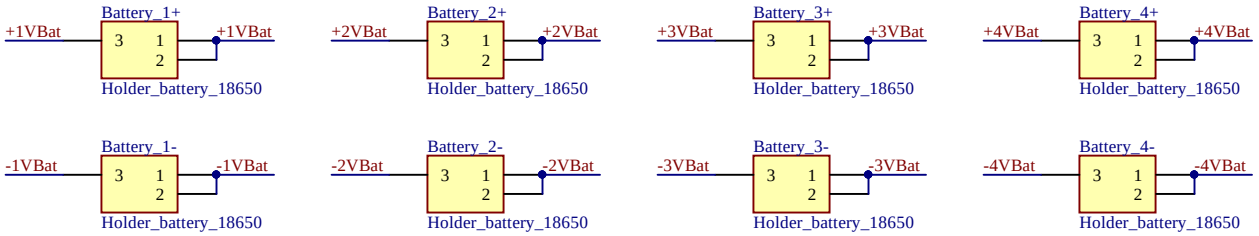
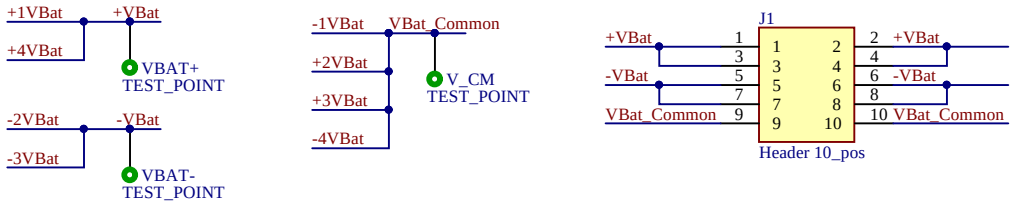
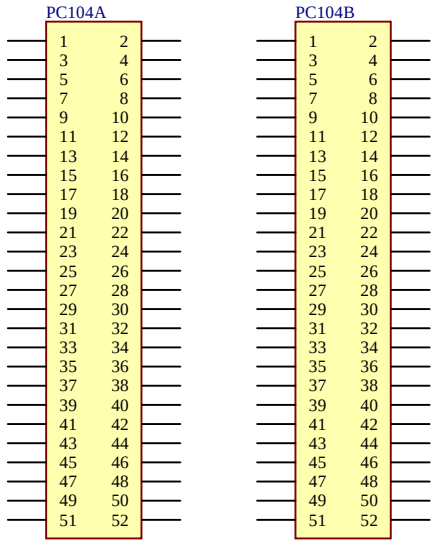
BATTERIES' CONNECTORS



