0.79	1	0.79	
U3	MAX5035B	5V 1A, 76V, High-Efficiency MAXPower Step-Down DC-DC Converter				SOIC-8N	Maxim Integrated Prod	MAX5035BUSA+T	2799102	3.26	1	3.26	
U4	MAX3232ID	RS232 to TTL converter				SOIC16	MAX3232	TEXAS INSTRUMENTS	MAX3232ID	1652282	1.69	1	1.69
U5	AP1509-33	150KHz, 2A PWM BUCK DC/DC CONVERTER				SOIC-8N	Diodes Inc	AP1509-33SG-13	1825322	0.75	1	0.75	
Y1	16MHz	Crystal				XT49M-2016M	Multicomp	MCRSD16000F183000	2395958	0.19	1	0.19	
21.427													