

M1

Interstage Interface Panel  
Board N.1 Rev 2.0

FD1



SPACELAB



TP2

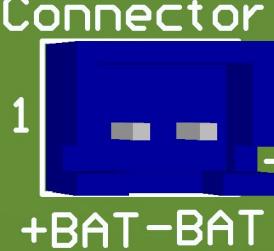


SpaceLab UFSC 2021

M2

FD2

Charge  
Connector



TP3

14 13 12 11 10 9 8 7 6 5 4 3 2 1

structure contact area

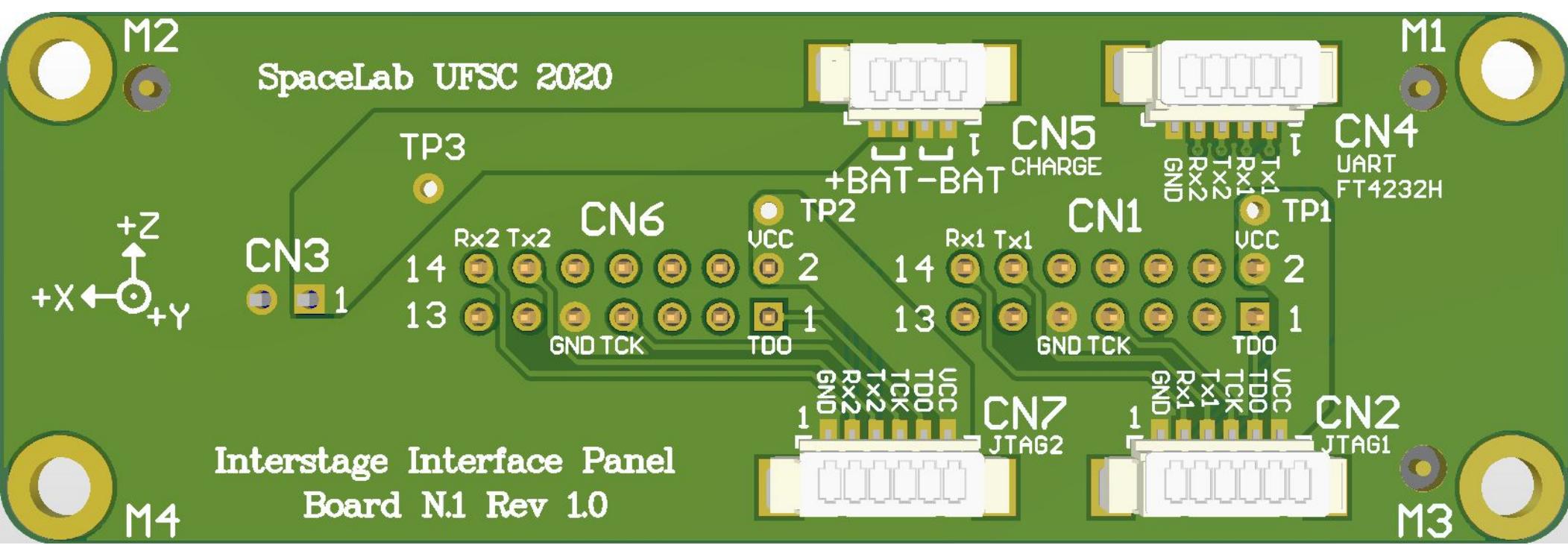
M3

FD3

line limit  
external connectors



M4



A

A

B

B

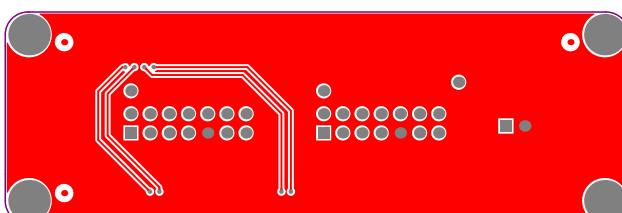
C

C

D

D

Layer	Name	Material	Thickness	Constant	Board Layer Stack
1	Top Overlay				
2	Top Solder	Solder Resist	0.010mm	3.5	
3	Top Layer	Copper	0.035mm		
4	Dielectric 1	FR-4	1.500mm	4.2	
5	Bottom Layer	Copper	0.035mm		
6	Bottom Solder	Solder Resist	0.010mm	3.5	
7	Bottom Overlay				



