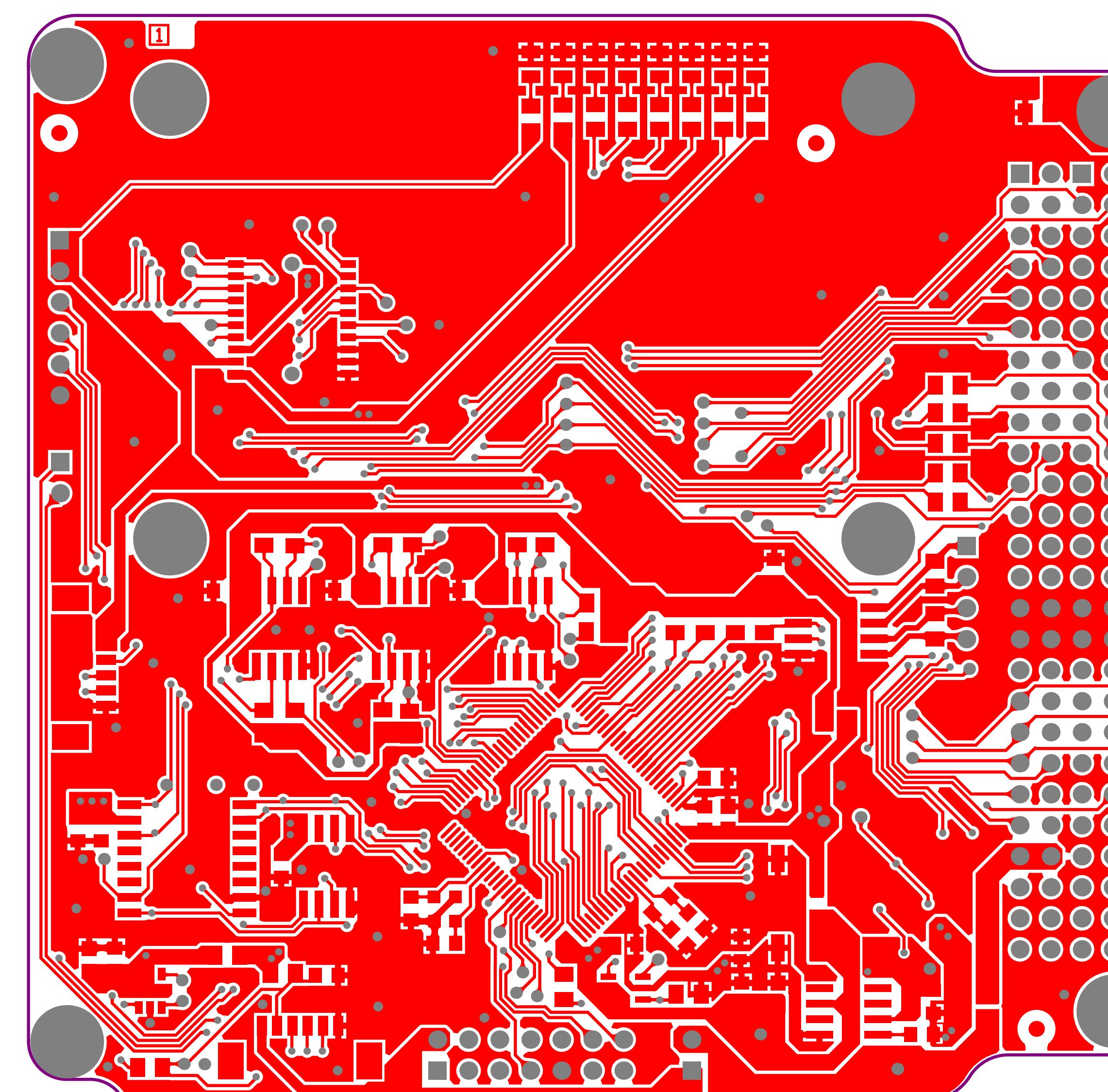


A

A



B

B

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	4,8	
5	Bottom Layer	Copper	1,38mil		
6	Bottom Solder	Solder Resist	0,39mil	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: Blue
- Vias: Force Complete Tenting
- Special: Stack-up (herein included)

