Bill of Materials

Project:

Sunflare Solar Team

Drachten, The Netherlands

002-H-01 SLS to CAN.PrjPcb V1.00

Revision: V1.00 Date: 11/1/2020

Designator	Comment	Description	Dielectric	VoltageRating Tolerance	Footprint	Manufacturer	Manufacturer Part Nc Farnell Orderc 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	OF 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	3		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		KPTB-1612LVSURKC		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 Verti	ic 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-5,0		_	_	0.00		3	0
R1	1M0	Resistor		1%	RES0805	-	-	_	0.00		1	0
R2	10K	Resistor		1%	RES0805	-	-	_	0.00		-	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					RES0805	-	-	-			4	
R13, R14, R17, R18	1K 820R	Resistor Resistor		1% 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	1-	170	TQFP80P1200X1200X	- (1 Microchip	DSPIC33EP128GS80	4 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	d MAX5035BUSA+T	2799102	3.26		1	3.26
U4	MAX3232ID	RS232 tot TTL converter			SOIC16 MAX3232	TEXAS INSTRUMENT	S 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	MCRSD16000F18300	0 2395958	0.19		1	0.19
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