

PCB Overview

2023

LAST UPDATED: 01-05-2024

DEMO

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Sample Boards

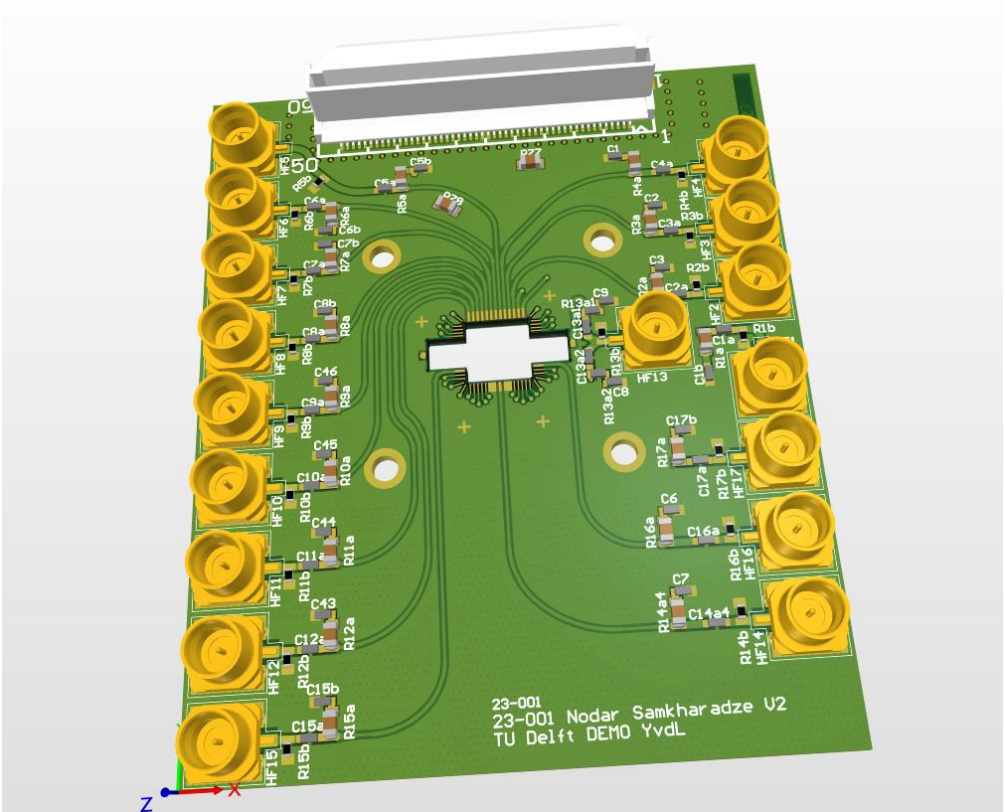
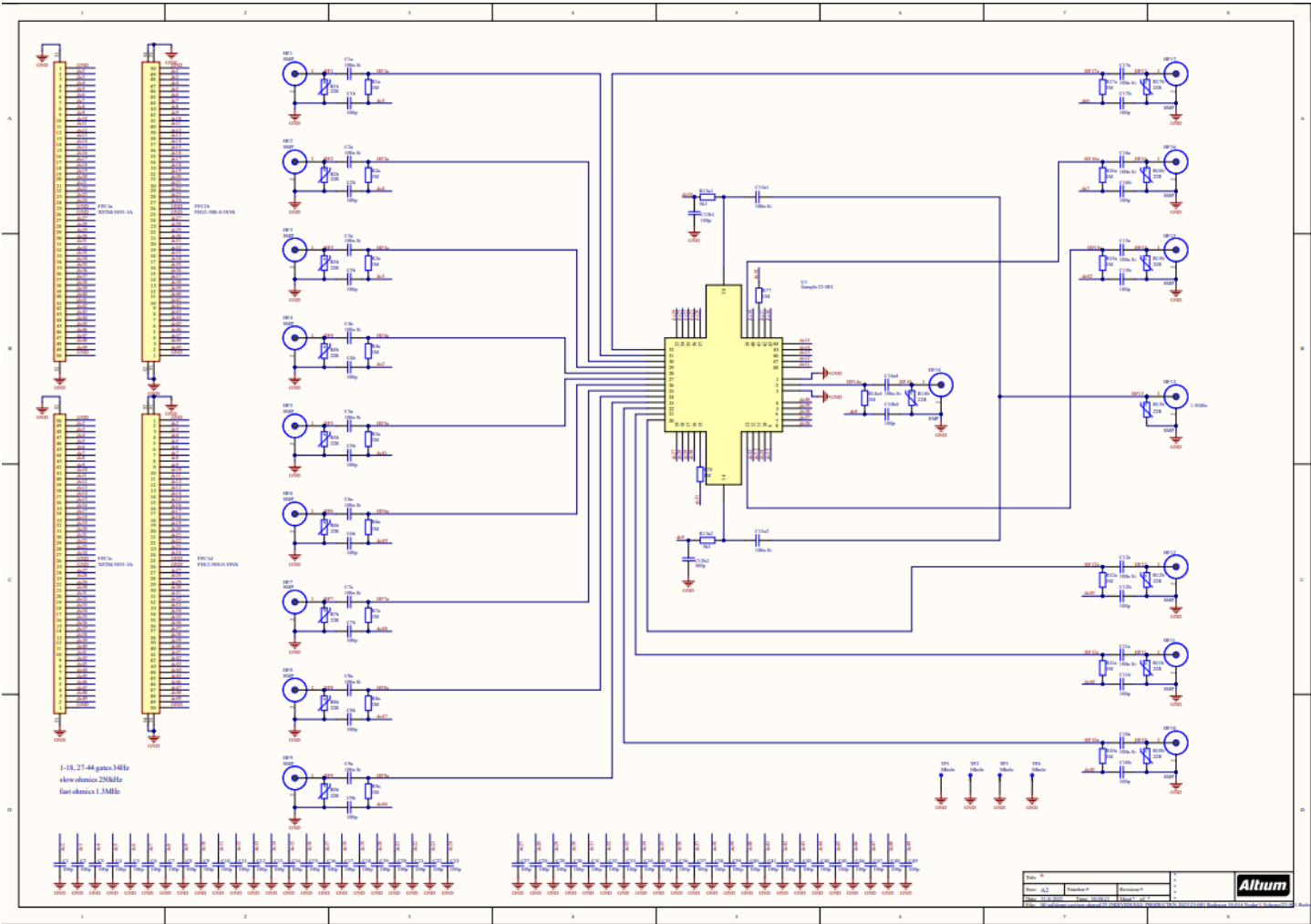
- 23-001 Redesign 18-016 Nodar
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23-001

Redesign 18-016 Nodar

Size (L x W x t) (mm)	56 x 47 x 1.5
Dielectric Material	RO4350B / RO4450F
Z ₀ (Design)	50Ω
Layers	6
Copper Finish	Ni / Au
RF Signals (Input)	16 (with Bias-Tees)
RF Signals (Read-out)	2 (multiplexed)
DC Signals	46
Connector Type (RF)	SMP
Connector Type (DC)	FFC50 Straight / RA