D

D

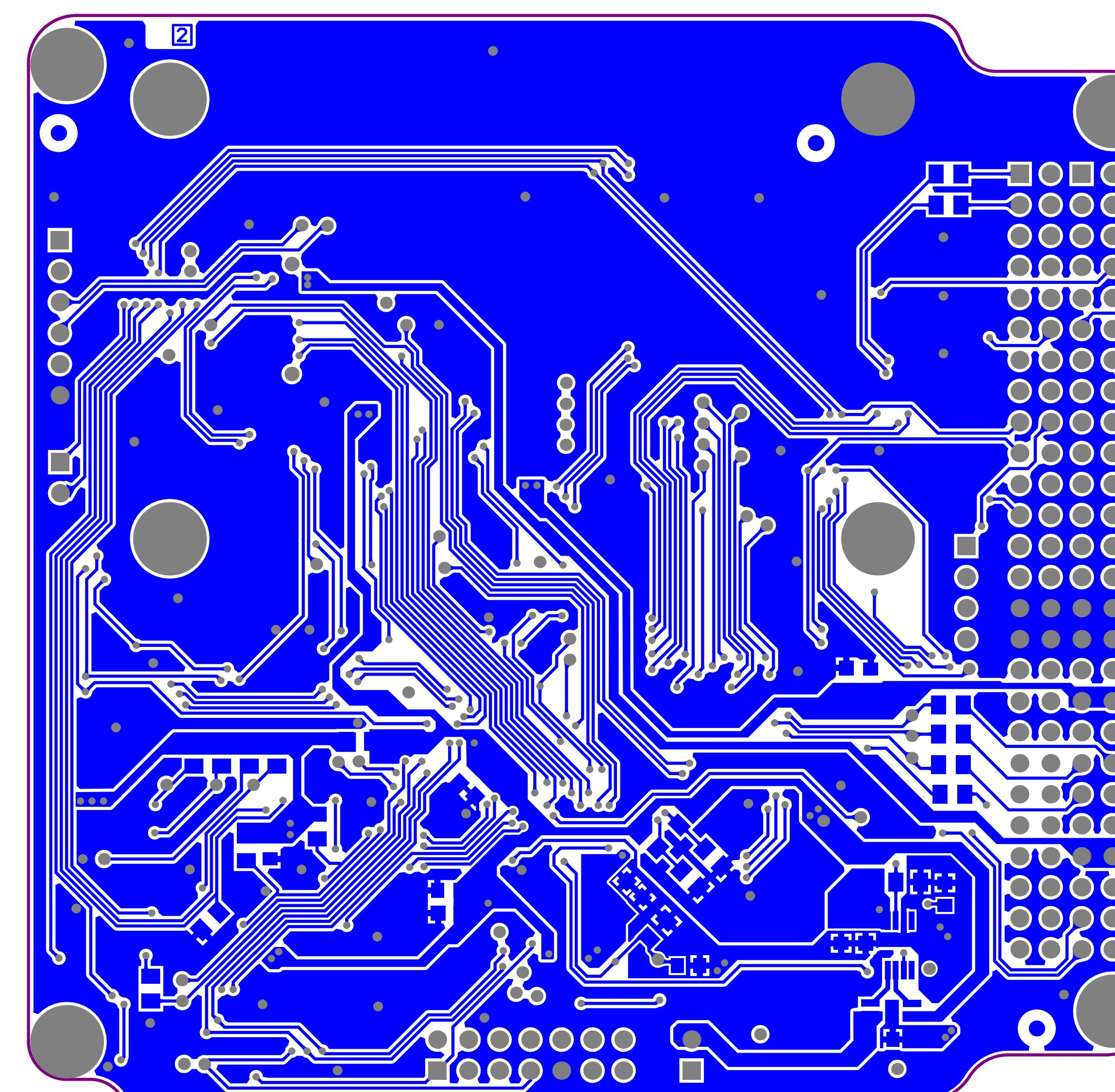
Assembly specifications:

- 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 Layer	
Designed by: Andre M. P. Mattos	Project Code: OBDH2
Date: 03/06/2021	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	0,39mil	3,5	
3	Top Layer	Copper	1,38mil		
4	Dielectric Core	FR-4	59,06mil	4,8	
5	Bottom Layer	Copper	1,38mil		
6	Bottom Solder	Solder Resist	0,39mil	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: Blue
- Vias: Force Complete Tenting
- Special: Stack-up (herein included)