### Fabrication specifications:

- Copper base: 1oz
- PCB Material: Prepeg FR4—Standard
- PCB Thickness: 1.6mm
- PCB Surface: HASL (with lead)
- Silkscreen Color: White (top and bottom)
- Soldermask Color: Green
- Vias: Force Complete Tenting
- Stack-up: Table herein included
- Special requirements: None

### Assembly specifications:

- Solder composition: Include lead
- Fiducials: 3 top and 3 bottom available

SpaceLab - Federal University of Santa Catarina	
Project: Interstage Interface Panel Nº1	
Layer: Top Layer      Board Edge	
Designed by: Yan C. de Azeredo	
Date: 6/29/2021	Project Code: IIP1
Version: v2.0	Size: A4

A

B

C

D

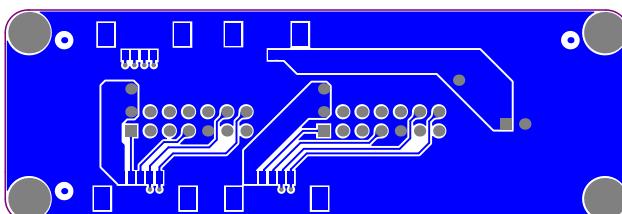
A

B

C

D

Layer	Name	Material	Thickness	Constant	Board Layer Stack
1	Top Overlay				
2	Top Solder	Solder Resist	0.010mm	3.5	
3	Top Layer	Copper	0.035mm		
4	Dielectric 1	FR-4	1.500mm	4.2	
5	Bottom Layer	Copper	0.035mm		
6	Bottom Solder	Solder Resist	0.010mm	3.5	
7	Bottom Overlay				



### Fabrication specifications:

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- PCB Material: Prepeg FR4—Standard
- PCB Thickness: 1.6mm
- PCB Surface: HASL (with lead)
- Silkscreen Color: White (top and bottom)
- Soldermask Color: Green
- Vias: Force Complete Tenting
- Stack-up: Table herein included
- Special requirements: None

### Assembly specifications:

- Solder composition: Include lead
- Fiducials: 3 top and 3 bottom available

SpaceLab - Federal University of Santa Catarina	
Project: Interstage Interface Panel Nº1	
Layer: Bottom Layer Board Edge	
Designed by: Yan C. de Azeredo	
Date: 6/29/2021	Project Code: IIP1
Version: v2.0	Size: A4

A

A

B

B

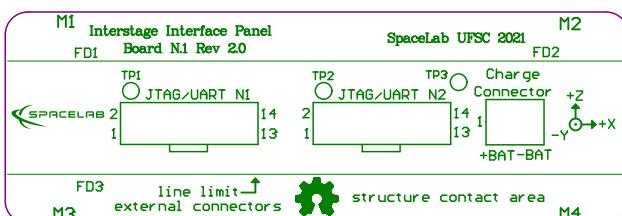
C

C

D

D

Layer	Name	Material	Thickness	Constant	Board Layer Stack
1	Top Overlay				
2	Top Solder	Solder Resist	0.010mm	3.5	
3	Top Layer	Copper	0.035mm		
4	Dielectric 1	FR-4	1.500mm	4.2	
5	Bottom Layer	Copper	0.035mm		
6	Bottom Solder	Solder Resist	0.010mm	3.5	
7	Bottom Overlay				



### Fabrication specifications:

- Copper base: 1oz
- PCB Material: Prepeg FR4—Standard
- PCB Thickness: 1.6mm
- PCB Surface: HASL (with lead)
- Silkscreen Color: White (top and bottom)
- Soldermask Color: Green
- Vias: Force Complete Tenting
- Stack-up: Table herein included
- Special requirements: None

### Assembly specifications:

- Solder composition: Include lead
- Fiducials: 3 top and 3 bottom available

SpaceLab - Federal University of Santa Catarina	
Project: Interstage Interface Panel Nº1	
Layer: Top Overlay Board Edge	
Designed by: Yan C. de Azeredo	
Date: 6/29/2021	Project Code: IIP1
Version: v2.0	Size: A4

A

A

B

B

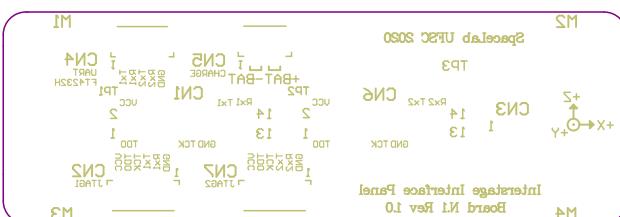
C

C

D

D

Layer	Name	Material	Thickness	Constant	Board Layer Stack
1	Top Overlay				
2	Top Solder	Solder Resist	0.010mm	3.5	
3	Top Layer	Copper	0.035mm		
4	Dielectric 1	FR-4	1.500mm	4.2	
5	Bottom Layer	Copper	0.035mm		
6	Bottom Solder	Solder Resist	0.010mm	3.5	
7	Bottom Overlay				