Schematic

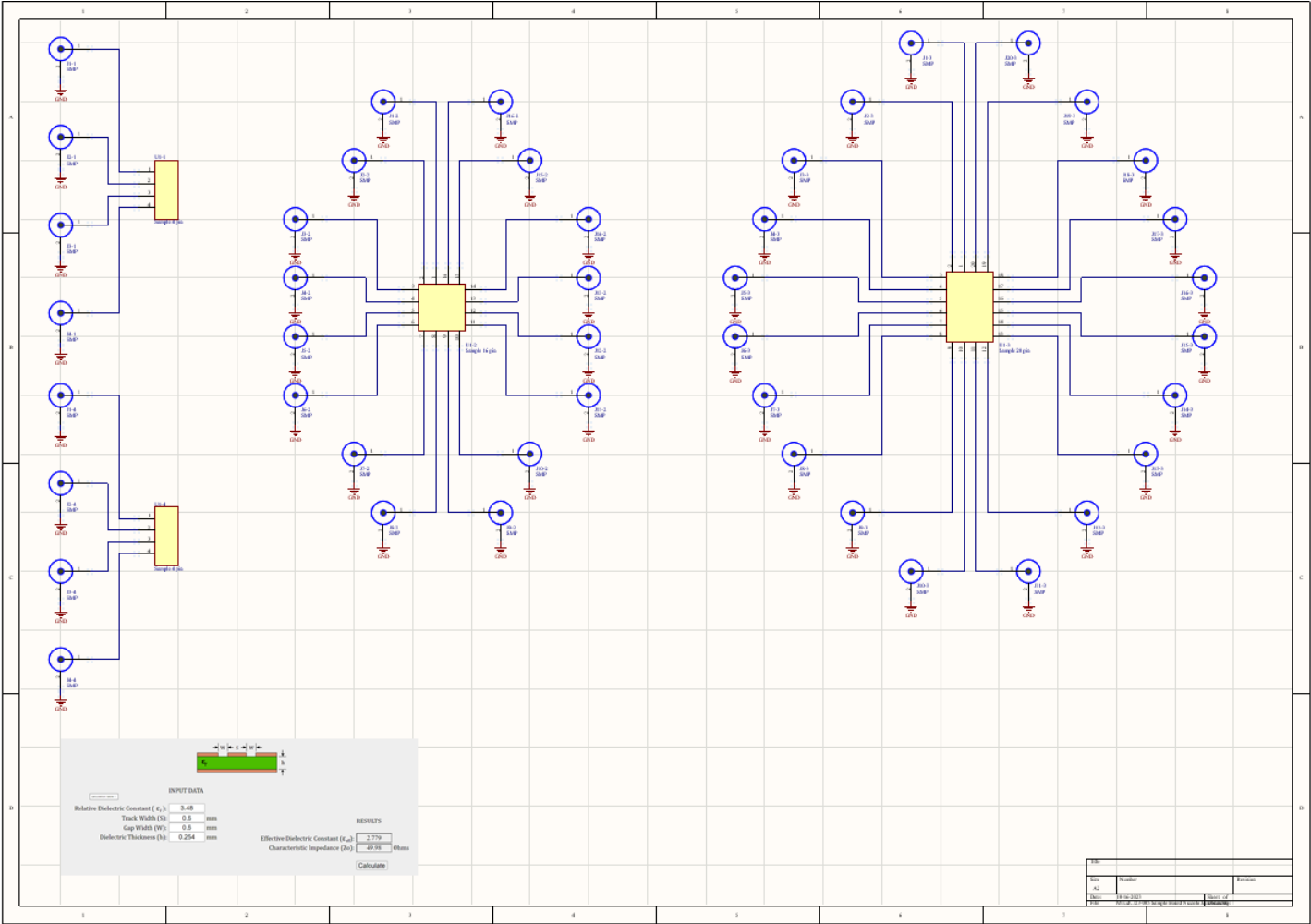


23-005

Sample Board Niccolo Jana

Size (L x W x t) (mm)	23-005-1: 28 x 20.5 x 1.5 23-005-2: 55 x 51 x 1.5 23-005-3: 55 x 52 x 1.5 23-005-4: 27 x 20.5 x 1.5
Dielectric Material	FR4 / RO4350
Zo (Design)	50 ohm
Layers	4
Copper Finish	Ni / Au
RF Signals (Input)	23-005-1: 4 23-005-2: 16 23-005-3: 20 23-005-4: 4
RF Signals (Read-out)	0
DC Signals	0
Connector Type (RF)	SMP
Connector Type (DC)	-

[Schematic](#)

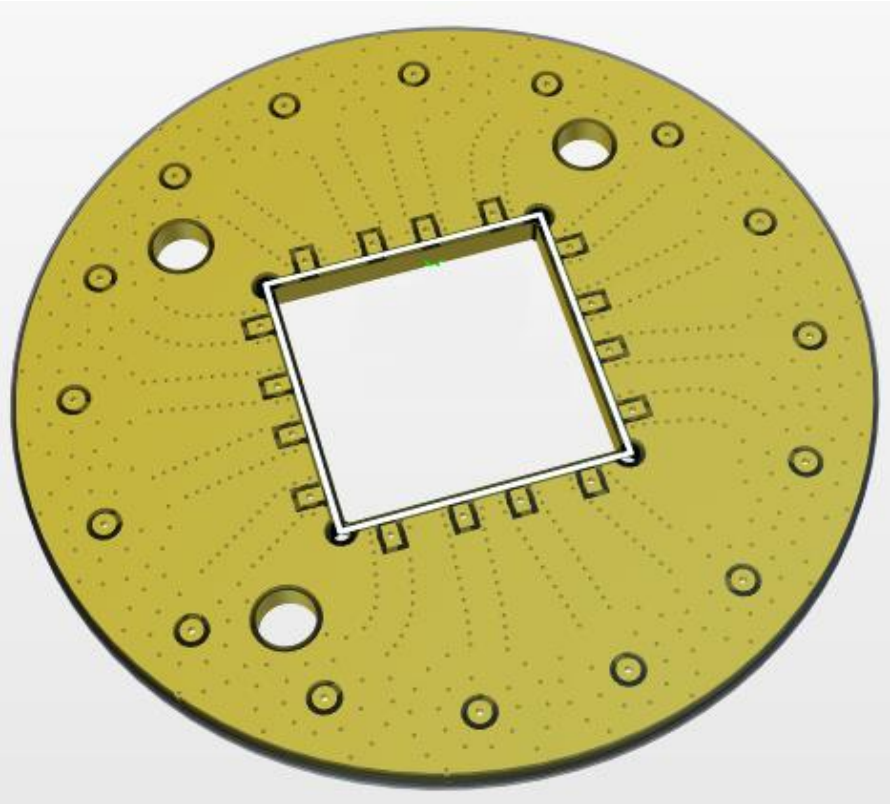
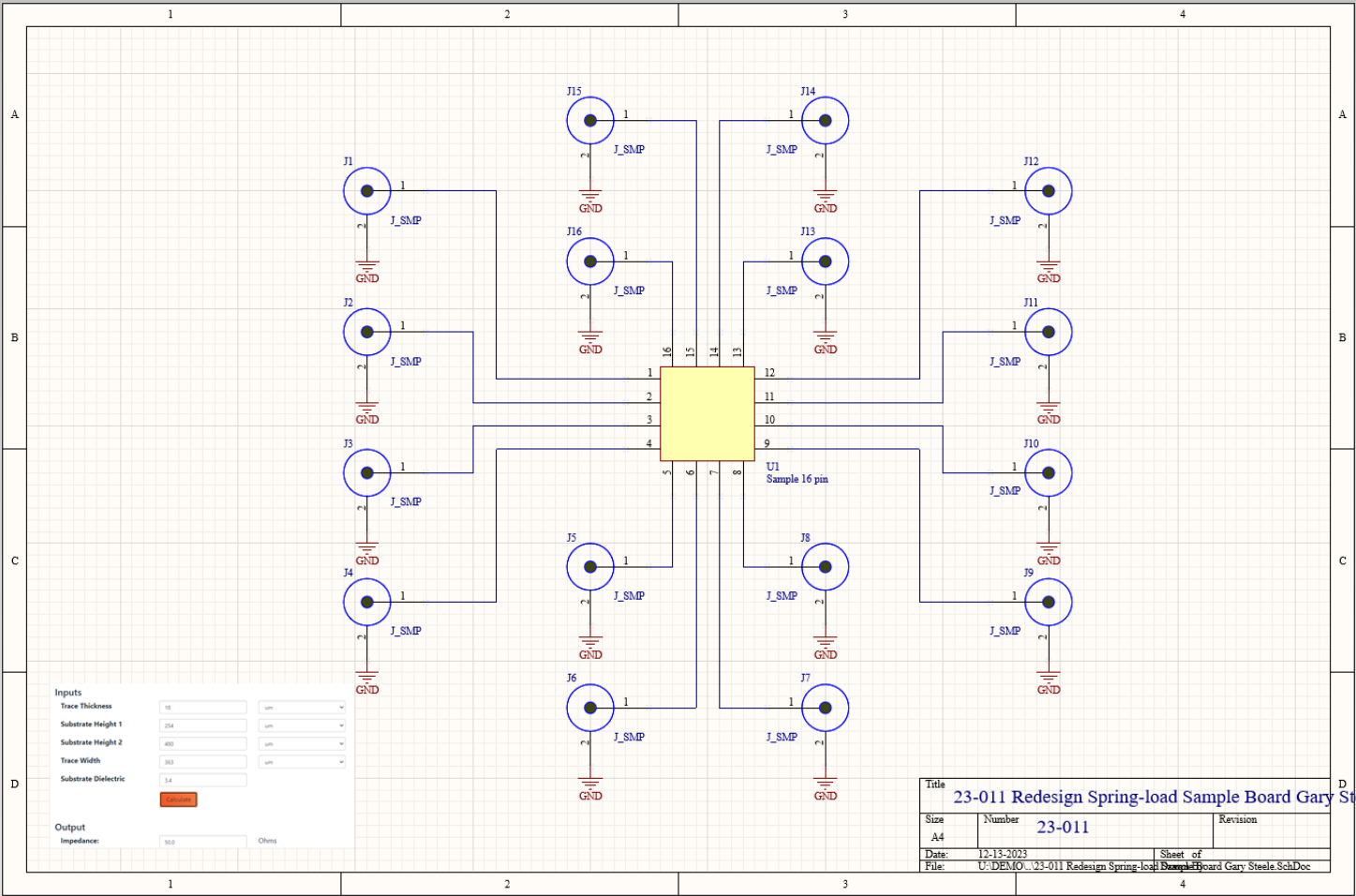