D

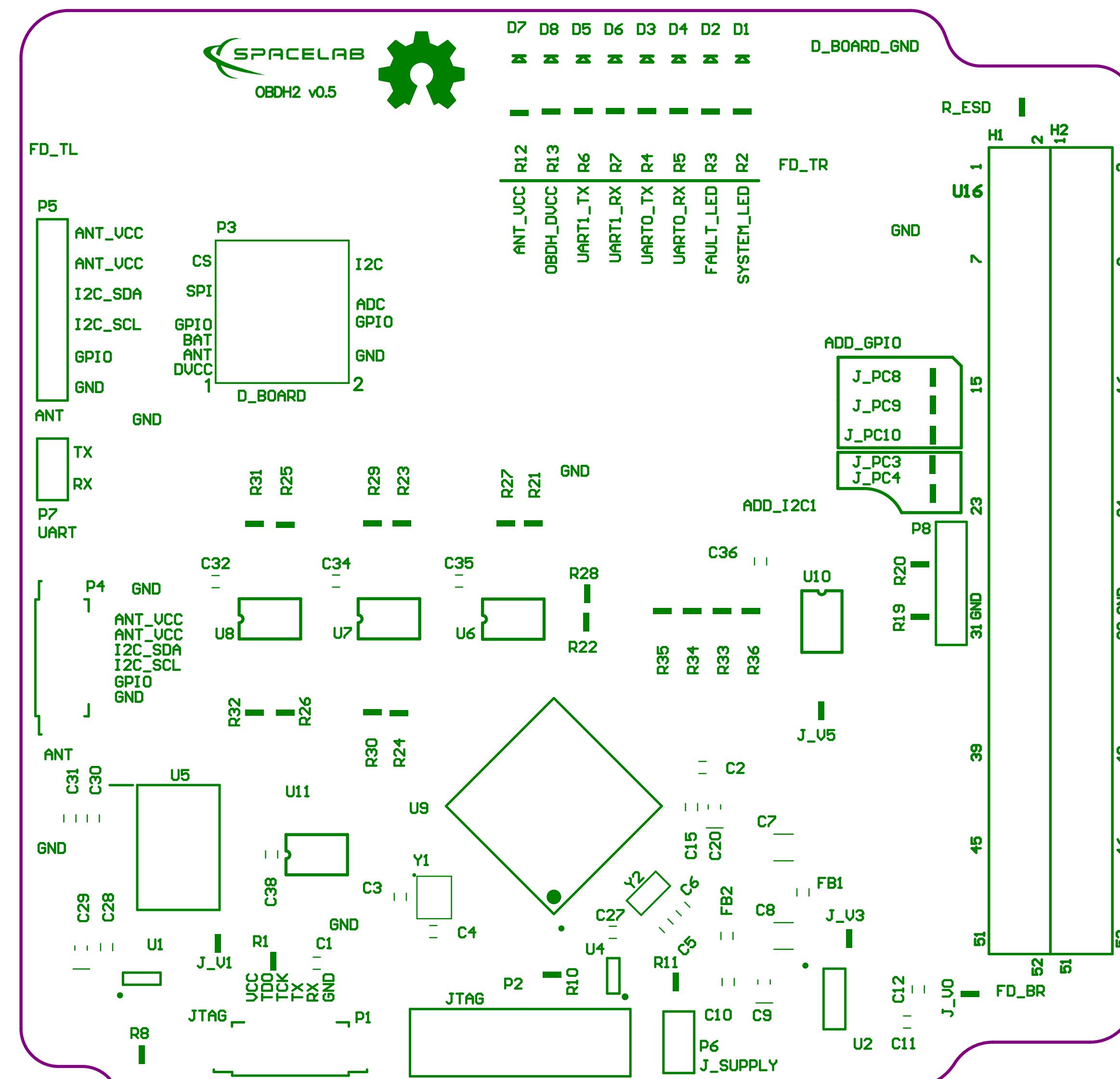
D

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: Bottom Layer	
Designed by: Andre M. P. Mattos	Project Code: OBDH2
Date: 03/06/2021	Version: v0.7
	Size: A4

A



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	4,8	
5	Bottom Layer	Copper	1,38mil		
6	Bottom Solder	Solder Resist	0,39mil	3,5	
7	Bottom Overlay				

B

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: Blue
- Vias: Force Complete Tenting
- Special: Stack-up (herein included)

C

Assembly specifications:

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

D

SpaceLab - Federal University of Santa Catarina	
Project: OBDH2	
Layer: Top Overlay	
Designed by: Andre M. P. Mattos	
Date: 03/06/2021	Project Code: OBDH2
Version: v0.7	Size: A4

A

A

B

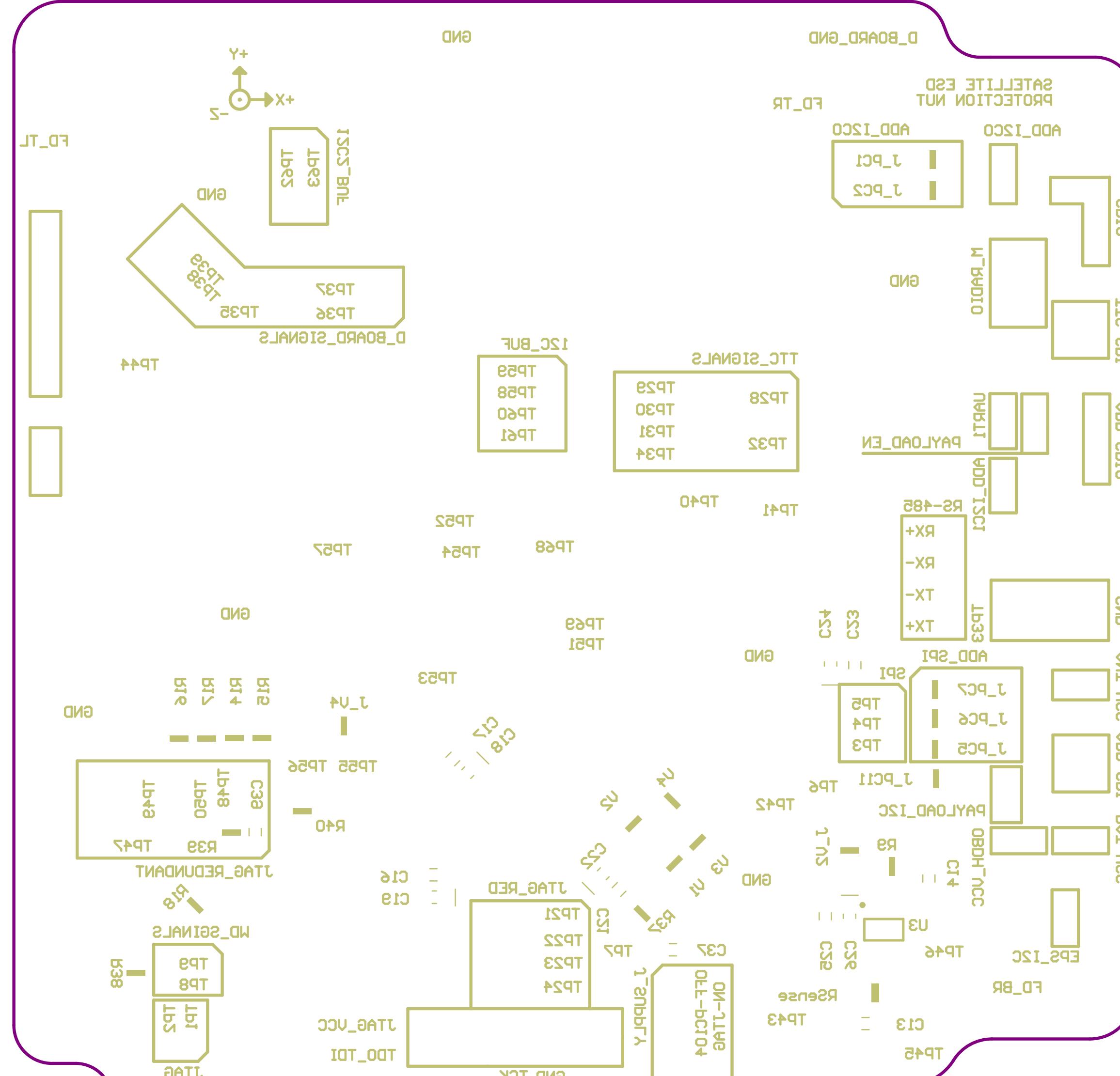
B

6

6

D

D



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	4,8	
5	Bottom Layer	Copper	1,38mil		
6	Bottom Solder	Solder Resist	0,39mil	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: Blue
 - Vias: Force Complete Tenting
 - Special: Stack-up (herein included)

