

M1 Interstage Interface Panel
FD1 Board N.2 Rev 2.0

SpaceLab UFSC 2021

M2
FD2

TP1

JTAG/UART N3



TP2

JTAG/UART N4



+RBF



-RBF

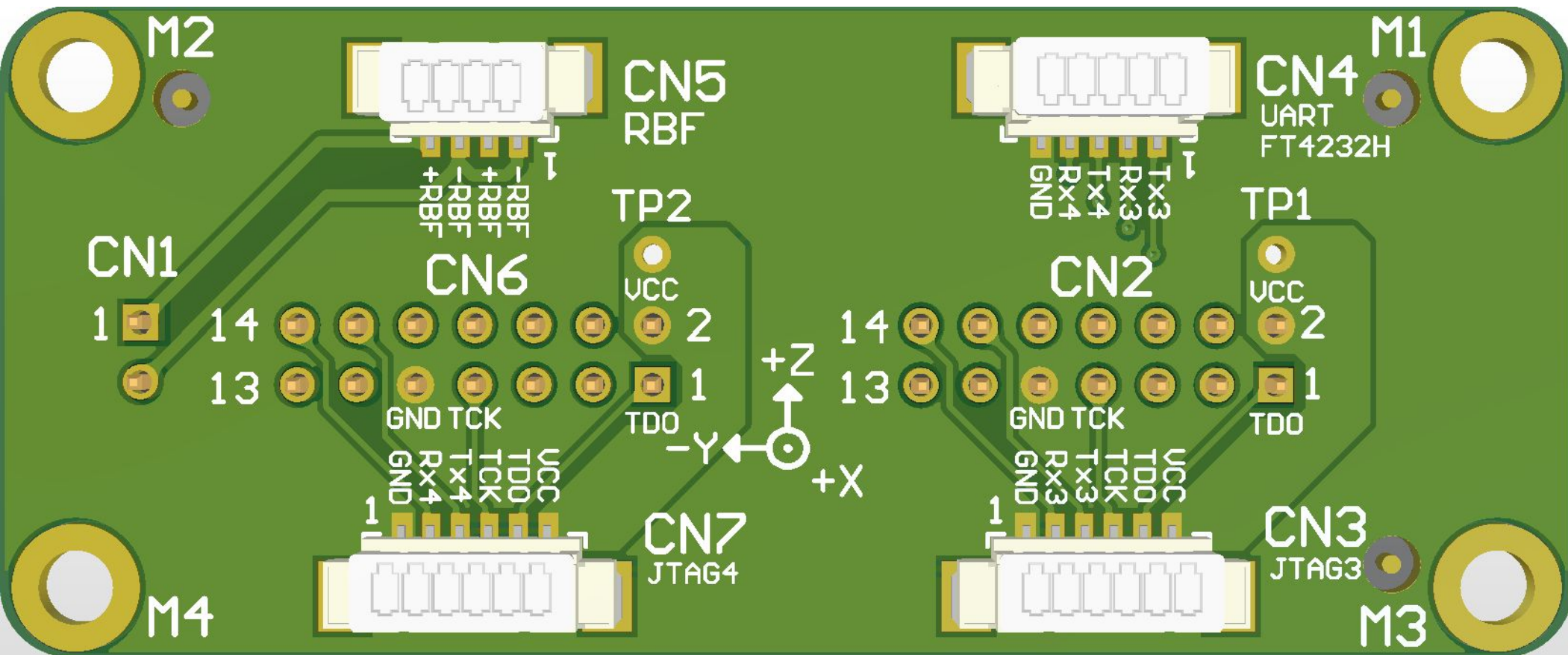


M3 FD3 line limit
external
connectors

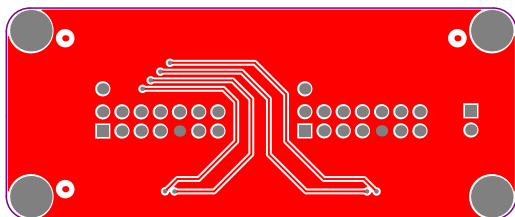


structure contact
area

M4



Layer	Name	Material	Thickness	Constant	Board Layer Stack
1	Top Overlay				
2	Top Solder	Solder Resist	0.010mm	3.5	
3	Top Layer	Copper	0.036mm		
4	Dielectric 1	FR-4	1.500mm	4.8	
5	Bottom Layer	Copper	0.036mm		
6	Bottom Solder	Solder Resist	0.010mm	3.5	
7	Bottom Overlay				