23-011

Redesign Spring-load Sample Board Gary Steele

Size (L x W x t) (mm)	30 x 30 x 1.06
Dielectric Material	RO4350B / RO4450F
Zo (Design)	50Ω
Layers	4
Copper Finish	Ni / Au
RF Signals (Input)	16
RF Signals (Read-out)	0
DC Signals	0
Connector Type (RF)	Spring-load Contact
Connector Type (DC)	-

[Schematic](#)



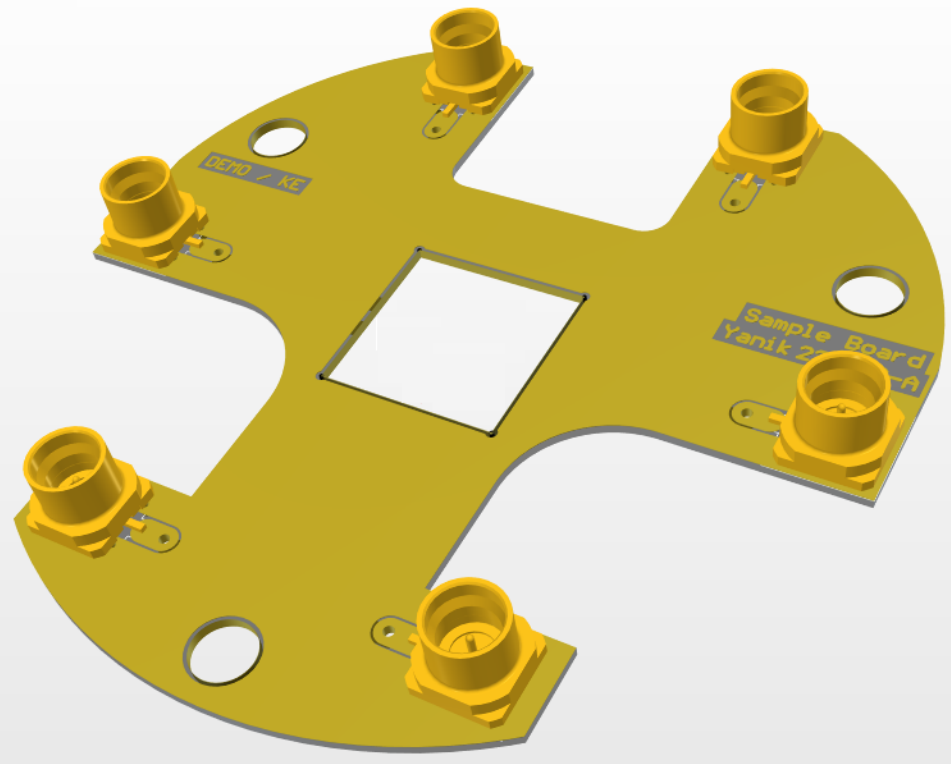
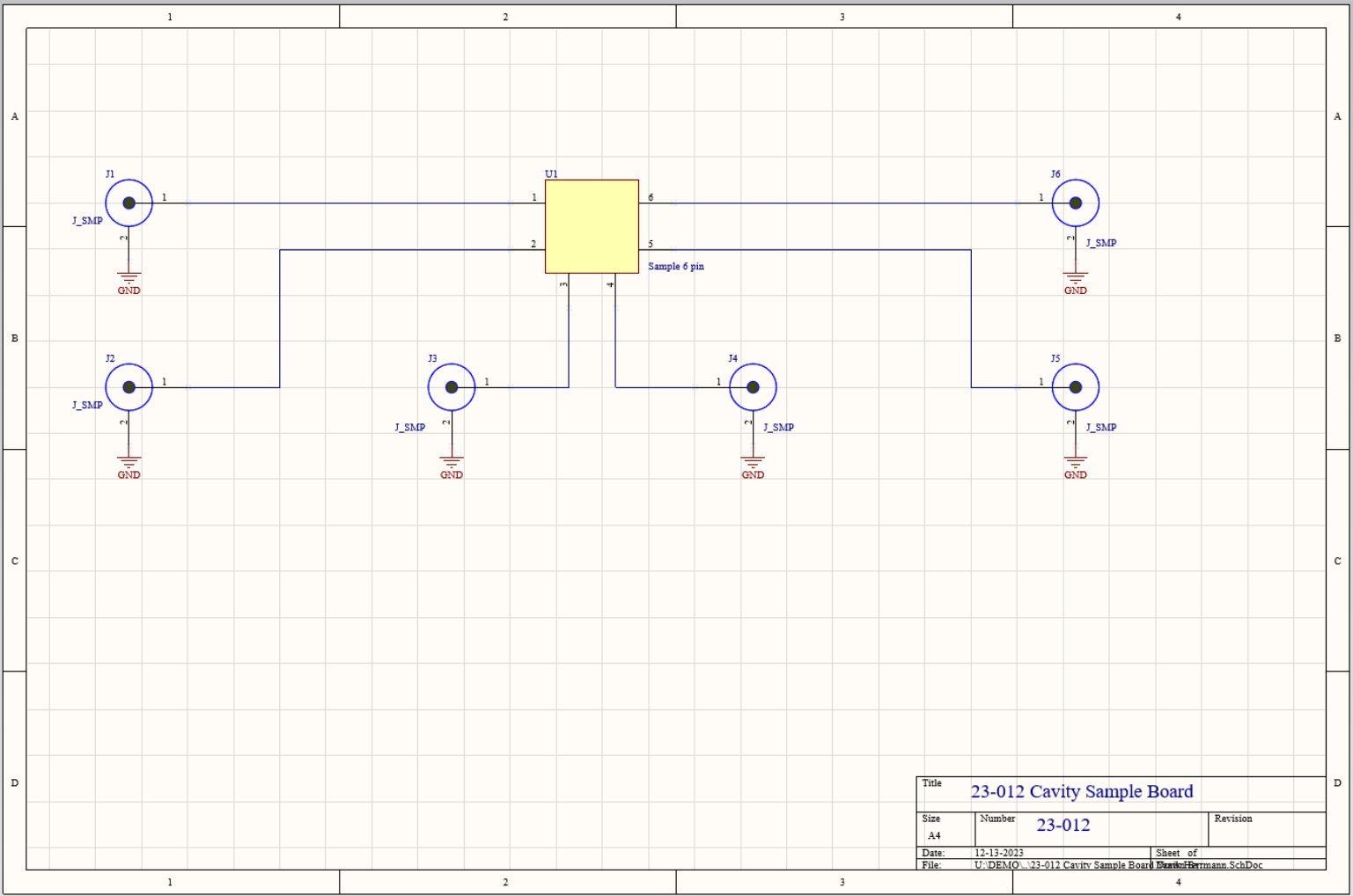
23-012