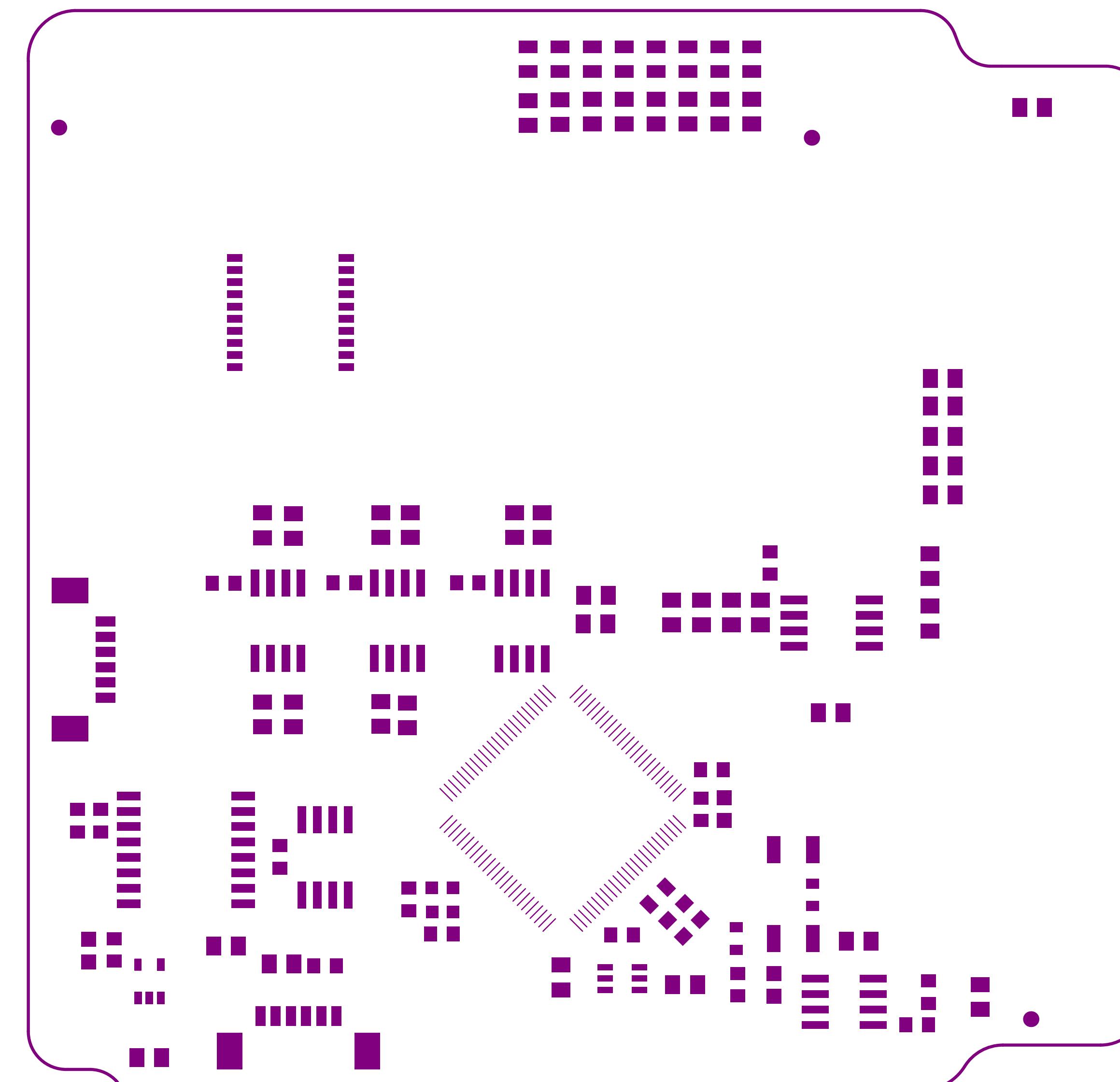
Assembly specifications:

- 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: 03/06/2021	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	0,39mil	3,5	
3	Top Layer	Copper	1,38mil		
4	Dielectric Core	FR-4	59,06mil	4,8	
5	Bottom Layer	Copper	1,38mil		
6	Bottom Solder	Solder Resist	0,39mil	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: Blue
- Vias: Force Complete Tenting
- Special: Stack-up (herein included)

