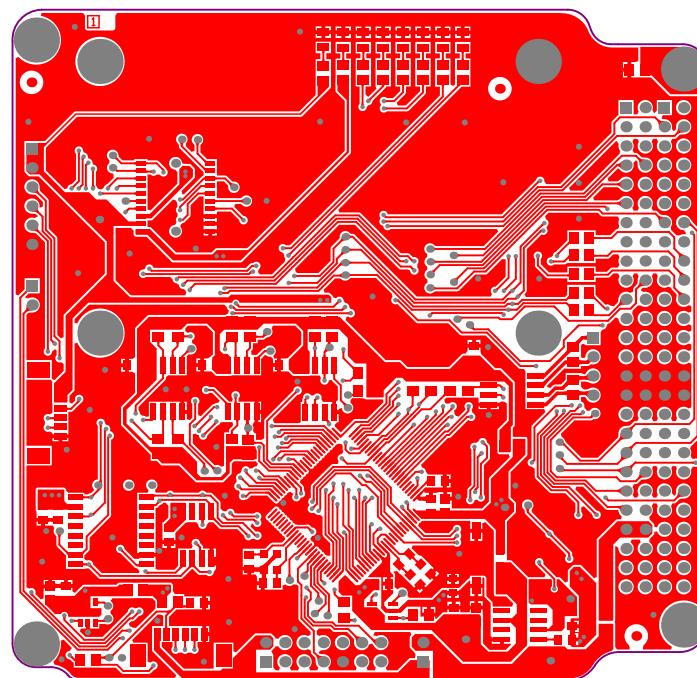


A

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 Core	FR-4	1.500mm	4.8	
5	Bottom Layer	Copper	0.035mm		
6	Bottom Solder	Solder Resist	0.010mm	3.5	
7	Bottom Overlay				

Fabrication specifications:

- Copper base 10Z
- 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
- Special: Stack-up (herein included)

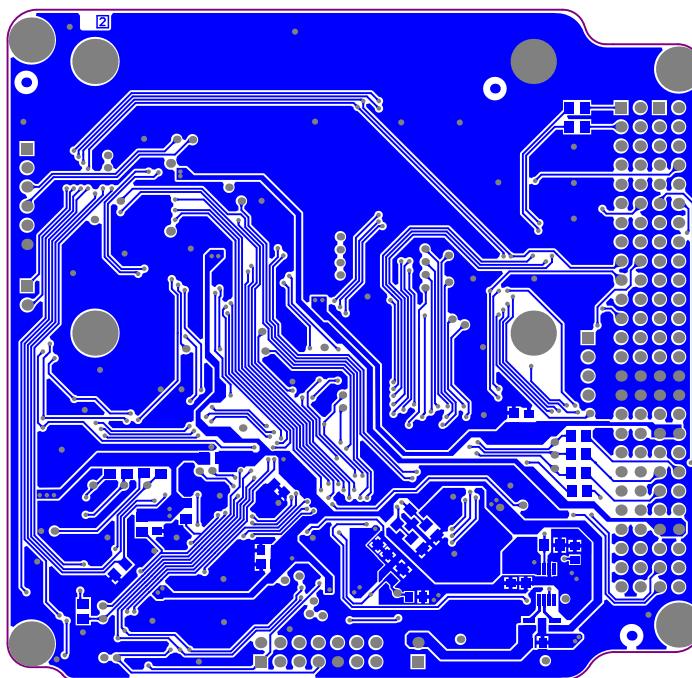
Assembly specifications:

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

SpaceLab - Federal University of Santa Catarina	
Project: OBDH2	
Layer: Top Layer	
Designed by: Andre M. P. Mattos	
Date: 6/4/2021	Project Code: OBDH2
Version: v0.7	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 Core	FR-4	1.500mm	4.8	
5	Bottom Layer	Copper	0.035mm		
6	Bottom Solder	Solder Resist	0.010mm	3.5	
7	Bottom Overlay				

Fabrication specifications:

- Copper base 10Z
- 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
- Special: Stack-up (herein included)

Assembly specifications:

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

SpaceLab - Federal University of Santa Catarina	
Project: OBDH2	
Layer: Bottom Layer	
Designed by: Andre M. P. Mattos	
Date: 6/4/2021	Project Code: OBDH2
Version: v0.7	Size: A4

A

1

B

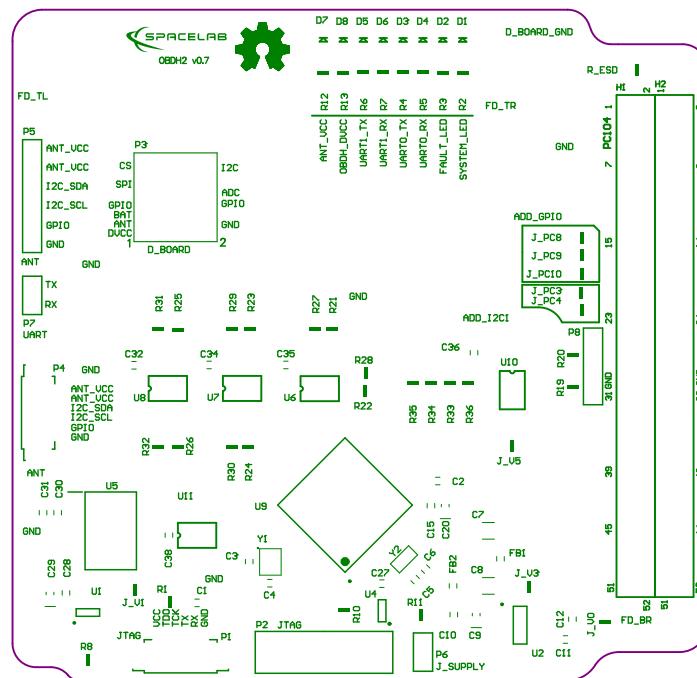
1

6

1

D

3



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 Core	FR-4	1.500mm	4.8	
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
 - Special: Stack-up (herein included)

Assembly specifications:

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

SpaceLab - Federal University of Santa Catarina	
Project: OBDH2	
Layer: Top Overlay	
Designed by: Andre M. P. Mattos	Project Code: OBDH2
Date: 6/4/2021	Version: v0.7
	Size: A4

A

A

B

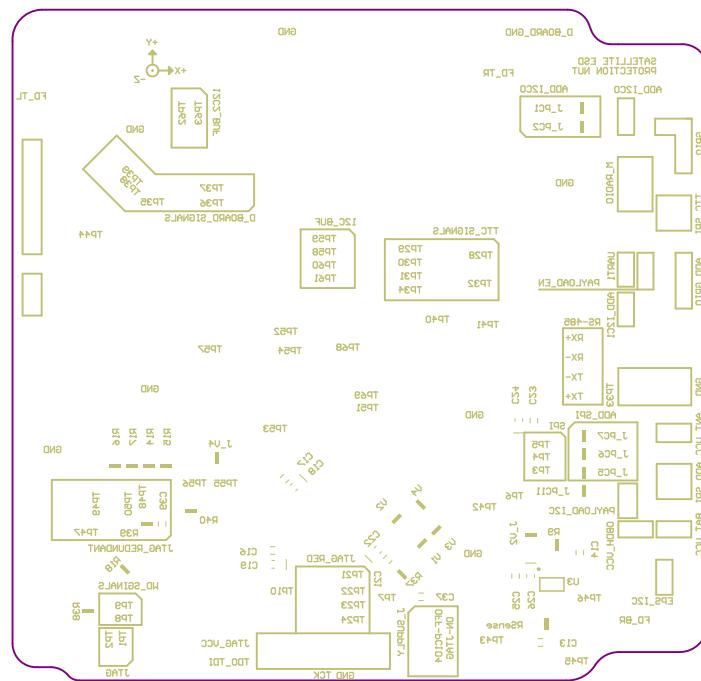
B

5

3

D

B 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 Core	FR-4	1.500mm	4.8	
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
 - Special: Stack-up (herein included)