Cavity Sample Board

Yanik Herrmann

Size (L x W x t) (mm)	47.5 x 48 x 0.5
Dielectric Material	FR4
Z ₀ (Design)	50Ω
Layers	2
Copper Finish	Ni / Au
RF Signals (Input)	6
RF Signals (Read-out)	0
DC Signals	0
Connector Type (RF)	SMP
Connector Type (DC)	-

Schematic



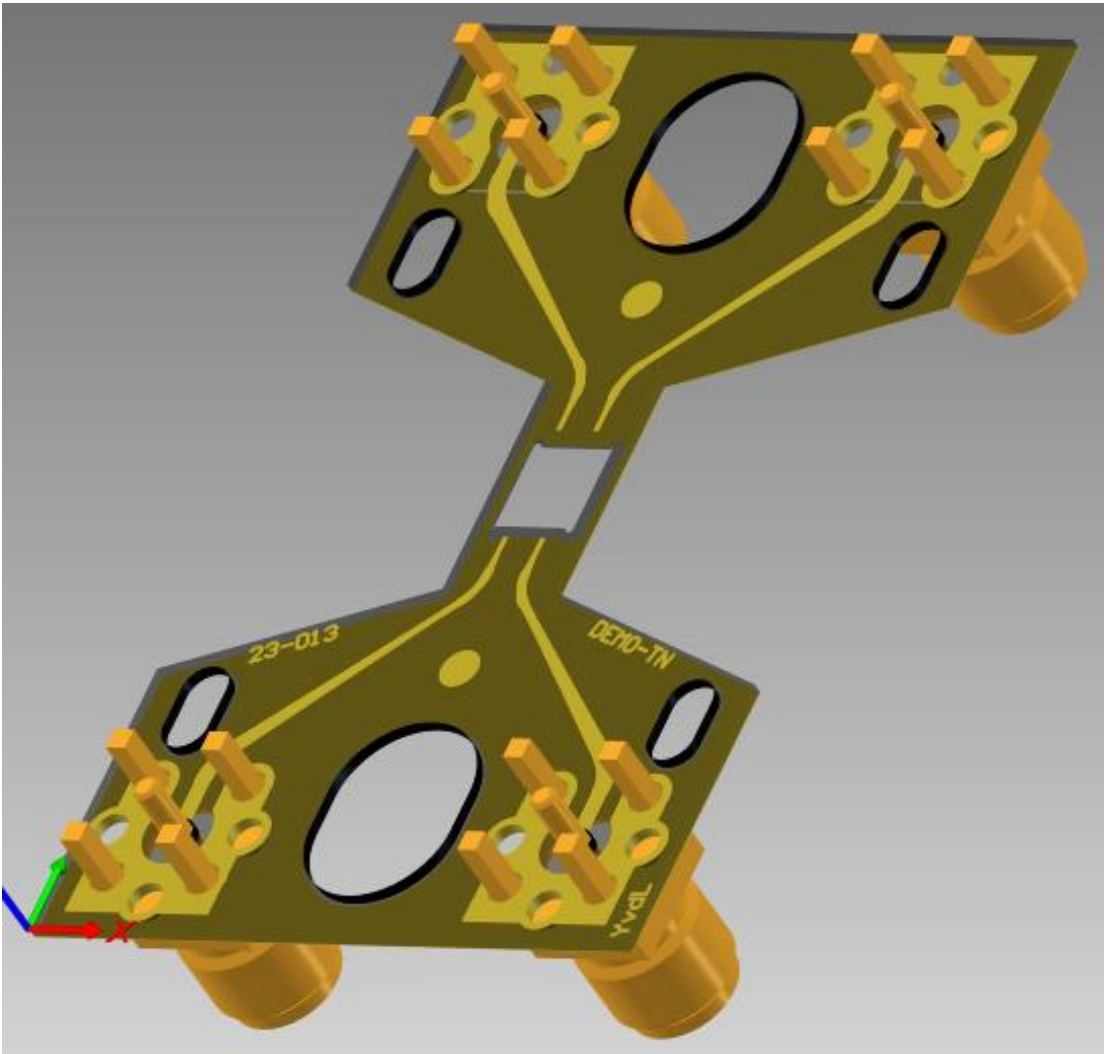
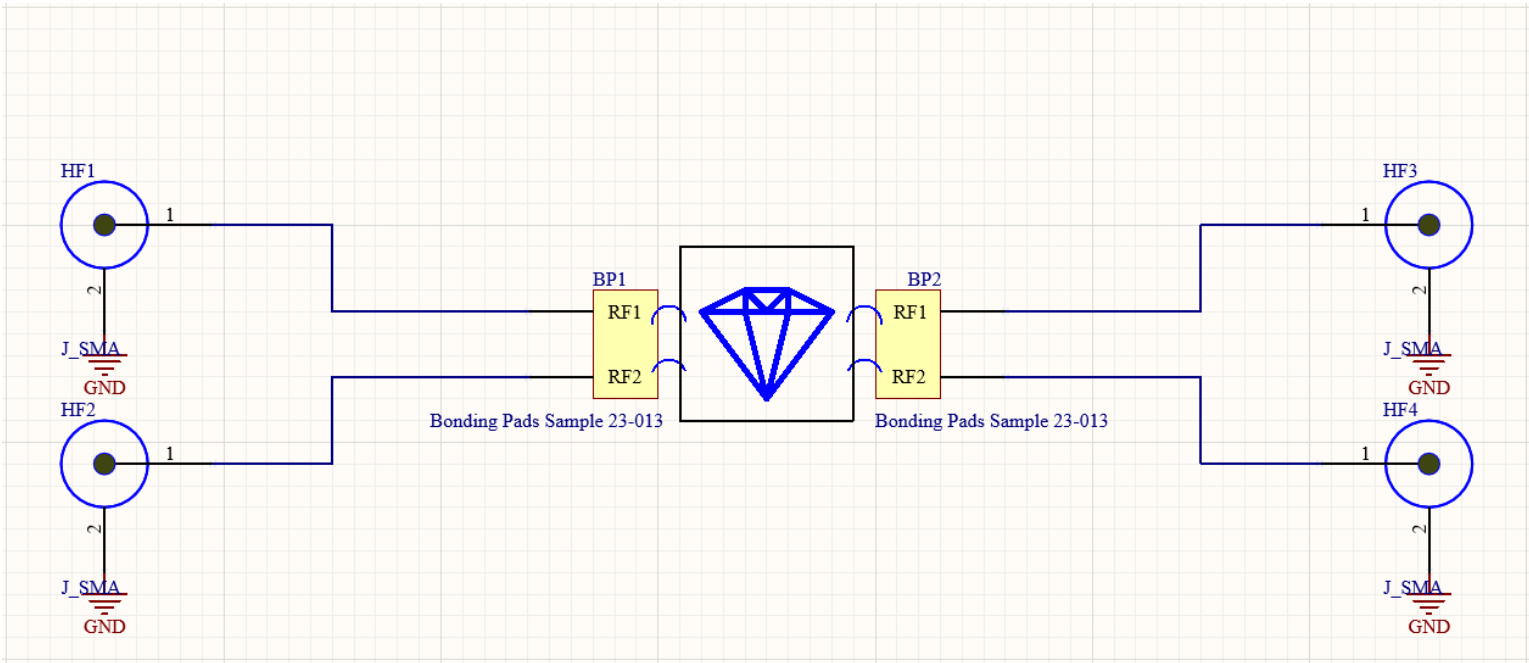
23-013