D

D

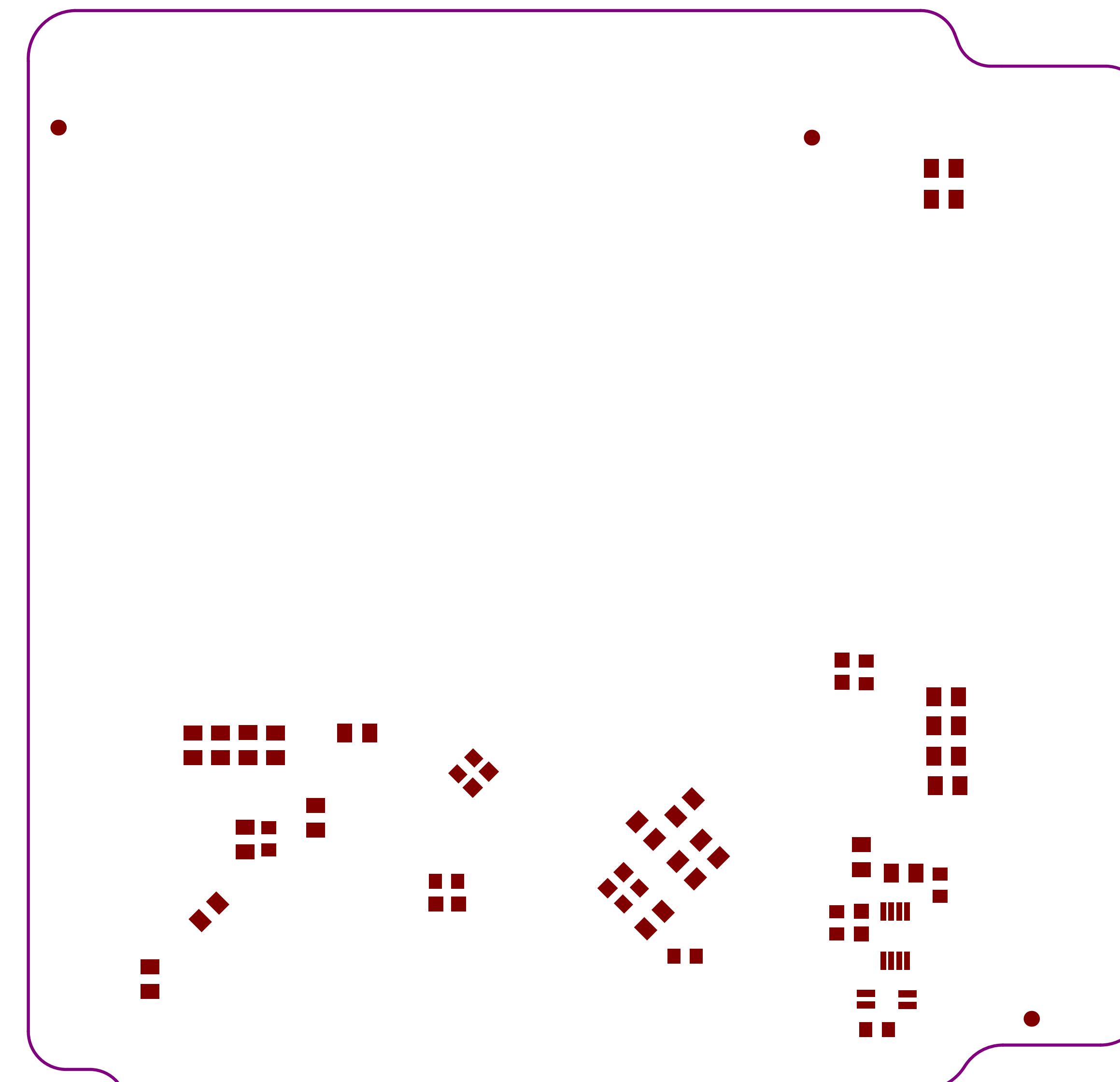
Assembly specifications:

- 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	Project Code: OBDH2
Date: 03/06/2021	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	0,39mil	3,5	
3	Top Layer	Copper	1,38mil		
4	Dielectric Core	FR-4	59,06mil	4,8	
5	Bottom Layer	Copper	1,38mil		
6	Bottom Solder	Solder Resist	0,39mil	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: Blue
- Vias: Force Complete Tenting
- Special: Stack-up (herein included)

