

# Bill of Materials

# Sunflare Solar Team

Project: 004-H-01 SD data logger.PrjPcb

Drachten, The Netherlands

Revision:

Date: 10/27/2020

Designator	Comment	Description	Dielectric	VoltageRating	Tolerance	Footprint	Manufacturer	Manufacturer Part Nc	Farnell Order Price	Quantity	Total price
C1, C4, C8, C11	100nF	Capacitor	X7R	100V		CAP0805	-	-	0.00	4	0
C2	68uF	Capacitor Pol	ELCO	63V		CAPP8383X62N	Panasonic	EEEFK1J680UP	1850126	1	0.7
C3	2.2uF	Capacitor	X7R	100V		CAP1210	AVX	C1210X225K1RACTU	2820988	1	0.98
C5, C6	4700uF	Capacitor Pol	ELCO	6.3V		CAPPOL_ leaded_ D12	Panasonic	ECA0JM472	1848486	2	1.46
C7, C10, C20, C22	10uF	Capacitor	X5R	16V		CAP1210	Multicomp	MC1210X106K160CT	1759465	4	2
C9	100uF	Capacitor Pol	ELCO	10V		CAPP8383X62N	Panasonic	EEEA1A101P	1973295	1	0.11
C12, C13	33pF	Capacitor	C0G	100V		CAP0603	-	-	0.00	2	0
C14, C15, C16, C17, C18, C19, C23, C24, C25, C26, C29	100nF	Capacitor	X7R	50V		CAP0603	-	-	0.00	11	0
C27, C30	47pF	Capacitor	C0G	50V		CAP0603	-	-	0.00	2	0
D1, D3	S2MA	Diode				DIODEDO-214AC	Multicomp	S2MA	2675071	2	0.26
D2, D4	HTA5U100	Diode Schottky				DIODEDO-214AC	Multicomp	HTA5U100	2750942	2	0.92
D6	RG	Led RG				LED_RG_COMMON	Multicomp	MCL039PURGW	1581194	1	0.21
D7	PESD1CAN	ESD Protection Device, TVS, 70 V, SOT-23, 3 Pins				SOT23-3N	NXP	PESD1CAN	1510703	1	0.13
F1	PTC 250mA	Fuse				Fuse1210	Bel Fuse	0ZCH0010FF2E	2834897	1	0.15
H1	U.FL to SMA	RF / Coaxial Cable Assembly, U.FL Jack to SMA Bulkhead Jack, 50 ohm, 0.25 ft, 75 mm					RF SOLUTIONS	CBA-UFLSMA-1	2448785	1	0
H2	004-H-01	PCB					-	-	0.00	1	0
H3	004-H-02	Casing bottom					-	-	0.00	1	0
H4, H5, H7, H8	M3x30 Countersunk	M3x30 Xountersunk Bolt					-	-	0.00	4	0
H6	004-H-03	Casing top					-	-	0.00	1	0
L1	100uH	Inductor				INDP3030X28N	BOURNS	SDR0302-101KL	2212477	1	0.408
L2	47uH	Inductor				INDP3030X28N	Bourns	SDR0302-470KL	2328694	1	0.403
L3	51uH	Choke common mode				IND200P450X300-4N	Bourns	SRF4532-510Y	2859108	1	0.47
P1	Header 2 way	Header 2 way				21.95MH/2-E	IMO PRECISION CON	21.95MH/2-E	2517885	1	0.15
P2	Header 1X6	Connector 1X6				Header1X6P100	Multicomp	2211S-06G	1593415	1	0.04
P3	Header 1X3	Connector 1X3				Header1X3P100	Multicomp	2211S-03G	1593412	1	0.02
P4, P5	Header 1X8 G	Connector 1X8 with Ground				TECO-1-406541-5	TE CONNECTIVITY	1-406541-5	-	2	0
P6	SD Card	SD slot connector with card detect and protect				SDK-9BNS-K13-GS-TE	JST	SDK-9BNS-K13-GS-TE	2469853	1	1.46
P7	Plug 2 way	Generic hardware					IMO PRECISION CON	21.950M/2-E	2575233	1	0.37
R1	100K	Resistor			1%	RES0805	-	-	0.00	1	0
R2	39K	Resistor			1%	RES0805	-	-	0.00	1	0
R3	105K	Resistor			1%	RES0805	-	-	0.00	1	0
R4	1M0	Resistor			1%	RES0603	-	-	0.00	1	0
R5, R6, R12, R15, R17, R18, R19, R23, R27	10K	Resistor			1%	RES0603	-	-	0.00	9	0
R7, R10, R11, R16, R22, R24, R26, R29	1K0	Resistor			1%	RES0603	-	-	0.00	8	0
R8, R21, R25	470R	Resistor			1%	RES0603	-	-	0.00	3	0
R9	13K3	Resistor			1%	RES0805	-	-	0.00	1	0
R13, R14	820R	Resistor			1%	RES0603	-	-	0.00	2	0
R20, R28	15K	Resistor			1%	RES0603	-	-	0.00	2	0
S1	Switch	Tactile Switch				FSMRA4JH	TE CONNECTIVITY	FSMRA4JH	1555988	1	0.14
U1	MAX5035B	5V 1A, 76V, High-Efficiency MAXPower Step-Down DC-DC Converter				SOIC-8N	Maxim Integrated Prod	MAX5035BUSA+T	2799102	1	3.26
U2	AP1509-33	150KHz, 2A PWM BUCK DC/DC CONVERTER				SOIC-8N	Diodes Inc	AP1509-33SG-13	1825322	1	0.75
U3	BU4809G	Voltage Detector				SOT95P280X125-5N	ROHM	BU4809G-TR	2342983	1	0.12
U4	DSPIC33EP128GS804	16-Bit Digital Signal Controllers for Digital Power Applications with Interconnected High-Speed PWM, ADC, PGA and Comparators				TQFP80P1200X1200X1	Microchip	DSPIC33EP128GS804	2706170	1	4.44
U5, U6	NUF2230XV6	2 Line EMI Filter with ESDProtection				SOT50P160X60-6N	ON SEMICONDUCTOR	NUF2230XV6T1G	2774598	2	0.44
U7	MCP2562	CAN Bus, Transceiver, CAN, LIN, 1, 1, 4.5 V, 5.5 V, SOIC				SOIC-8N	Microchip	MCP2562-E/SN	2362839	1	0.79
U8	GY-GPS6MV2	GPS module				GY-GPS6MV2	Ebay	GY-NEO6MV2	-	1	5
Y1	16MHz	Crystal				CrystalSMD 5032	MULTICOMP	MCSJK-7I-16.00-18-30-2854045	0.27	1	0.27

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