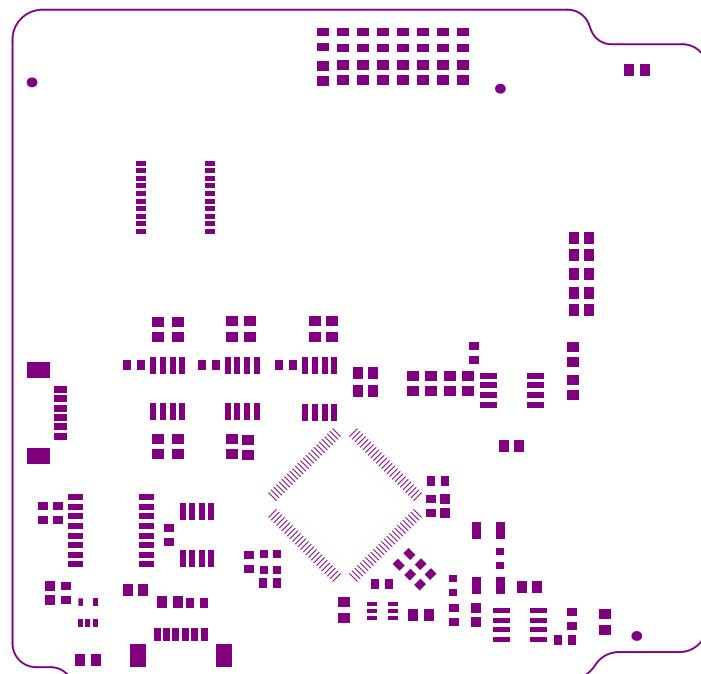
Assembly specifications:

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

SpaceLab - Federal University of Santa Catarina	
Project: OBDH2	
Layer: Bottom Overlay	
Designed by: Andre M. P. Mattos	Project Code: OBDH2
Date: 6/4/2021	Version: v0.7
Size: A4	

A

A



B

B

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 Core	FR-4	1.500mm	4.8	
5	Bottom Layer	Copper	0.035mm		
6	Bottom Solder	Solder Resist	0.010mm	3.5	
7	Bottom Overlay				

C

C

Fabrication specifications:

- Copper base 10Z:
- 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
- Special: Stack-up (herein included)

D

D

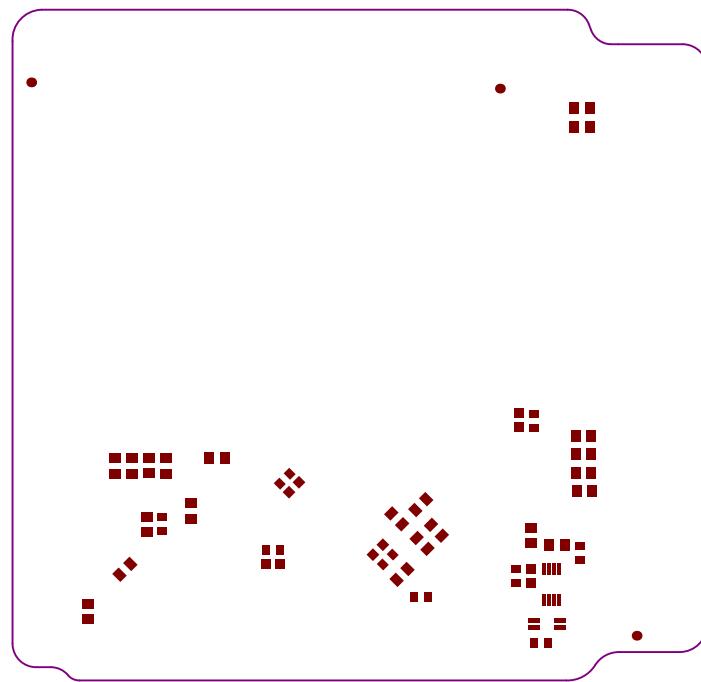
Assembly specifications:

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

SpaceLab - Federal University of Santa Catarina	
Project: OBDH2	
Layer: Top Paste	
Designed by: Andre M. P. Mattos	
Date: 6/4/2021	Project Code: OBDH2
Version: v0.7	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 Core	FR-4	1.500mm	4.8	
5	Bottom Layer	Copper	0.035mm		
6	Bottom Solder	Solder Resist	0.010mm	3.5	
7	Bottom Overlay				

Fabrication specifications:

- Copper base 10Z:
- 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
- Special: Stack-up (herein included)

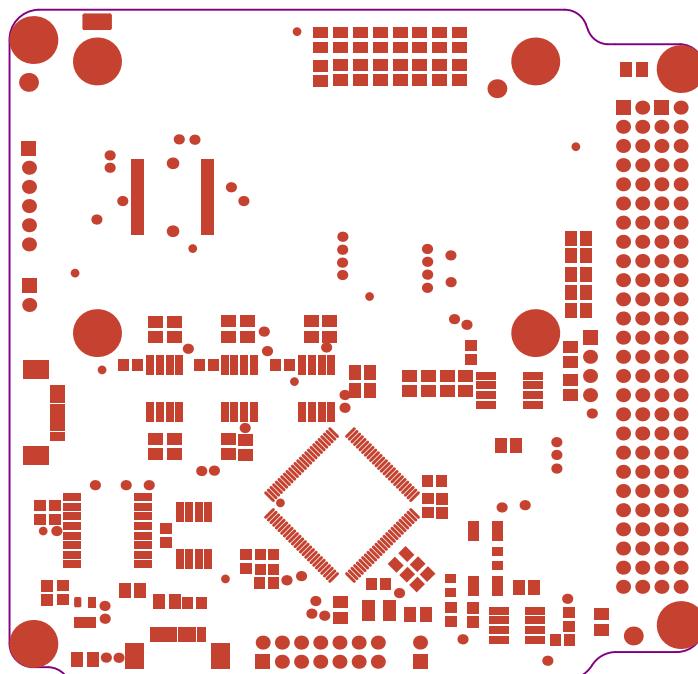
Assembly specifications:

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

SpaceLab - Federal University of Santa Catarina	
Project: OBDH2	
Layer: Bottom Paste	
Designed by: Andre M. P. Mattos	
Date: 6/4/2021	Project Code: OBDH2
Version: v0.7	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 Core	FR-4	1.500mm	4.8	
5	Bottom Layer	Copper	0.035mm		
6	Bottom Solder	Solder Resist	0.010mm	3.5	
7	Bottom Overlay				

Fabrication specifications:

- Copper base 10Z:
- 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
- Special: Stack-up (herein included)

Assembly specifications:

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

SpaceLab - Federal University of Santa Catarina



Project: OBDH2

Layer: Top Solder

Designed by: Andre M. P. Mattos

Project Code: OBDH2

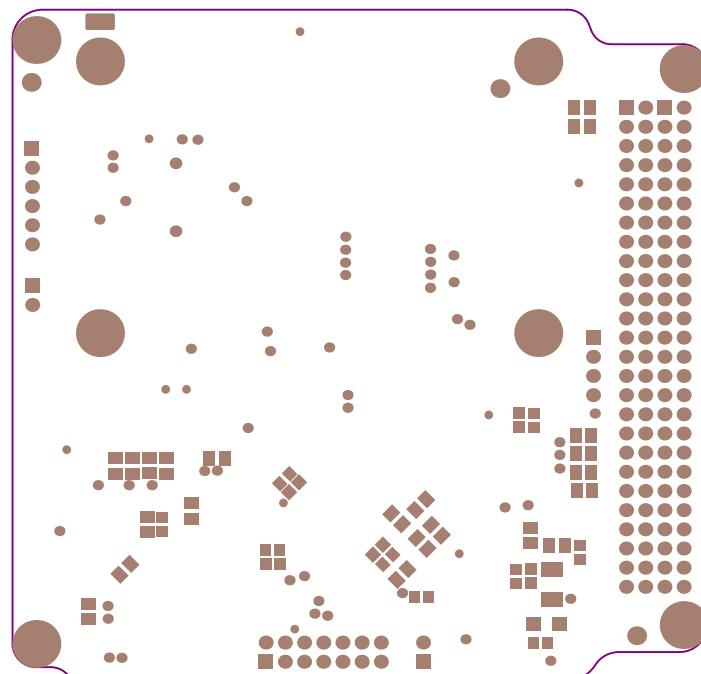
Date: 6/4/2021

Version: v0.7

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 Core	FR-4	1.500mm	4.8	
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
- Special: Stack-up (herein included)