D

D

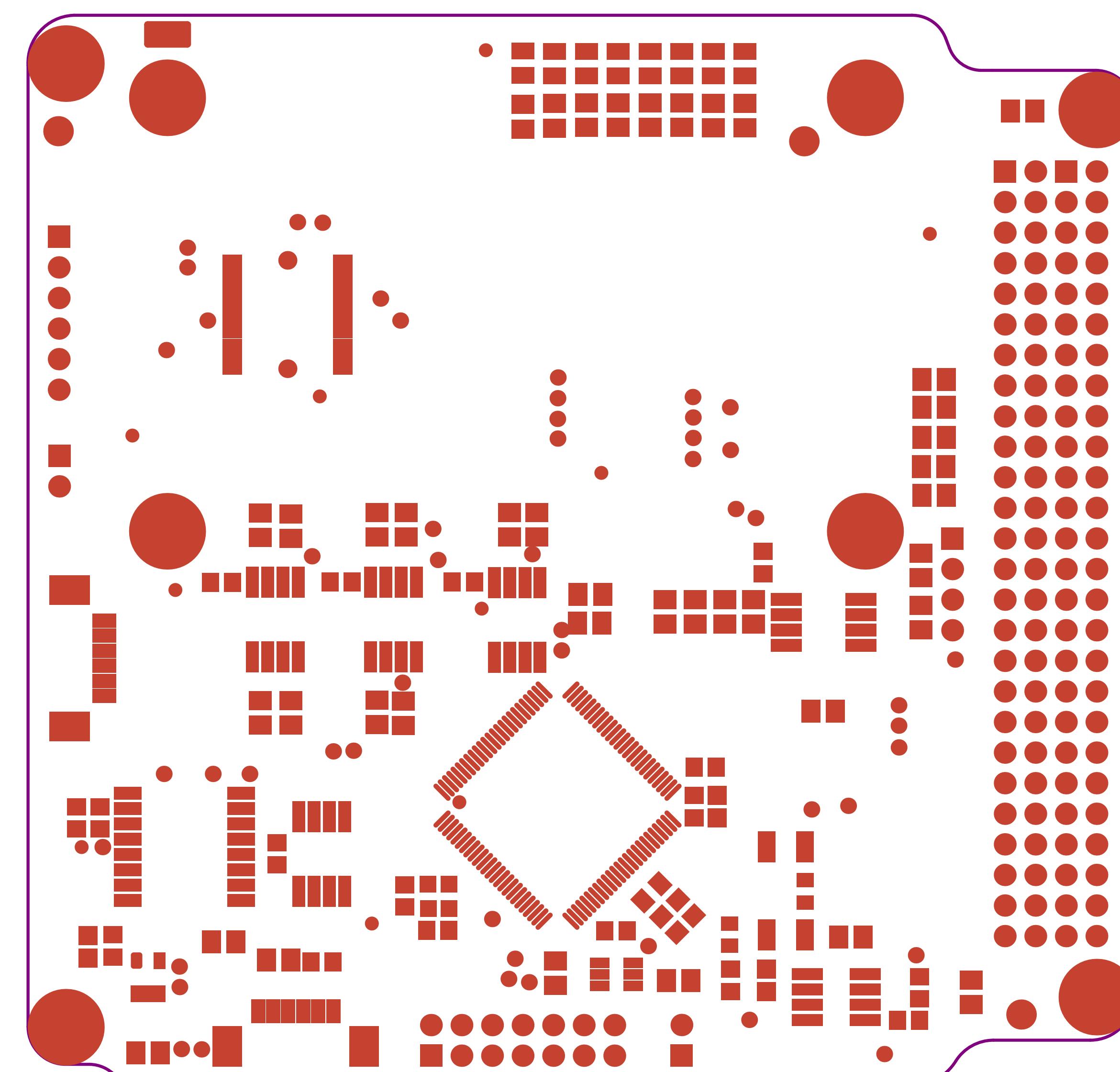
Assembly specifications:

- 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: Bottom Paste	
Designed by: Andre M. P. Mattos	Project Code: OBDH2
Date: 03/06/2021	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	0,39mil	3,5	
3	Top Layer	Copper	1,38mil		
4	Dielectric Core	FR-4	59,06mil	4,8	
5	Bottom Layer	Copper	1,38mil		
6	Bottom Solder	Solder Resist	0,39mil	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: Blue
- Vias: Force Complete Tenting
- Special: Stack-up (herein included)

D

D

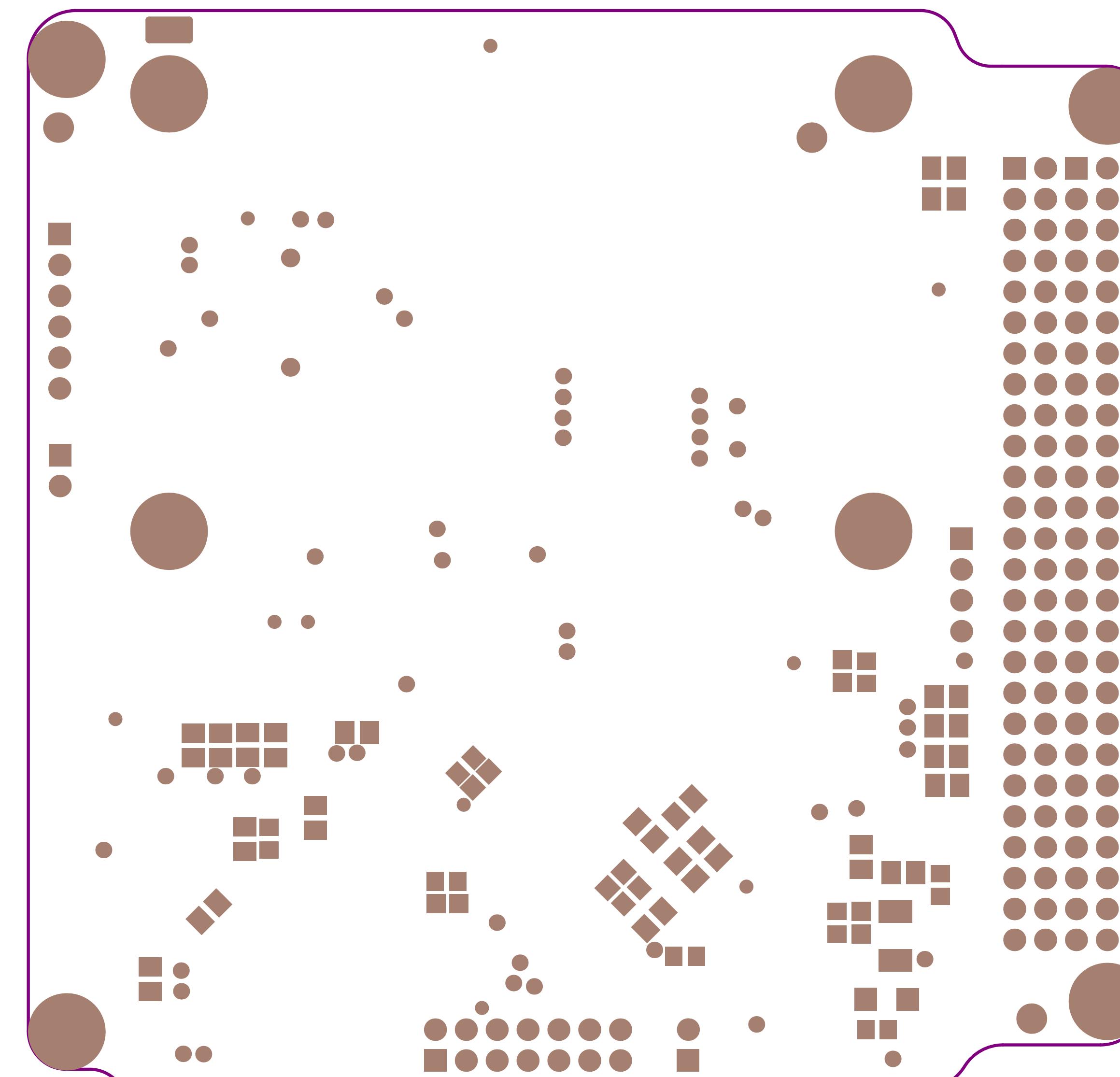
Assembly specifications:

- 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 Solder	
Designed by: Andre M. P. Mattos	Project Code: OBDH2
Date: 03/06/2021	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	0,39mil	3,5	
3	Top Layer	Copper	1,38mil		
4	Dielectric Core	FR-4	59,06mil	4,8	
5	Bottom Layer	Copper	1,38mil		
6	Bottom Solder	Solder Resist	0,39mil	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: Blue
- Vias: Force Complete Tenting
- Special: Stack-up (herein included)

D

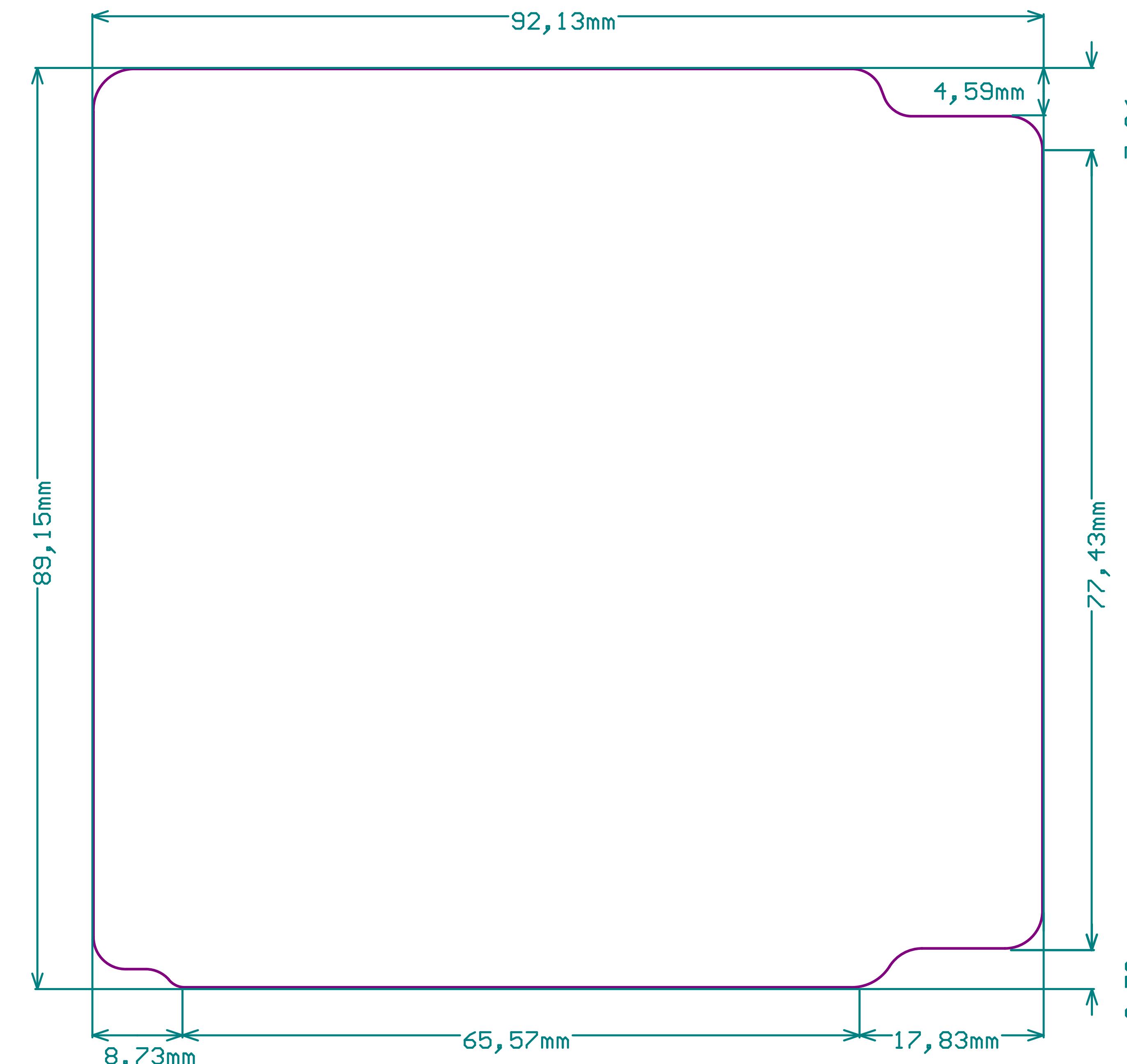
D

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: Bottom Solder	
Designed by: Andre M. P. Mattos	Project Code: OBDH2
Date: 03/06/2021	Version: v0.7
	Size: A4