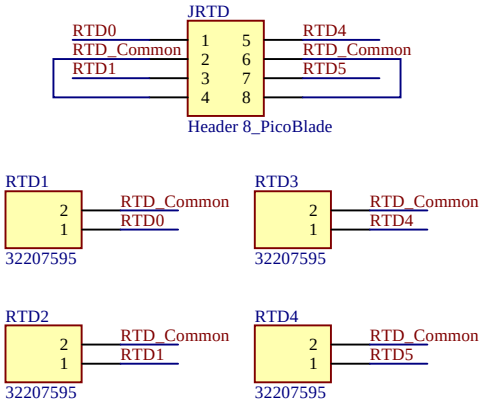
BATTERY CONNECTIONS



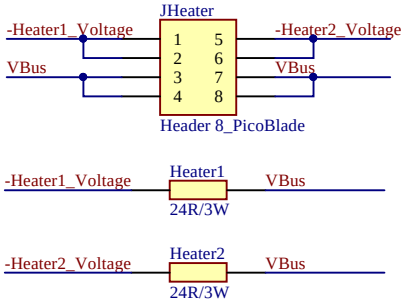
PC104 CONNECTIONS



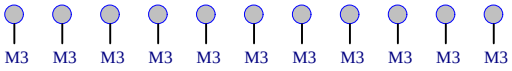
RTD SENSORS CONNECTIONS



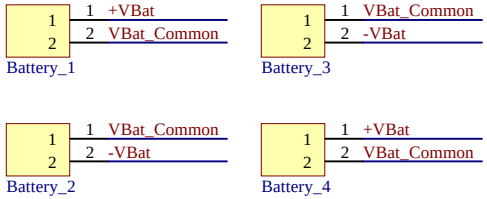
HEATER CONNECTION



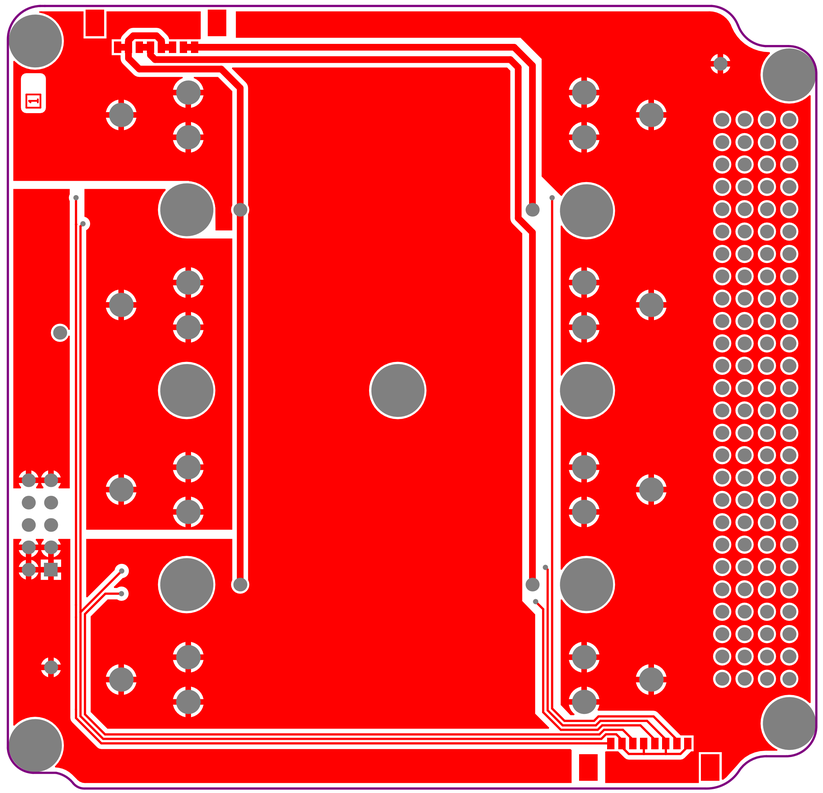
MECHANICAL HOLES



BATTERIES' PADS



SpaceLab - Federal University of Santa Catarina			
Project: *bat2_project.prjpcb / [No Variations]*			
Title: *Battery Board*			
Designed by: *Amanda Batista Medeiros*			
Date: 28/09/2020	Version: *v0.0*	Sheet *1* of *1*	Size: A4



Layer	Name	Material	Thickness	Constant	Board Layer Stack
1	Top Overlay				
2	Top Solder	Solder Resist	0,39mil	3,5	
3	Top Layer	Copper	1,38mil		
4	Dielectric Core	FR-4	59,06mil	4,2	
5	Bottom Layer	Copper	1,38mil		
6	Bottom Solder	Solder Resist	0,39mil	3,5	
7	Bottom Overlay				

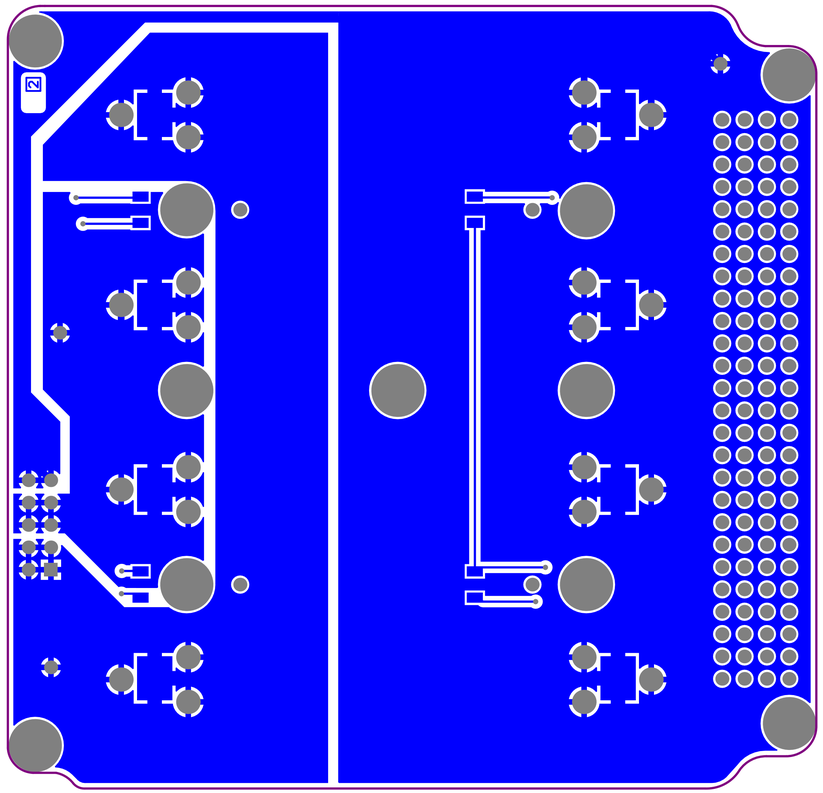
Fabrication specifications:

- Copper base 1OZ:
- PCB Material: Prepeg FR4–Standard
- PCB Tickness: 1.6mm
- PCB Surface: HASL (with lead)
- Silkscreen Color: White (top and bottom)
- Soldermask Color: Green
- Vias: Force Complete Tenting
- Special: Stack–up (herein included)

Assembly specifications:

- Solder composition: Include lead
- Fiducials: 3 top and 3 bottom avaliable
- Check BOM for not placed components

SpaceLab - Federal University of Santa Catarina		SPACE LAB
Project: Battery Board 4 cells		
Layer: Top Layer		
Designed by: Amanda B. Medeiros (based on FSat-I Bat)		Project Code: BAT2
Date: 28/09/2020	Version: v0.1	Size: A4



Layer	Name	Material	Thickness	Constant	Board Layer Stack
1	Top Overlay				
2	Top Solder	Solder Resist	0,39mil	3,5	
3	Top Layer	Copper	1,38mil		
4	Dielectric Core	FR-4	59,06mil	4,2	
5	Bottom Layer	Copper	1,38mil		
6	Bottom Solder	Solder Resist	0,39mil	3,5	
7	Bottom Overlay				

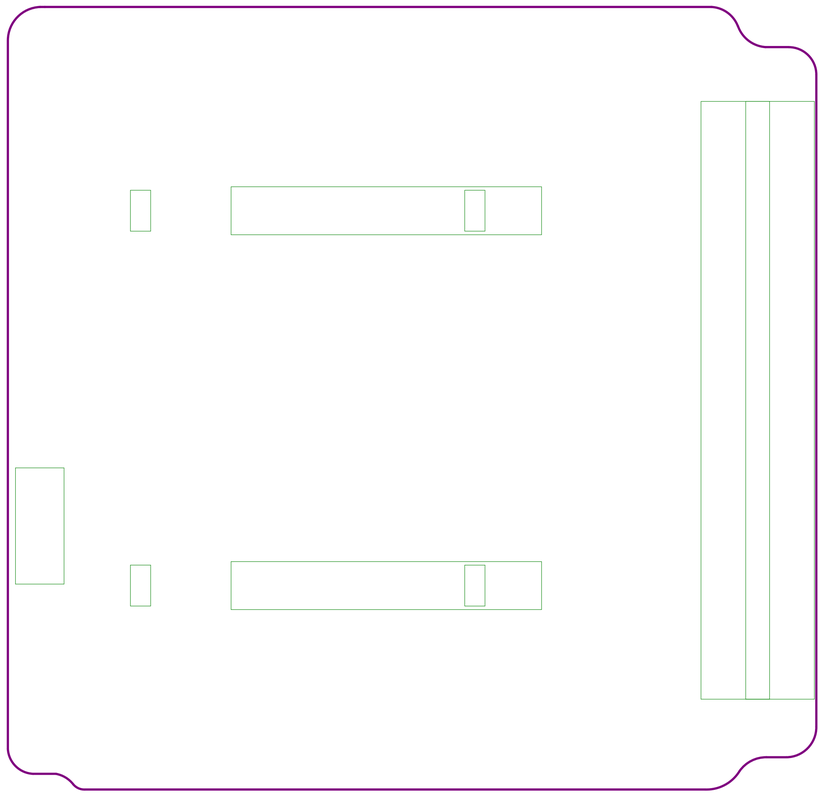
Fabrication specifications:

- Copper base 1OZ:
- PCB Material: Prepeg FR4–Standard
- PCB Tickness: 1.6mm
- PCB Surface: HASL (with lead)
- Silkscreen Color: White (top and bottom)
- Soldermask Color: Green
- Vias: Force Complete Tenting
- Special: Stack–up (herein included)

Assembly specifications:

- Solder composition: Include lead
- Fiducials: 3 top and 3 bottom avaliable
- Check BOM for not placed components

SpaceLab - Federal University of Santa Catarina		SPACE LAB
Project: Battery Board 4 cells		
Layer: Bottom Layer		
Designed by: Amanda B. Medeiros (based on FSat-I Bat)		Project Code: BAT2
Date: 28/09/2020	Version: v0.1	Size: A4



Layer	Name	Material	Thickness	Constant	Board Layer Stack
1	Top Overlay				
2	Top Solder	Solder Resist	0,39mil	3,5	
3	Top Layer	Copper	1,38mil		
4	Dielectric Core	FR-4	59,06mil	4,2	
5	Bottom Layer	Copper	1,38mil		
6	Bottom Solder	Solder Resist	0,39mil	3,5	
7	Bottom Overlay				