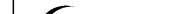


Fabrication specifications:

- Copper base: 1oz
  - PCB Material: Prepeg FR4—Standard
  - PCB Thickness: 1.6mm
  - PCB Surface: HASL (with lead)
  - Silkscreen Color: White (top and bottom)
  - Soldermask Color: Green
  - Vias: Force Complete Tenting
  - Stack-up: Table herein included  
Special requirements: None

Assembly specifications:

- Solder composition: Include lead
  - Fiducials: 3 top and 3 bottom available

SpaceLab - Federal University of Santa Catarina	
Project: Interstage Interface Panel N°1	
Layer: Bottom Overlay Board Edge	
Designed by: Yan C. de Azeredo	Project Code: IIP1
Date: 6/29/2021	Version: v2.0
	Size: A4

A

B

C

D

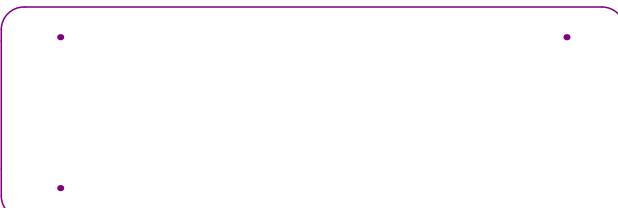
A

B

C

D

Layer	Name	Material	Thickness	Constant	Board Layer Stack
1	Top Overlay				
2	Top Solder	Solder Resist	0.010mm	3.5	
3	Top Layer	Copper	0.035mm		
4	Dielectric 1	FR-4	1.500mm	4.2	
5	Bottom Layer	Copper	0.035mm		
6	Bottom Solder	Solder Resist	0.010mm	3.5	
7	Bottom Overlay				



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- PCB Surface: HASL (with lead)
- Silkscreen Color: White (top and bottom)
- Soldermask Color: Green
- Vias: Force Complete Tenting
- Stack-up: Table herein included
- Special requirements: None

### Assembly specifications:

- Solder composition: Include lead
- Fiducials: 3 top and 3 bottom available

SpaceLab - Federal University of Santa Catarina	
Project: Interstage Interface Panel Nº1	
Layer: Top Paste      Board Edge	
Designed by: Yan C. de Azeredo	
Date: 6/29/2021	Project Code: IIP1
Version: v2.0	Size: A4

A

B

C

D

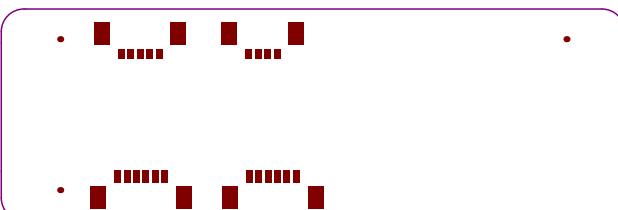
A

B

C

D

Layer	Name	Material	Thickness	Constant	Board Layer Stack
1	Top Overlay				
2	Top Solder	Solder Resist	0.010mm	3.5	
3	Top Layer	Copper	0.035mm		
4	Dielectric 1	FR-4	1.500mm	4.2	
5	Bottom Layer	Copper	0.035mm		
6	Bottom Solder	Solder Resist	0.010mm	3.5	
7	Bottom Overlay				



### Fabrication specifications:

- Copper base: 1oz
- PCB Material: Prepeg FR4—Standard
- PCB Thickness: 1.6mm
- PCB Surface: HASL (with lead)
- Silkscreen Color: White (top and bottom)
- Soldermask Color: Green
- Vias: Force Complete Tenting
- Stack-up: Table herein included
- Special requirements: None

### Assembly specifications:

- Solder composition: Include lead
- Fiducials: 3 top and 3 bottom available

SpaceLab - Federal University of Santa Catarina	
Project: Interstage Interface Panel Nº1	
Layer: Bottom Paste Board Edge	
Designed by: Yan C. de Azeredo	
Date: 6/29/2021	Project Code: IIP1
Version: v2.0	Size: A4