Fabrication specifications:

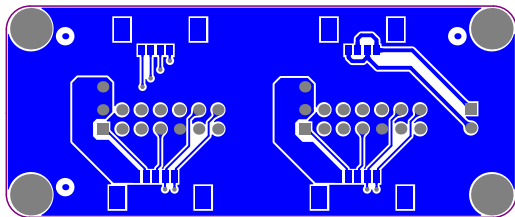
- Copper base: 1oz
- PCB Material: Prepeg FR4—Standard
- PCB Thickness: 1.6mm
- PCB Surface: HASL (with lead)
- Silkscreen Color: White (top and bottom)
- Soldermask Color: Green
- Vias: Force Complete Tenting
- Stack-up: Table herein included
- Special requirements: None

Assembly specifications:

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

SpaceLab - Federal University of Santa Catarina		
Project: Interstage Interface Panel N°2		
Layer: Top Layer Board Edge		
Designed by: Yan C. de Azeredo		Project Code: IIP2
Date: 6/30/2021	Version: v2.0	Size: A4

Layer	Name	Material	Thickness	Constant	Board Layer Stack
1	Top Overlay				
2	Top Solder	Solder Resist	0.010mm	3.5	
3	Top Layer	Copper	0.036mm		
4	Dielectric 1	FR-4	1.500mm	4.8	
5	Bottom Layer	Copper	0.036mm		
6	Bottom Solder	Solder Resist	0.010mm	3.5	
7	Bottom Overlay				




Fabrication specifications:

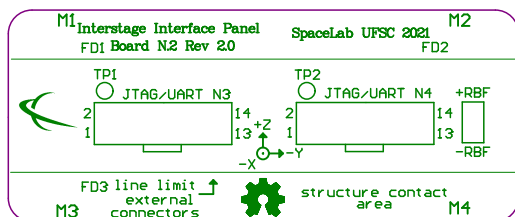
- Copper base: 1oz
- PCB Material: Prepeg FR4–Standard
- PCB Thickness: 1.6mm
- PCB Surface: HASL (with lead)
- Silkscreen Color: White (top and bottom)
- Soldermask Color: Green
- Vias: Force Complete Tenting
- Stack-up: Table herein included
- Special requirements: None

Assembly specifications:

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

SpaceLab - Federal University of Santa Catarina		
Project: Interstage Interface Panel N°2		
Layer: Bottom Layer Board Edge		
Designed by: Yan C. de Azeredo		Project Code: IIP2
Date: 6/30/2021	Version: v2.0	Size: A4

Layer	Name	Material	Thickness	Constant	Board Layer Stack
1	Top Overlay				
2	Top Solder	Solder Resist	0.010mm	3.5	
3	Top Layer	Copper	0.036mm		
4	Dielectric 1	FR-4	1.500mm	4.8	
5	Bottom Layer	Copper	0.036mm		
6	Bottom Solder	Solder Resist	0.010mm	3.5	
7	Bottom Overlay				




Fabrication specifications:

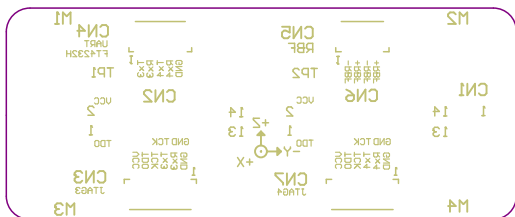
- Copper base: 1oz
- PCB Material: Prepeg FR4–Standard
- PCB Tickness: 1.6mm
- PCB Surface: HASL (with lead)
- Silkscreen Color: White (top and bottom)
- Soldermask Color: Green
- Vias: Force Complete Tenting
- Stack–up: Table herein included
- Special requirements: None

Assembly specifications:

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

SpaceLab - Federal University of Santa Catarina		
Project: Interstage Interface Panel N°2		
Layer: Top Overlay Board Edge		
Designed by: Yan C. de Azeredo		Project Code: IIP2
Date: 6/30/2021	Version: v2.0	Size: A4

Layer	Name	Material	Thickness	Constant	Board Layer Stack
1	Top Overlay				
2	Top Solder	Solder Resist	0.010mm	3.5	
3	Top Layer	Copper	0.036mm		
4	Dielectric 1	FR-4	1.500mm	4.8	
5	Bottom Layer	Copper	0.036mm		
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°2		
Layer: Bottom Overlay Board Edge		
Designed by: Yan C. de Azeredo		Project Code: IIP2
Date: 6/30/2021	Version: v2.0	Size: A4


