

STELLA-1.1 Assembly list - 2023-07-03

Item	Step	Description	Front/ Rear	Location 1	Location 2	color	done
1	R	Resistors 100Ω	Rear	A60	( + ) bus	Brown-Black-Brown	<input type="checkbox"/>
2	R	Resistors 10kΩ	Rear	C39	( - ) bus	Brown-Black-Orange	<input type="checkbox"/>
3	R	Resistors 10kΩ	Rear	E39	G39	Brown-Black-Orange	<input type="checkbox"/>
4	G	GND test point	Front	H36	H37	GND — bare wire loop	<input type="checkbox"/>
5	0	black wires	Front	A2	( - ) bus	GND	<input type="checkbox"/>
6	0	black wires	Front	A9	( - ) bus	GND	<input type="checkbox"/>
7	0	black wires	Front	A13	( - ) bus	GND	<input type="checkbox"/>
8	0	black wires	Front	A23	( - ) bus	GND	<input type="checkbox"/>
9	0	black wires	Front	A32	( - ) bus	GND	<input type="checkbox"/>
10	0	black wires	Front	A56	( - ) bus	GND	<input type="checkbox"/>
11	0	black wires	Front	E9	F9	GND	<input type="checkbox"/>
12	0	black wires	Front	E32	F33	GND	<input type="checkbox"/>
13	0	black wires	Front	I33	I36	GND	<input type="checkbox"/>
14	1	brown wires	Rear	B41	B54	Main Battery Voltage / 2	<input type="checkbox"/>
15	1	brown wires	Rear	D39	D41	Main Battery Voltage / 2	<input type="checkbox"/>
16	2	red wires	Front	A4	( + ) bus	+3.3V	<input type="checkbox"/>
17	2	red wires	Front	A8	( + ) bus	+3.3V	<input type="checkbox"/>
18	2	red wires	Front	A15	( + ) bus	+3.3V	<input type="checkbox"/>
19	2	red wires	Front	A24	( + ) bus	+3.3V	<input type="checkbox"/>
20	2	red wires	Front	A28	( + ) bus	+3.3V	<input type="checkbox"/>
21	2	red wires	Front	A34	( + ) bus	+3.3V	<input type="checkbox"/>
22	2	red wires	Front	A58	( + ) bus	+3.3V	<input type="checkbox"/>
23	2	red wires	Front	E8	F8	+3.3V	<input type="checkbox"/>
24	2	red wires	Front	E34	F34	+3.3V	<input type="checkbox"/>
25	3	orange wires	Rear	J39	J55	Vbat Main Battery Voltage	<input type="checkbox"/>
26	4	yellow wires	Rear	A6	A50	UART Main RX1 Sensor TXO	<input type="checkbox"/>
27	4	yellow wires	Front	D11	A46	UART Main RX0 Sensor TXO	<input type="checkbox"/>
28	4	yellow wires	Front	E11	F11	UART Main RX0 Sensor TXO	<input type="checkbox"/>
29	5	green wires	Front	J16	SCK bus ( - )	i2c Serial Clock	<input type="checkbox"/>
30	5	green wires	Front	J23	SCK bus ( - )	i2c Serial Clock	<input type="checkbox"/>
31	5	green wires	Front	J32	SCK bus ( - )	i2c Serial Clock	<input type="checkbox"/>
32	5	green wires	Front	E31	F32	i2c Serial Clock	<input type="checkbox"/>
33	5	green wires	Rear	J45	SCK bus ( - )	i2c Serial Clock	<input type="checkbox"/>
34	6	blue wires	Front	H38	H41	Pushbutton (active low)	<input type="checkbox"/>
35	6	blue wires	Front	F41	F51	Pushbutton (active low)	<input type="checkbox"/>
36	7	violet wires	Rear	A5	A51	UART Main TX1 Sensor RXI	<input type="checkbox"/>
37	7	violet wires	Front	C10	A45	UART Main TX0 Sensor RXI	<input type="checkbox"/>
38	7	violet wires	Front	E10	F10	UART Main TX0 Sensor RXI	<input type="checkbox"/>
39	8	grey wires	Front	E40	F40	Enable	<input type="checkbox"/>
40	8	grey wires	Front	G40	G54	Enable	<input type="checkbox"/>