Redesign 22-004

Christopher Waas

Size (L x W x t) (mm)	49.6 x 32 x 0.5
Dielectric Material	Isola I-Tera MT40
Zo (Design)	50Ω Tapered to 100Ω
Layers	2
Copper Finish	Ni / Au
RF Signals (Input)	4
RF Signals (Read-out)	0
DC Signals	0
Connector Type (RF)	SMA
Connector Type (DC)	-

Schematic



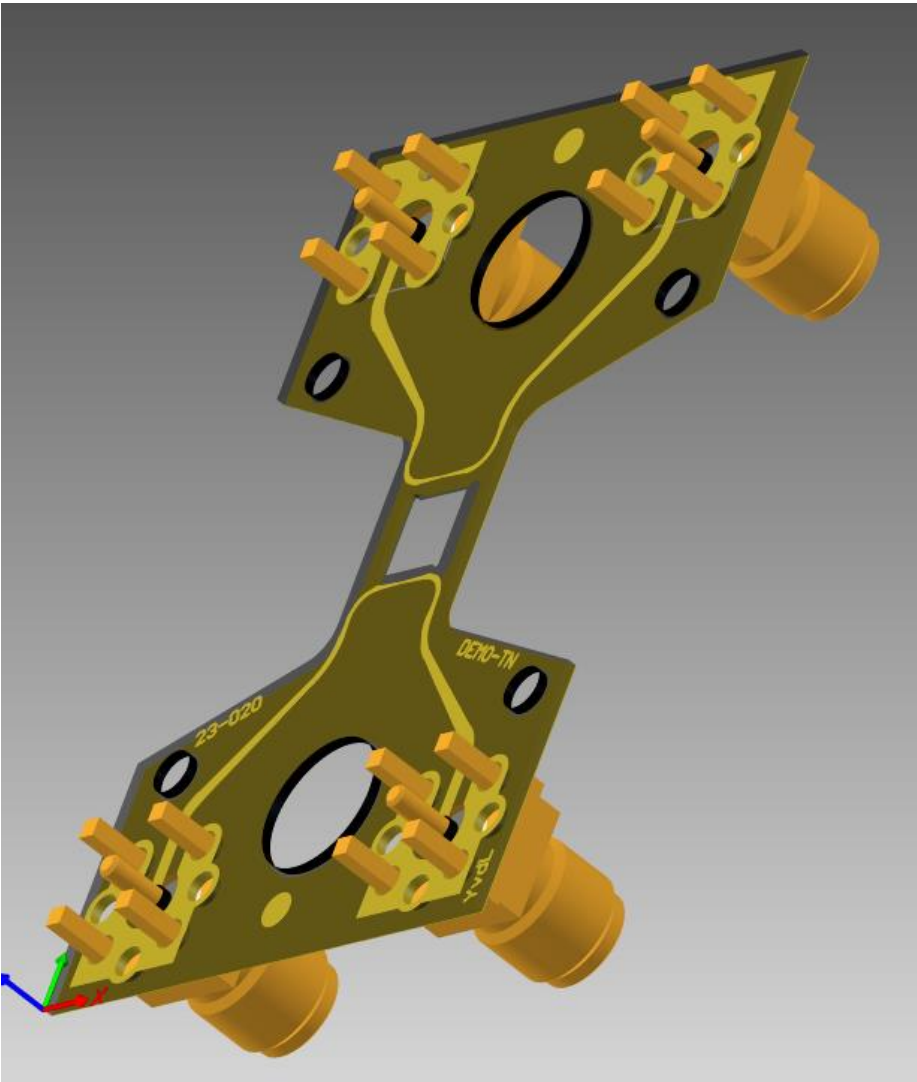
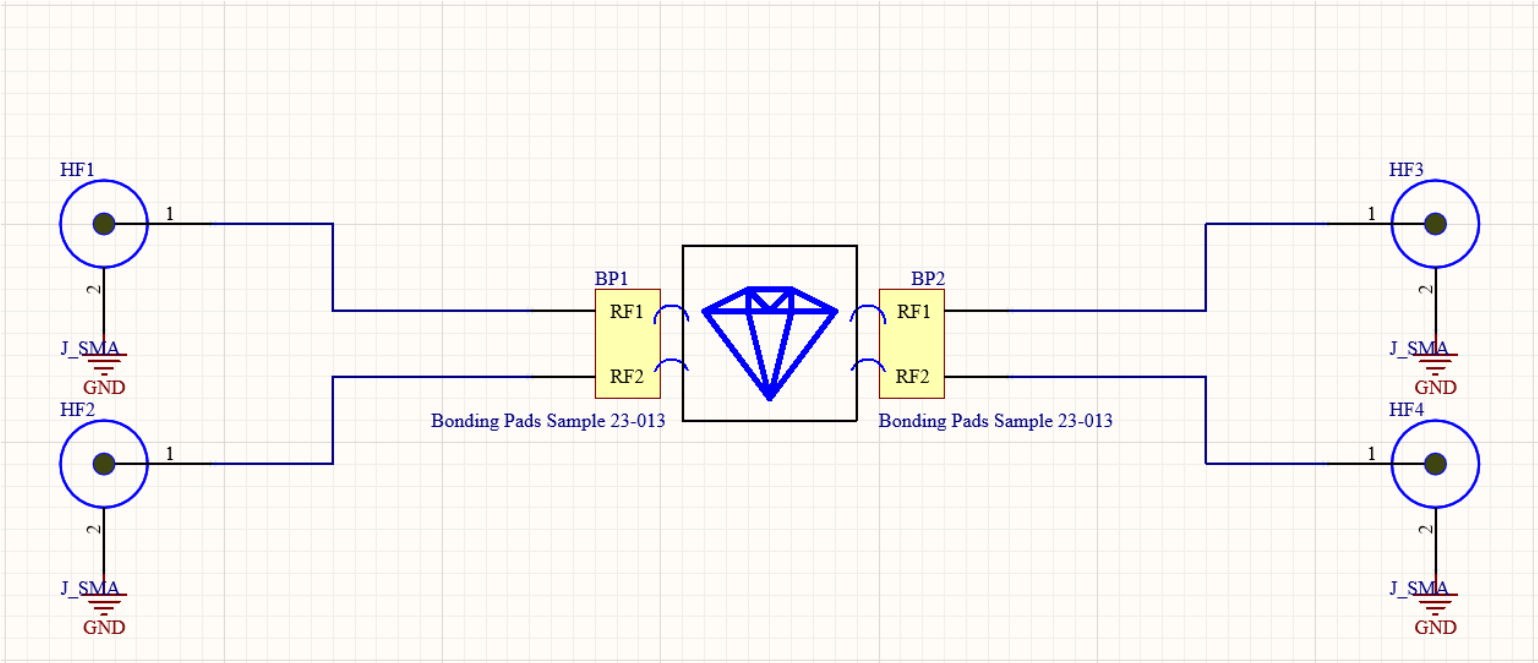
23-020