Layer	Name	Material	Thickness	Constant	Board Layer Stack
1	Top Overlay				
2	Top Solder	Solder Resist	0.010mm	3.5	
3	Top Layer	Copper	0.036mm		
4	Dielectric 1	FR-4	1.500mm	4.8	
5	Bottom Layer	Copper	0.036mm		
6	Bottom Solder	Solder Resist	0.010mm	3.5	
7	Bottom Overlay				

Fabrication specifications:

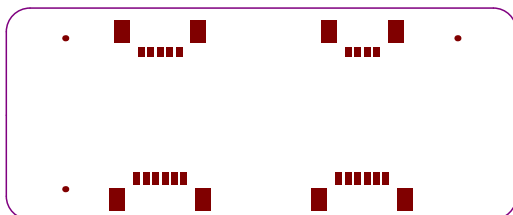
- Copper base: 1oz
- PCB Material: Prepeg FR4—Standard
- PCB Thickness: 1.6mm
- PCB Surface: HASL (with lead)
- Silkscreen Color: White (top and bottom)
- Soldermask Color: Green
- Vias: Force Complete Tenting
- Stack-up: Table herein included
- Special requirements: None

Assembly specifications:

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

SpaceLab - Federal University of Santa Catarina		
Project: Interstage Interface Panel N°2		
Layer: Top Paste Board Edge		
Designed by: Yan C. de Azeredo		Project Code: IIP2
Date: 6/30/2021	Version: v2.0	Size: A4

Layer	Name	Material	Thickness	Constant	Board Layer Stack
1	Top Overlay				
2	Top Solder	Solder Resist	0.010mm	3.5	
3	Top Layer	Copper	0.036mm		
4	Dielectric 1	FR-4	1.500mm	4.8	
5	Bottom Layer	Copper	0.036mm		
6	Bottom Solder	Solder Resist	0.010mm	3.5	
7	Bottom Overlay				




Fabrication specifications:

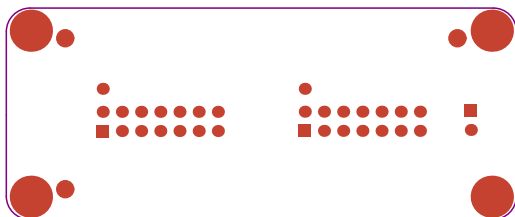
- Copper base: 1oz
- PCB Material: Prepeg FR4—Standard
- PCB Thickness: 1.6mm
- PCB Surface: HASL (with lead)
- Silkscreen Color: White (top and bottom)
- Soldermask Color: Green
- Vias: Force Complete Tenting
- Stack-up: Table herein included
- Special requirements: None

Assembly specifications:

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

SpaceLab - Federal University of Santa Catarina		
Project: Interstage Interface Panel N°2		
Layer: Bottom Paste Board Edge		
Designed by: Yan C. de Azeredo		Project Code: IIP2
Date: 6/30/2021	Version: v2.0	Size: A4

Layer	Name	Material	Thickness	Constant	Board Layer Stack
1	Top Overlay				
2	Top Solder	Solder Resist	0.010mm	3.5	
3	Top Layer	Copper	0.036mm		
4	Dielectric 1	FR-4	1.500mm	4.8	
5	Bottom Layer	Copper	0.036mm		
6	Bottom Solder	Solder Resist	0.010mm	3.5	
7	Bottom Overlay				




Fabrication specifications:

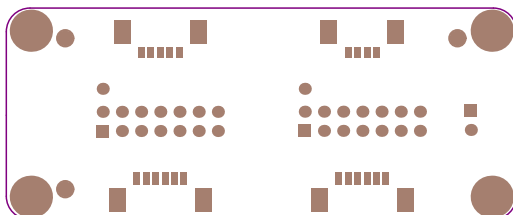
- Copper base: 1oz
- PCB Material: Prepeg FR4—Standard
- PCB Thickness: 1.6mm
- PCB Surface: HASL (with lead)
- Silkscreen Color: White (top and bottom)
- Soldermask Color: Green
- Vias: Force Complete Tenting
- Stack-up: Table herein included
- Special requirements: None

Assembly specifications:

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

SpaceLab - Federal University of Santa Catarina		
Project: Interstage Interface Panel N°2		
Layer: Top Solder Board Edge		
Designed by: Yan C. de Azeredo		Project Code: IIP2
Date: 6/30/2021	Version: v2.0	Size: A4