A



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	4,8	
5	Bottom Layer	Copper	1,38mil		
6	Bottom Solder	Solder Resist	0,39mil	3,5	
7	Bottom Overlay				

B

C

D

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: Blue
- 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	Project Code: OBDH2
Date: 03/06/2021	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	0,39mil	3,5	
3	Top Layer	Copper	1,38mil		
4	Dielectric Core	FR-4	59,06mil	4,8	
5	Bottom Layer	Copper	1,38mil		
6	Bottom Solder	Solder Resist	0,39mil	3,5	
7	Bottom Overlay				

C

C

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
□	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
486 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: Blue
- 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

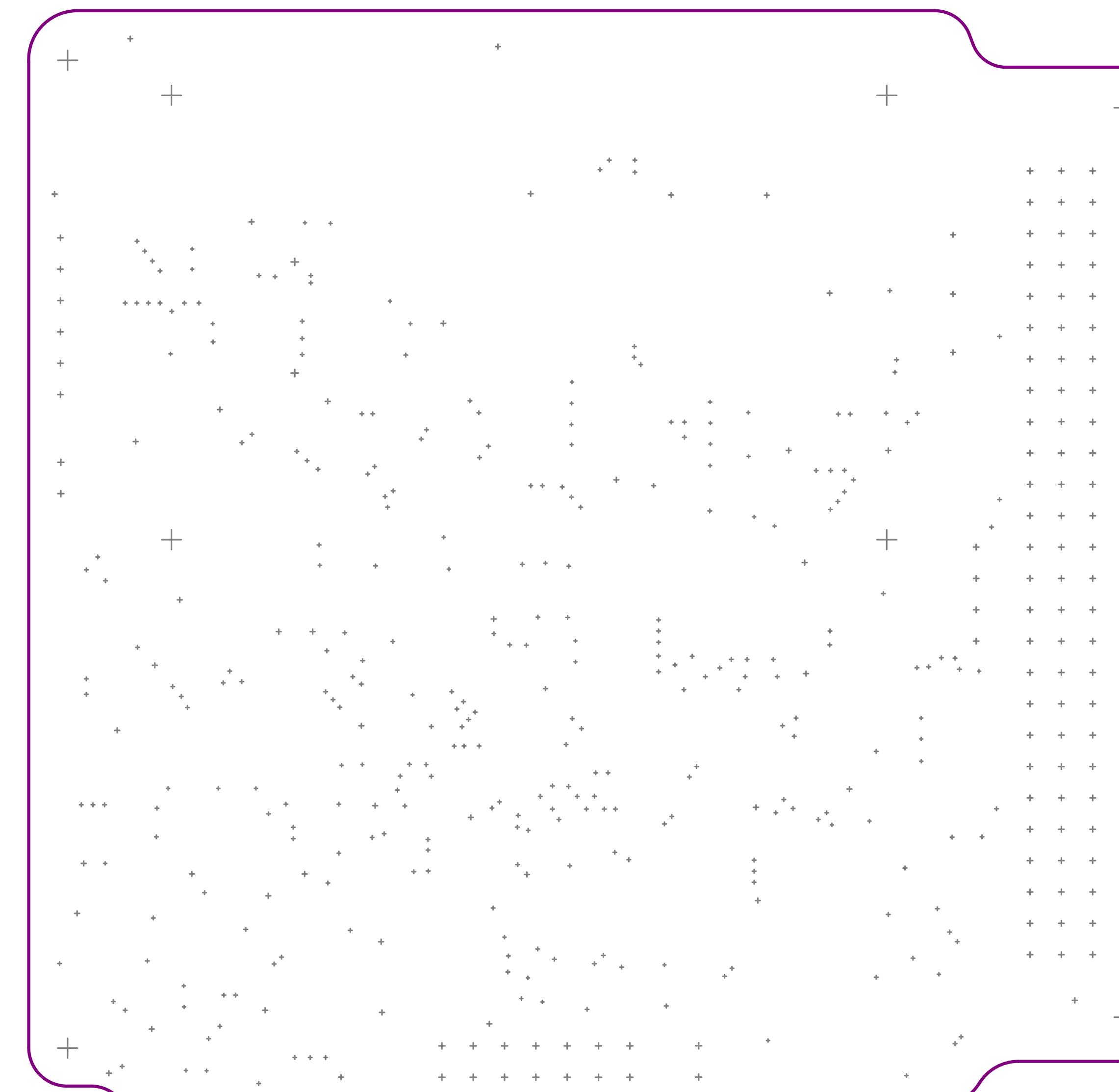
D

D

SpaceLab - Federal University of Santa Catarina	
Project: OBDH2	
Layer: Drill Drawing	
Designed by: Andre M. P. Mattos	Project Code: OBDH2
Date: 03/06/2021	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	0,39mil	3,5	
3	Top Layer	Copper	1,38mil		
4	Dielectric Core	FR-4	59,06mil	4,8	
5	Bottom Layer	Copper	1,38mil		
6	Bottom Solder	Solder Resist	0,39mil	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: Blue
- 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: Drill Guide	
Designed by: Andre M. P. Mattos	Project Code: OBDH2
Date: 03/06/2021	Version: v0.7
	Size: A4