Redesign 23-013

Christopher Waas

Size (L x W x t) (mm)	49.6 x 32 x 0.5
Dielectric Material	Isola I-Tera MT40
Zo (Design)	50Ω Tapered to 100Ω
Layers	2
Copper Finish	Ni / Au
RF Signals (Input)	4
RF Signals (Read-out)	0
DC Signals	0
Connector Type (RF)	SMA
Connector Type (DC)	-

[Schematic](#)



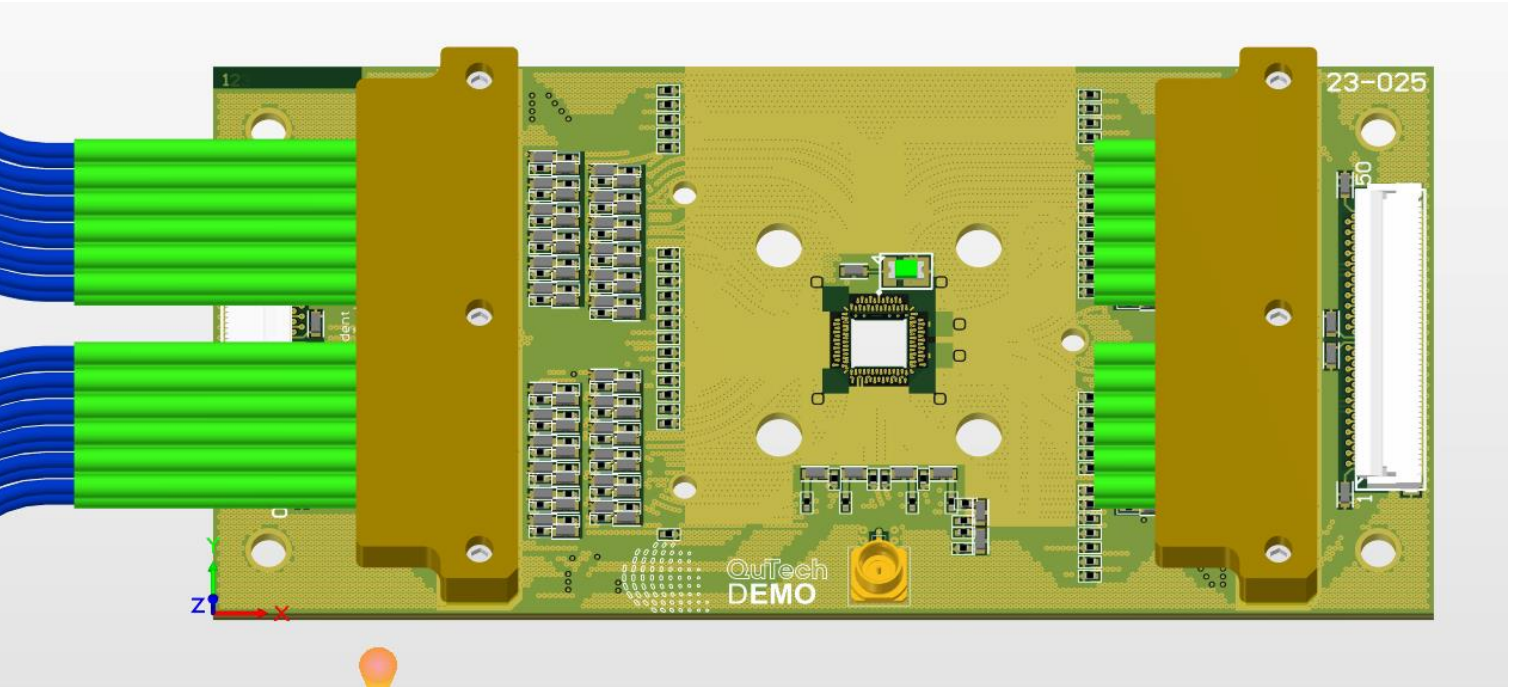
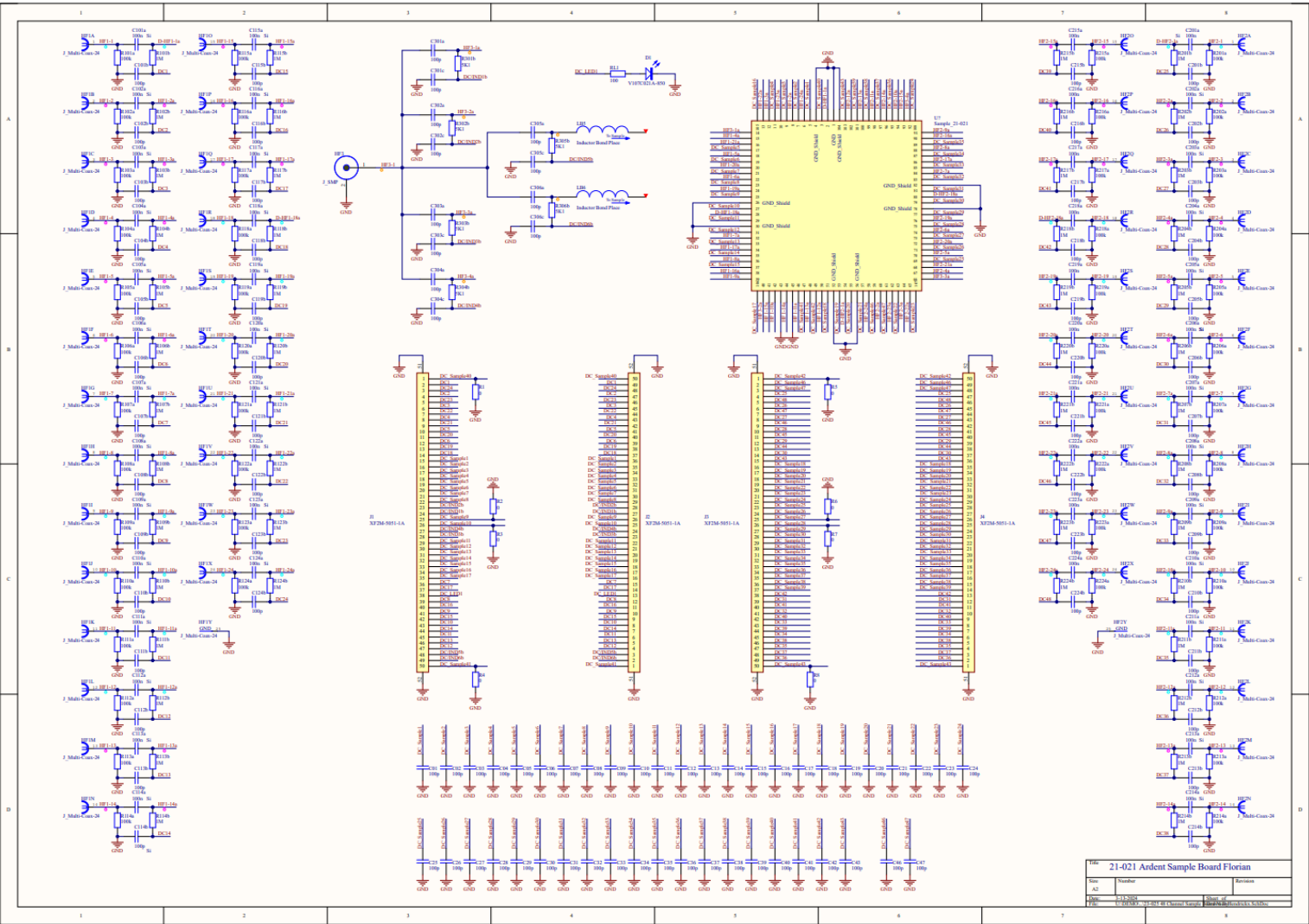
23-025