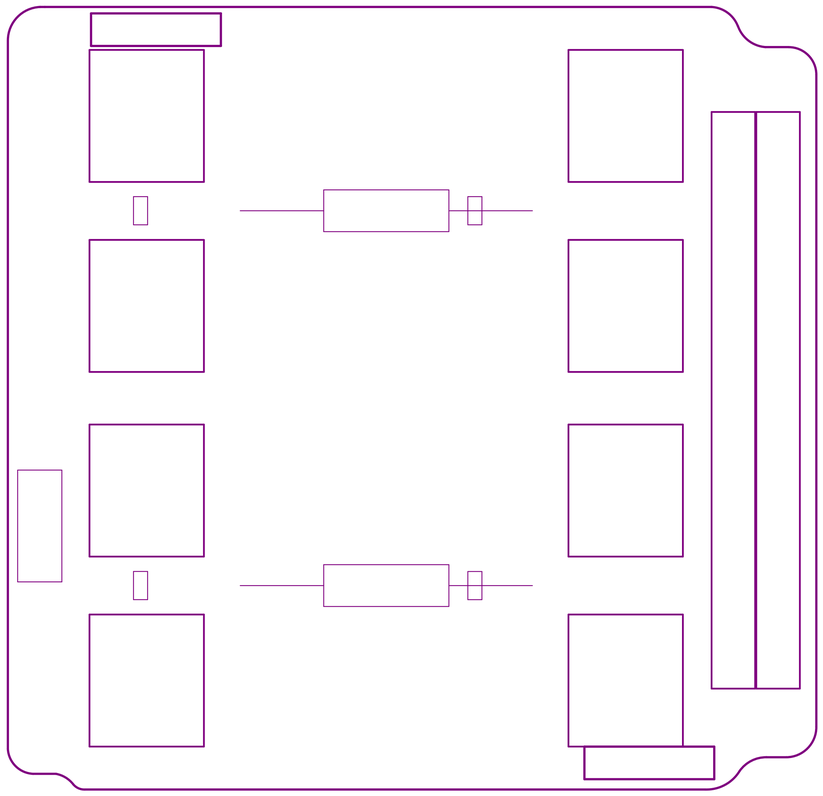
Fabrication specifications:

- Copper base 1OZ:
- PCB Material: Prepeg FR4–Standard
- PCB Tickness: 1.6mm
- PCB Surface: HASL (with lead)
- Silkscreen Color: White (top and bottom)
- Soldermask Color: Green
- Vias: Force Complete Tenting
- Special: Stack–up (herein included)

Assembly specifications:

- Solder composition: Include lead
- Fiducials: 3 top and 3 bottom avaliable
- Check BOM for not placed components

SpaceLab - Federal University of Santa Catarina		SPACE LAB
Project: Battery Board 4 cells		
Layer: Mechanical 15		
Designed by: Amanda B. Medeiros (based on FSat-I Bat)		Project Code: BAT2
Date: 28/09/2020	Version: v0.1	Size: A4



Layer	Name	Material	Thickness	Constant	Board Layer Stack
1	Top Overlay				
2	Top Solder	Solder Resist	0,39mil	3,5	
3	Top Layer	Copper	1,38mil		
4	Dielectric Core	FR-4	59,06mil	4,2	
5	Bottom Layer	Copper	1,38mil		
6	Bottom Solder	Solder Resist	0,39mil	3,5	
7	Bottom Overlay				

Fabrication specifications:

- Copper base 1OZ:
- PCB Material: Prepeg FR4–Standard
- PCB Tickness: 1.6mm
- PCB Surface: HASL (with lead)
- Silkscreen Color: White (top and bottom)
- Soldermask Color: Green
- Vias: Force Complete Tenting
- Special: Stack–up (herein included)

Assembly specifications:

- Solder composition: Include lead
- Fiducials: 3 top and 3 bottom avaliable
- Check BOM for not placed components

SpaceLab - Federal University of Santa Catarina		SPACE LAB
Project: Battery Board 4 cells		
Layer: Mechanical 13		
Designed by: Amanda B. Medeiros (based on FSat-I Bat)		Project Code: BAT2
Date: 28/09/2020	Version: v0.1	Size: A4

JHeater
H2+
H2-
H1+
H1-
SPACE LAB
BATTERY BOARD v0.1
V_CM
H1
H2
Battery_1
VBAT+
V_CM
Heater1
Battery_2
VBAT-
V_CM
VBAT-
J1
VBAT+ VBAT- V_CM
Battery_3
VBAT-
V_CM
Heater2
VBAT+
Battery_4
VBAT+
V_CM
RTD0
RTD1
RTD4
RTD5
JRTD
1
5
8
15
16
24
25
32
35
40
45
46
51
52

V_CM
Battery_1-
Battery_1+
H1-
H1+
RTD1
SAMSUNG SD
6
2H75
Battery_2+
Battery_2-
VBAT-
Battery_3+
Battery_3-
VBAT-
VBAT+
V_CM
J1
H2-
H2+
RTD2
Battery_4-
Battery_4+
VBAT+