A

B

C

D

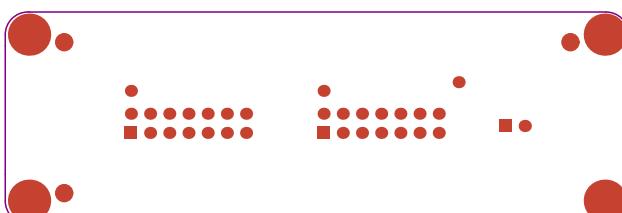
A

B

C

D

Layer	Name	Material	Thickness	Constant	Board Layer Stack
1	Top Overlay				
2	Top Solder	Solder Resist	0.010mm	3.5	
3	Top Layer	Copper	0.035mm		
4	Dielectric 1	FR-4	1.500mm	4.2	
5	Bottom Layer	Copper	0.035mm		
6	Bottom Solder	Solder Resist	0.010mm	3.5	
7	Bottom Overlay				



### Fabrication specifications:

- Copper base: 1oz
- PCB Material: Prepeg FR4—Standard
- PCB Thickness: 1.6mm
- PCB Surface: HASL (with lead)
- Silkscreen Color: White (top and bottom)
- Soldermask Color: Green
- Vias: Force Complete Tenting
- Stack-up: Table herein included
- Special requirements: None

### Assembly specifications:

- Solder composition: Include lead
- Fiducials: 3 top and 3 bottom available

SpaceLab - Federal University of Santa Catarina	
Project: Interstage Interface Panel Nº1	
Layer: Top Solder      Board Edge	
Designed by: Yan C. de Azeredo	
Date: 6/29/2021	Project Code: IIP1
Version: v2.0	Size: A4

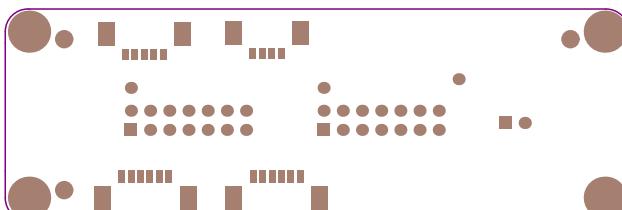
A

B

C

D

Layer	Name	Material	Thickness	Constant	Board Layer Stack
1	Top Overlay				
2	Top Solder	Solder Resist	0.010mm	3.5	
3	Top Layer	Copper	0.035mm		
4	Dielectric 1	FR-4	1.500mm	4.2	
5	Bottom Layer	Copper	0.035mm		
6	Bottom Solder	Solder Resist	0.010mm	3.5	
7	Bottom Overlay				



### Fabrication specifications:

- Copper base: 1oz
- PCB Material: Prepeg FR4—Standard
- PCB Thickness: 1.6mm
- PCB Surface: HASL (with lead)
- Silkscreen Color: White (top and bottom)
- Soldermask Color: Green
- Vias: Force Complete Tenting
- Stack-up: Table herein included
- Special requirements: None

### Assembly specifications:

- Solder composition: Include lead
- Fiducials: 3 top and 3 bottom available

SpaceLab - Federal University of Santa Catarina



Project: Interstage Interface Panel Nº1

Layer: Bottom Solder Board Edge

Designed by: Yan C. de Azeredo

Project Code: IIP1

Date: 6/29/2021

Version: v2.0

Size: A4

A

B

C

D

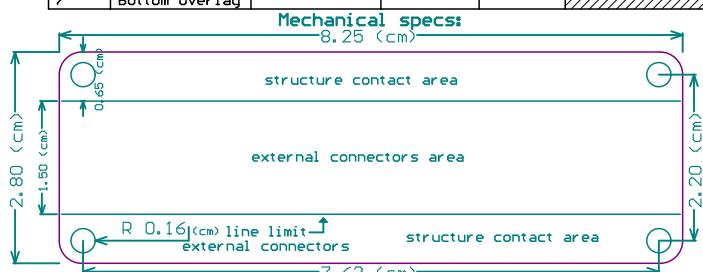
A

B

C

D

Layer	Name	Material	Thickness	Constant	Board Layer Stack
1	Top Overlay				
2	Top Solder	Solder Resist	0.010mm	3.5	
3	Top Layer	Copper	0.035mm		
4	Dielectric 1	FR-4	1.500mm	4.2	
5	Bottom Layer	Copper	0.035mm		
6	Bottom Solder	Solder Resist	0.010mm	3.5	
7	Bottom Overlay				



### Fabrication specifications:

- Copper base: 1oz
- PCB Material: Prepeg FR4—Standard
- PCB Thickness: 1.6mm
- PCB Surface: HASL (with lead)
- Silkscreen Color: White (top and bottom)
- Soldermask Color: Green
- Vias: Force Complete Tenting
- Stack-up: Table herein included
- Special requirements: None