Layer	Name	Material	Thickness	Constant	Board Layer Stack
1	Top Overlay				
2	Top Solder	Solder Resist	0.010mm	3.5	
3	Top Layer	Copper	0.036mm		
4	Dielectric 1	FR-4	1.500mm	4.8	
5	Bottom Layer	Copper	0.036mm		
6	Bottom Solder	Solder Resist	0.010mm	3.5	
7	Bottom Overlay				




Fabrication specifications:

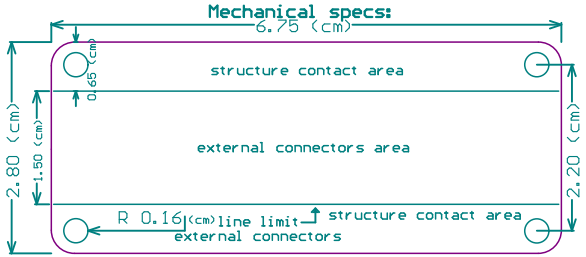
- Copper base: 1oz
- PCB Material: Prepeg FR4—Standard
- PCB Thickness: 1.6mm
- PCB Surface: HASL (with lead)
- Silkscreen Color: White (top and bottom)
- Soldermask Color: Green
- Vias: Force Complete Tenting
- Stack-up: Table herein included
- Special requirements: None

Assembly specifications:

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

SpaceLab - Federal University of Santa Catarina		
Project: Interstage Interface Panel N°2		
Layer: Bottom Solder Board Edge		
Designed by: Yan C. de Azeredo		Project Code: IIP2
Date: 6/30/2021	Version: v2.0	Size: A4

Layer	Name	Material	Thickness	Constant	Board Layer Stack
1	Top Overlay				
2	Top Solder	Solder Resist	0.010mm	3.5	
3	Top Layer	Copper	0.036mm		
4	Dielectric 1	FR-4	1.500mm	4.8	
5	Bottom Layer	Copper	0.036mm		
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

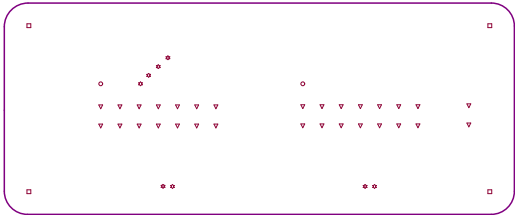
Assembly specifications:

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

SpaceLab - Federal University of Santa Catarina		
Project: Interstage Interface Panel N°2		
Layer: Dimensions Board Edge		
Designed by: Yan C. de Azeredo		Project Code: IIP2
Date: 6/30/2021	Version: v2.0	Size: A4

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
○	2	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
	44 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	0.036mm		
4	Dielectric 1	FR-4	1.500mm	4.8	
5	Bottom Layer	Copper	0.036mm		
6	Bottom Solder	Solder Resist	0.010mm	3.5	
7	Bottom Overlay				

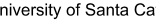


Fabrication specifications:

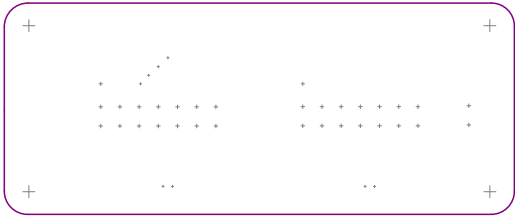
- Copper base: 1oz
- PCB Material: Prepeg FR4—Standard
- PCB Thickness: 1.6mm
- PCB Surface: HASL (with lead)
- Silkscreen Color: White (top and bottom)
- Soldermask Color: Green
- Vias: Force Complete Tenting
- Stack-up: Table herein included
- Special requirements: None

Assembly specifications:

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

SpaceLab - Federal University of Santa Catarina		
Project: Interstage Interface Panel N°2		
Layer: Drill Drawing Board Edge		
Designed by: Yan C. de Azeredo		Project Code: IIP2
Date: 6/30/2021	Version: v2.0	Size: A4

Layer	Name	Material	Thickness	Constant	Board Layer Stack
1	Top Overlay				
2	Top Solder	Solder Resist	0.010mm	3.5	
3	Top Layer	Copper	0.036mm		
4	Dielectric 1	FR-4	1.500mm	4.8	
5	Bottom Layer	Copper	0.036mm		
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°2		
Layer: Drill Guide Board Edge		
Designed by: Yan C. de Azeredo		Project Code: IIP2
Date: 6/30/2021	Version: v2.0	Size: A4