Assembly specifications:

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

SpaceLab - Federal University of Santa Catarina



Project: OBDH2

Layer: Bottom Solder

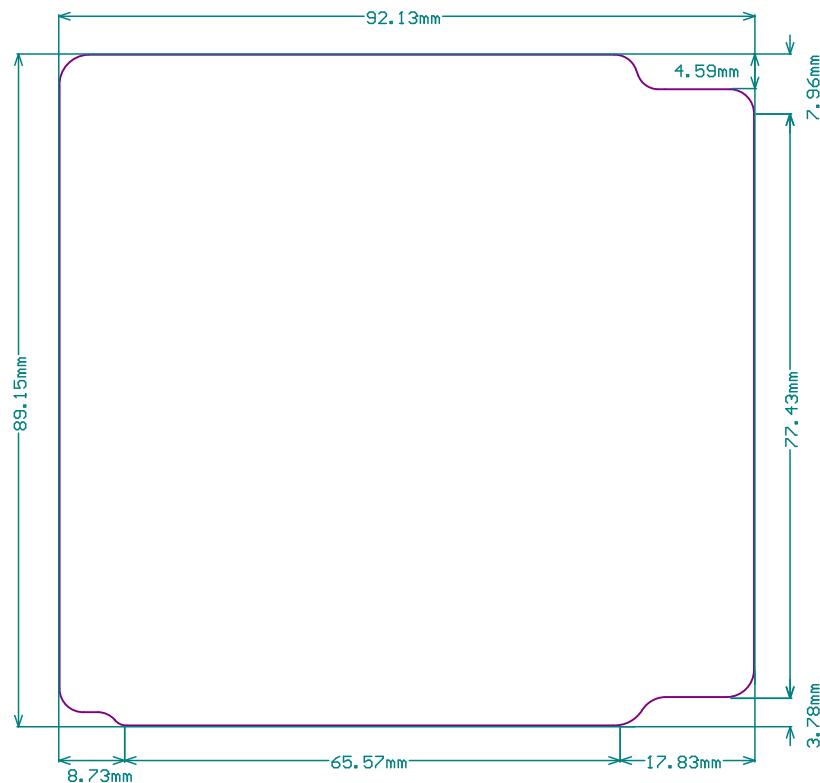
Project Code: OBDH2

Designed by: Andre M. P. Mattos

Date: 6/4/2021 Version: v0.7

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 Core	FR-4	1.500mm	4.8	
5	Bottom Layer	Copper	0.035mm		
6	Bottom Solder	Solder Resist	0.010mm	3.5	
7	Bottom Overlay				

Fabrication specifications:

- Copper base 10Z:
- 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
- Special: Stack-up (herein included)

Assembly specifications:

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

SpaceLab - Federal University of Santa Catarina

Project: OBDH2

Layer: Dimension

Designed by: Andre M. P. Mattos

Date: 6/4/2021 Version: v0.7

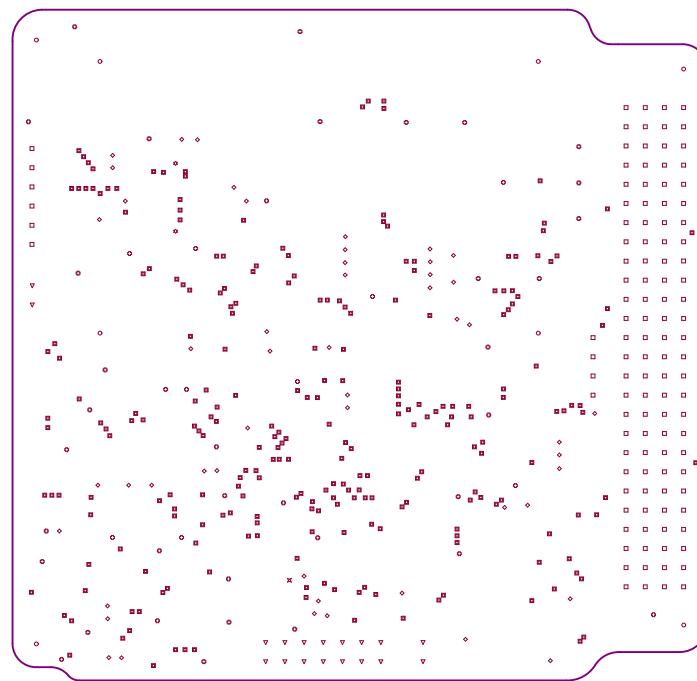
Project Code: OBDH2



Size: A4

A

A



B

B

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 Core	FR-4	1.500mm	4.8	
5	Bottom Layer	Copper	0.035mm		
6	Bottom Solder	Solder Resist	0.010mm	3.5	
7	Bottom Overlay				

Symbol	Count	Hole Size	Plated	Hole Type	Drill Layer Pair	Via/Pad
■	247	0.300mm <11.81mil>	PTH	Round	Top Layer - Bottom Layer	Via
○	46	0.400mm <15.75mil>	PTH	Round	Top Layer - Bottom Layer	Via
◇	51	0.500mm <19.69mil>	PTH	Round	Top Layer - Bottom Layer	Pad
☒	1	0.508mm <20.00mil>	PTH	Round	Top Layer - Bottom Layer	Pad
□	114	0.900mm <35.43mil>	PTH	Round	Top Layer - Bottom Layer	Pad
▽	18	1.000mm <39.37mil>	PTH	Round	Top Layer - Bottom Layer	Pad
✖	2	1.190mm <46.85mil>	NPTH	Round	Top Layer - Bottom Layer	Pad
○	8	3.200mm <125.98mil>	PTH	Round	Top Layer - Bottom Layer	Pad
487 Total						

Fabrication specifications:

- Copper base 10Z
- 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
- Special: Stack-up (herein included)

Assembly specifications:

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

C

C

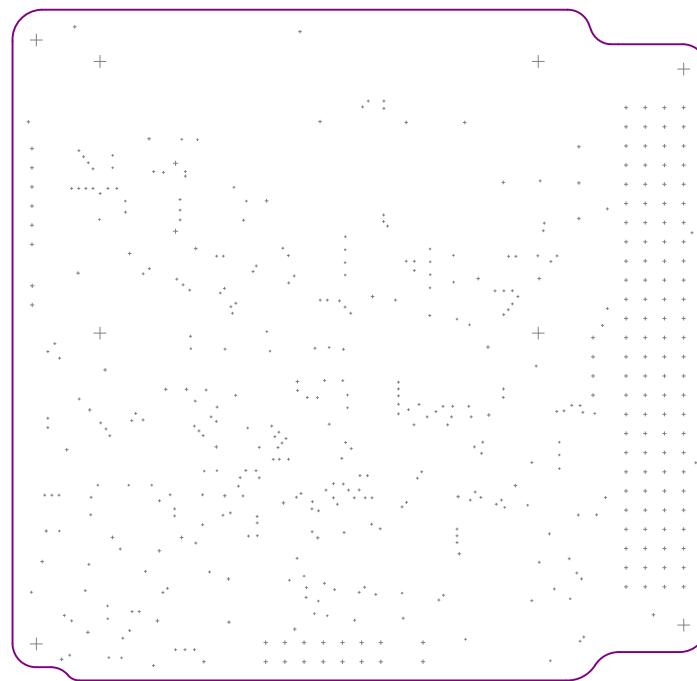
D

D

SpaceLab - Federal University of Santa Catarina	 SPACELAB
Project: OBDH2	
Layer: Drill Drawing	
Designed by: Andre M. P. Mattos	
Date: 6/4/2021	Project Code: OBDH2
Version: v0.7	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 Core	FR-4	1.500mm	4.8	
5	Bottom Layer	Copper	0.035mm		
6	Bottom Solder	Solder Resist	0.010mm	3.5	
7	Bottom Overlay				

Fabrication specifications:

- Copper base 10Z
- 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
- Special: Stack-up (herein included)

Assembly specifications:

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

SpaceLab - Federal University of Santa Catarina



Project: OBDH2

Layer: Drill Guide

Project Code: OBDH2

Designed by: Andre M. P. Mattos

Date: 6/4/2021 Version: v0.7

Size: A4