### Assembly specifications:

- Solder composition: Include lead
- Fiducials: 3 top and 3 bottom available

SpaceLab - Federal University of Santa Catarina



Project: Interstage Interface Panel Nº1

Layer: Dimensions Board Edge

Designed by: Yan C. de Azeredo

Project Code: IIP1

Date: 6/29/2021

Version: v2.0

Size: A4

A

A

B

B

C

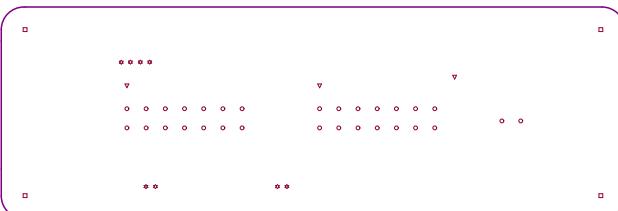
C

D

D

Symbol	Count	Hole Size	Plated	Hole Type	Drill Layer Pair	Via/Pad	Pad Shape	Template
◊	8	0.300mm (11.81mil)	PTH	Round	Top Layer - Bottom Layer	Via	Rounded	v60h30m0mx0
▽	3	0.900mm (35.43mil)	PTH	Round	Top Layer - Bottom Layer	Pad	Rounded	c150h90
○	30	1.000mm (39.37mil)	PTH	Round	Top Layer - Bottom Layer	Pad	(Mixed)	(Mixed)
□	4	3.200mm (125.98mil)	PTH	Round	Top Layer - Bottom Layer	Pad	Rounded	c550h320
45 Total								

Layer	Name	Material	Thickness	Constant	Board Layer Stack
1	Top Overlay				
2	Top Solder	Solder Resist	0.010mm	3.5	
3	Top Layer	Copper	0.035mm		
4	Dielectric 1	FR-4	1.500mm	4.2	
5	Bottom Layer	Copper	0.035mm		
6	Bottom Solder	Solder Resist	0.010mm	3.5	
7	Bottom Overlay				



### Fabrication specifications:

- Copper base: 1oz
- PCB Material: Prepeg FR4—Standard
- PCB Thickness: 1.6mm
- PCB Surface: HASL (with lead)
- Silkscreen Color: White (top and bottom)
- Soldermask Color: Green
- Vias: Force Complete Tenting
- Stack-up: Table herein included
- Special requirements: None

### Assembly specifications:

- Solder composition: Include lead
- Fiducials: 3 top and 3 bottom available

SpaceLab - Federal University of Santa Catarina	
Project: Interstage Interface Panel Nº1	
Layer: Drill Drawing Board Edge	
Designed by: Yan C. de Azeredo	
Date: 6/29/2021	Project Code: IIP1
Version: v2.0	Size: A4

A

B

C

D

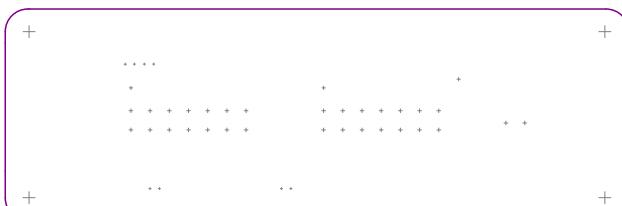
A

B

C

D

Layer	Name	Material	Thickness	Constant	Board Layer Stack
1	Top Overlay				
2	Top Solder	Solder Resist	0.010mm	3.5	
3	Top Layer	Copper	0.035mm		
4	Dielectric 1	FR-4	1.500mm	4.2	
5	Bottom Layer	Copper	0.035mm		
6	Bottom Solder	Solder Resist	0.010mm	3.5	
7	Bottom Overlay				



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- PCB Material: Prepeg FR4—Standard
- PCB Thickness: 1.6mm
- PCB Surface: HASL (with lead)
- Silkscreen Color: White (top and bottom)
- Soldermask Color: Green
- Vias: Force Complete Tenting
- Stack-up: Table herein included
- Special requirements: None

### Assembly specifications:

- Solder composition: Include lead
- Fiducials: 3 top and 3 bottom available

SpaceLab - Federal University of Santa Catarina	
Project: Interstage Interface Panel Nº1	
Layer: Drill Guide      Board Edge	
Designed by: Yan C. de Azeredo	
Date: 6/29/2021	Project Code: IIP1
Version: v2.0	Size: A4