48 Channel Sample Board

Nico Hendrickx

Size (L x W x t) (mm)	52 x 110 x 1.8
Dielectric Material	Megtron 6 5775(N) Megtron 6 1027 / 1078
Z ₀ (Design)	50Ω
Layers	12
Copper Finish	Ni / Au
RF Signals (Input)	48 (with Bias-Tees)
RF Signals (Read-out)	6 (Multiplexed)
DC Signals	96
Connector Type (RF)	SMP (Read-Out) Ardent 24 Ch. (Input)
Connector Type (DC)	FFC50

[Schematic](#)



Filter & Interface Boards

Filter Boards

- -

Interface Boards

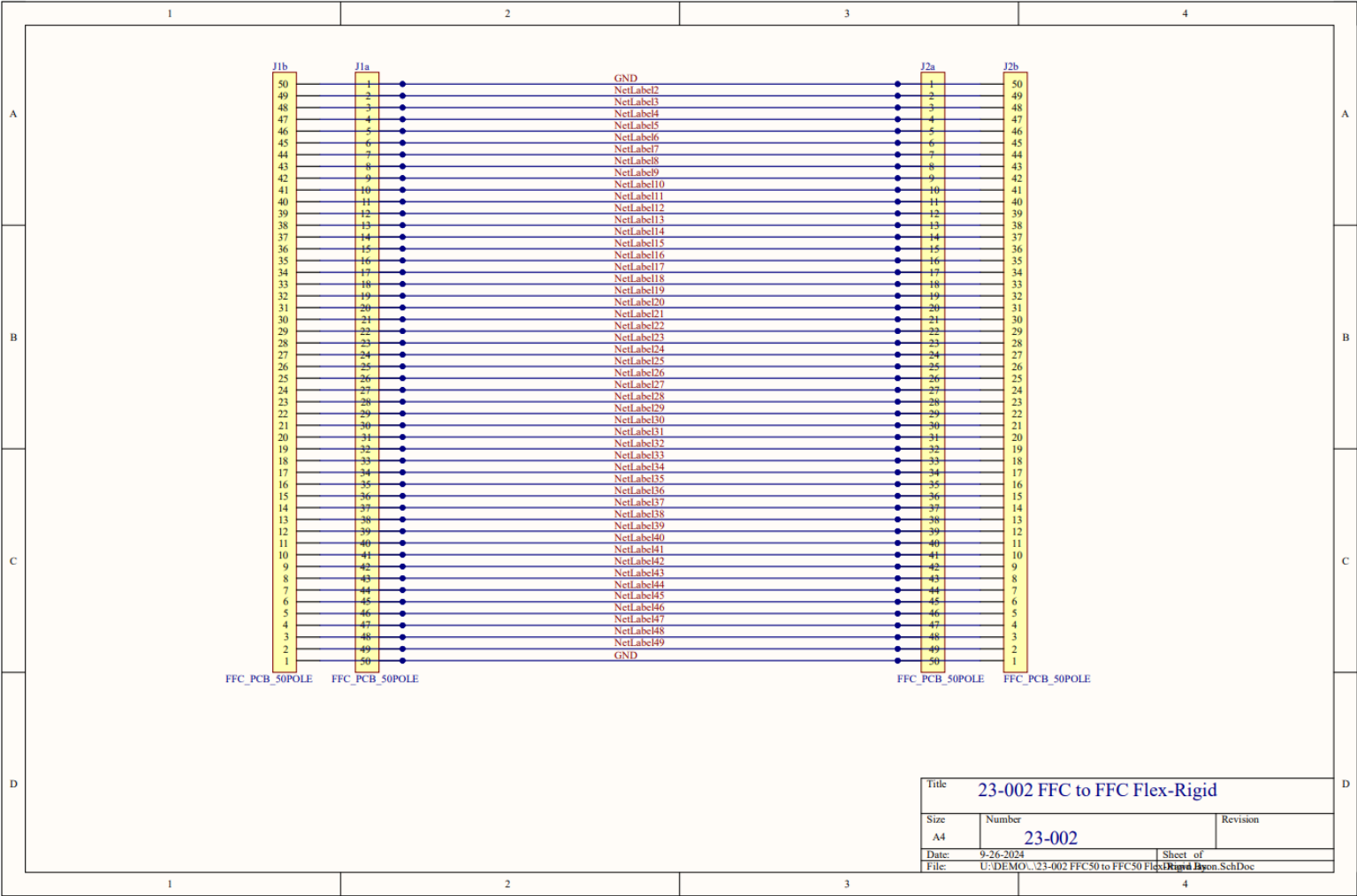
- 23-002 FFC50 to FFC50 Flex-Rigid Jason
- 23-004 4uD24 Female to 2xFFC50 Corentin
- 23-010 Redesign FFC50 to FFC50 Flex-Rigid Francesco
- 23-021 GND Adaptor FFC50 to FFC50 Flex-Rigid Davide
- 23-024 FFC50 to FFC50 1500mm Flex-rigid

23-002

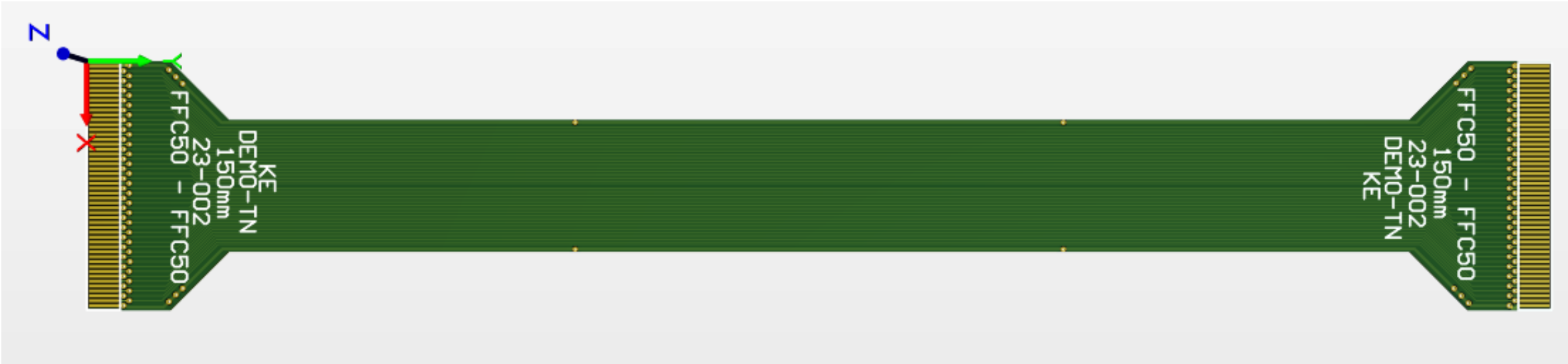
FFC50 to FFC50 Flex-Rigid

Jason

Board Type	Flex Interface 1/50 GND
Size (L x W x t) (mm)	Type 1: 100 x 25.5 x 0.15 Type 2: 120 x 25.5 x 0.15 Type 3: 150 x 25.5 x 0.15 Type 4: 200 x 25.5 x 0.15 Type 5: 225 x 25.5 x 0.15 Type 6: 250 x 25.5 x 0.15 Type 7: 300 x 25.5 x 0.15 Type 8: 400 x 25.5 x 0.15
Material	Polyimide
Layers	2
Copper Finish	Ni / Au
Connector Type	FFC50