Item	Step	Description	Front/ Rear	Location 1	Location 2	color	done
41	9	white wires	Front	J17	SDA bus ( + )	i2c Serial Data	<input type="checkbox"/>
42	9	white wires	Front	J24	SDA bus ( + )	i2c Serial Data	<input type="checkbox"/>
43	9	white wires	Front	J31	SDA bus ( + )	i2c Serial Data	<input type="checkbox"/>
44	9	white wires	Front	E29	F31	i2c Serial Data	<input type="checkbox"/>
45	9	white wires	Rear	J44	SDA bus ( + )	i2c Serial Data	<input type="checkbox"/>
46	10	modify NIR	Front/Rear	A. JP1 open	B. JP2 close	For UART communication	<input type="checkbox"/>
47	11	sensor pins	Rear	B2 - B7	I2 - I7	2x 6 pins for NIR spectral	<input type="checkbox"/>
48	11	sensor pins	Rear	B13-B19	H13 - H19	2x 7 pins for VIS spectral	<input type="checkbox"/>
49	11	sensor pins	Rear	B28 - B34	NA	1x 7 pins for WX weather	<input type="checkbox"/>
50	11	sensor pins	Rear	H27 - H34	NA	1x 8 pins for AT temperature	<input type="checkbox"/>
51	11	sensor socket	Front	J8-J12	NA	1x 5 pos low header socket for GPS	<input type="checkbox"/>
52	12	discretes	Front	I8	I9	0.1uF capacitor	<input type="checkbox"/>
53	12	discretes	Front	[ - ] 6	[ + ] 6	10uF capacitor	<input type="checkbox"/>
54	12	discretes	Rear	J37 [ - ]	J38 [ + ]	10uF capacitor	<input type="checkbox"/>
55	12	discretes	Rear	B60 [ + ]	B55 [ - ]	Red LED (bend leads)	<input type="checkbox"/>
56	12	discretes	Front	D36, 38	G36, 38	push button	<input type="checkbox"/>
57	12	discretes	Front	A40	( - ) bus	power button	<input type="checkbox"/>
58	13	modify data logger	Front	SDCS	reroute to 11	yellow	<input type="checkbox"/>
59	14	assemble microcontroller		12 pin	16 pin	stacking headers	<input type="checkbox"/>
60	15	mount microcontroller	Rear	I44	I55	12 positions	<input type="checkbox"/>
61	15	mount microcontroller	Rear	C44	C59	16 positions	<input type="checkbox"/>
62	16	mount sensors	Rear	B2 - B7	I2 - I7	NIR spectral	<input type="checkbox"/>
63	16	mount sensors	Rear	B13-B19	H13 - H19	VIS spectral	<input type="checkbox"/>
64	16	mount sensors	Rear	B28 - B34	NA	WX weather	<input type="checkbox"/>
65	16	mount sensors	Rear	H27 - H34	NA	AT temperature	<input type="checkbox"/>
66	16	mount sensors	Rear	E23 - E24	F23 - F24	TIR thermal	<input type="checkbox"/>
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67	17	modify display	Rear	NA	IM1, IM2, IM3	Close jumpers IM1,2,3. <u>Do not close IM0</u>	<input type="checkbox"/>
68	18	display board wiring	Front	C14	T14	Short header socket 16 pos	<input type="checkbox"/>
69	18	display board wiring	Front	C22	N22	Short header socket 12 pos	<input type="checkbox"/>
70	18	display board wiring	Rear	B1	W1	Header pins 20 pos	<input type="checkbox"/>
71	18	display board wiring	Front	C14	J1	Display Reset	<input type="checkbox"/>
72	18	display board wiring	Front	F14	F1	SPI MISO Main In Serial Out	<input type="checkbox"/>
73	18	display board wiring	Front	G14	G1	SPI MOSI Main Out Serial In	<input type="checkbox"/>
74	18	display board wiring	Front	H14	E1	SPI Serial Clock SCK	<input type="checkbox"/>
75	18	display board wiring	Front	P14	B1	GND	<input type="checkbox"/>
76	18	display board wiring	Front	S14	C1	+3.3V	<input type="checkbox"/>
77	18	display board wiring	Front	C22	N1	i2c Serial Data	<input type="checkbox"/>
78	18	display board wiring	Front	D22	P1	i2c Serial Clock	<input type="checkbox"/>
79	18	display board wiring	Front	G22	H1	SPI CS Chip Select	<input type="checkbox"/>
80	18	display board wiring	Front	H22	I1	SPI D/C Data/ Command	<input type="checkbox"/>