Schematic

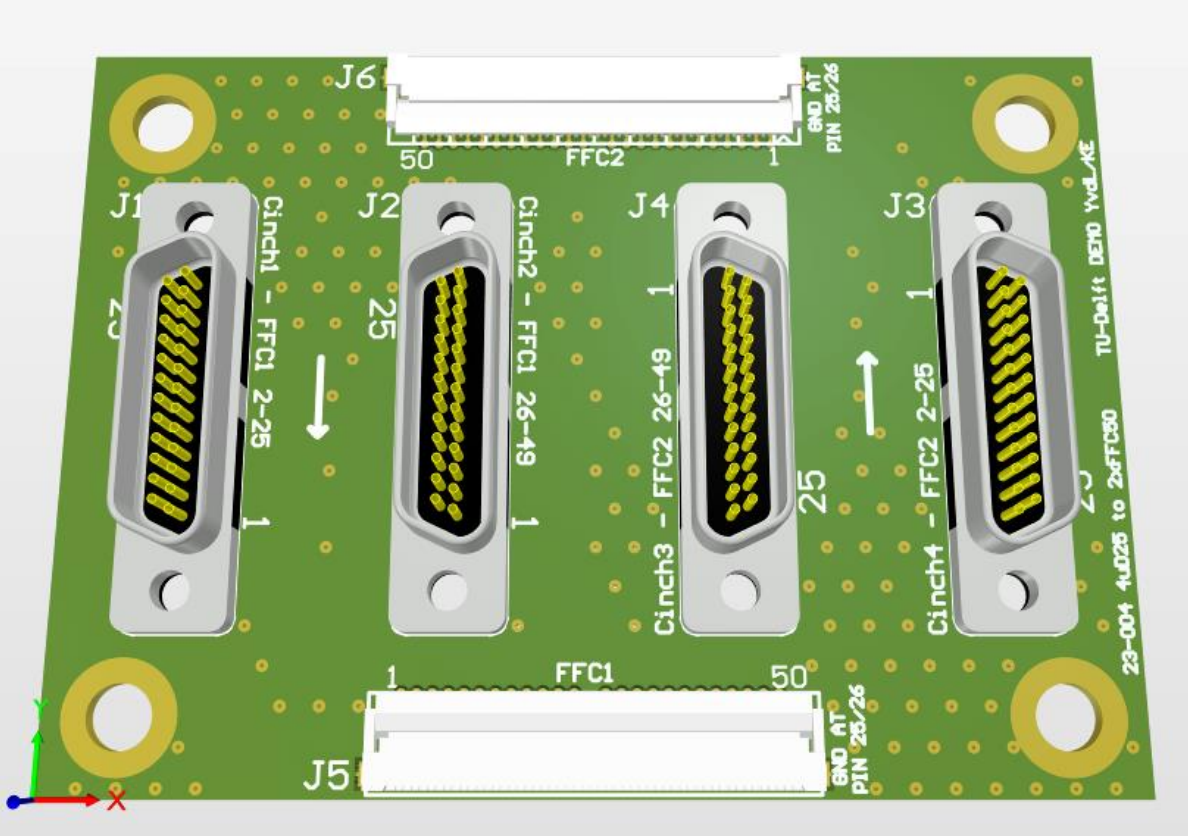
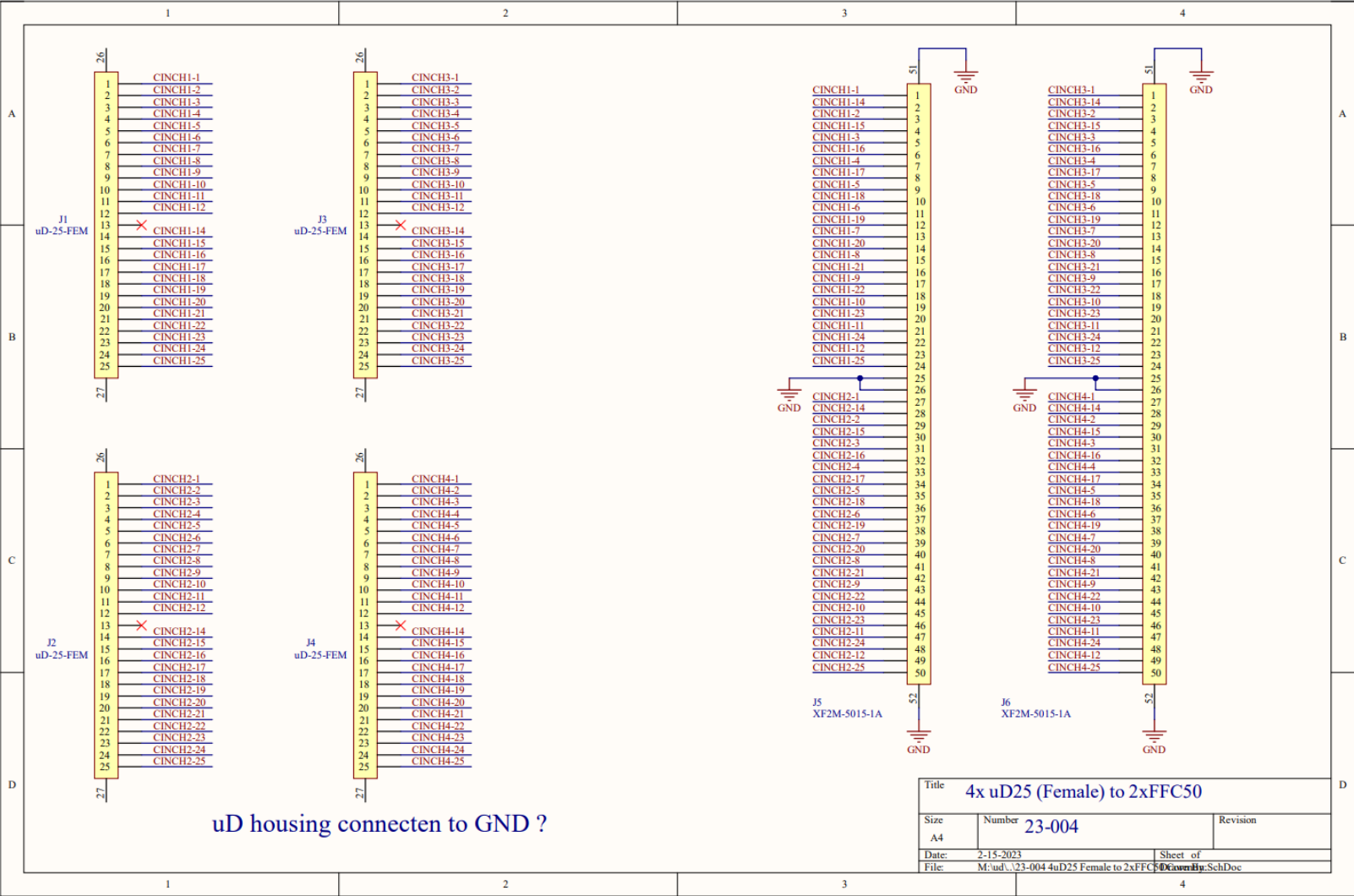


23-004

4uD24 Female to 2xFFC50

Corentin

Board Type	uD to FFC Adaptor Interface
Size (L x W x t) (mm)	50 x 70 x 1.6
Material	FR4
Layers	4
Copper Finish	Ni / Au
Connector Type	FFC50 RA Micro-D 25 pins Female



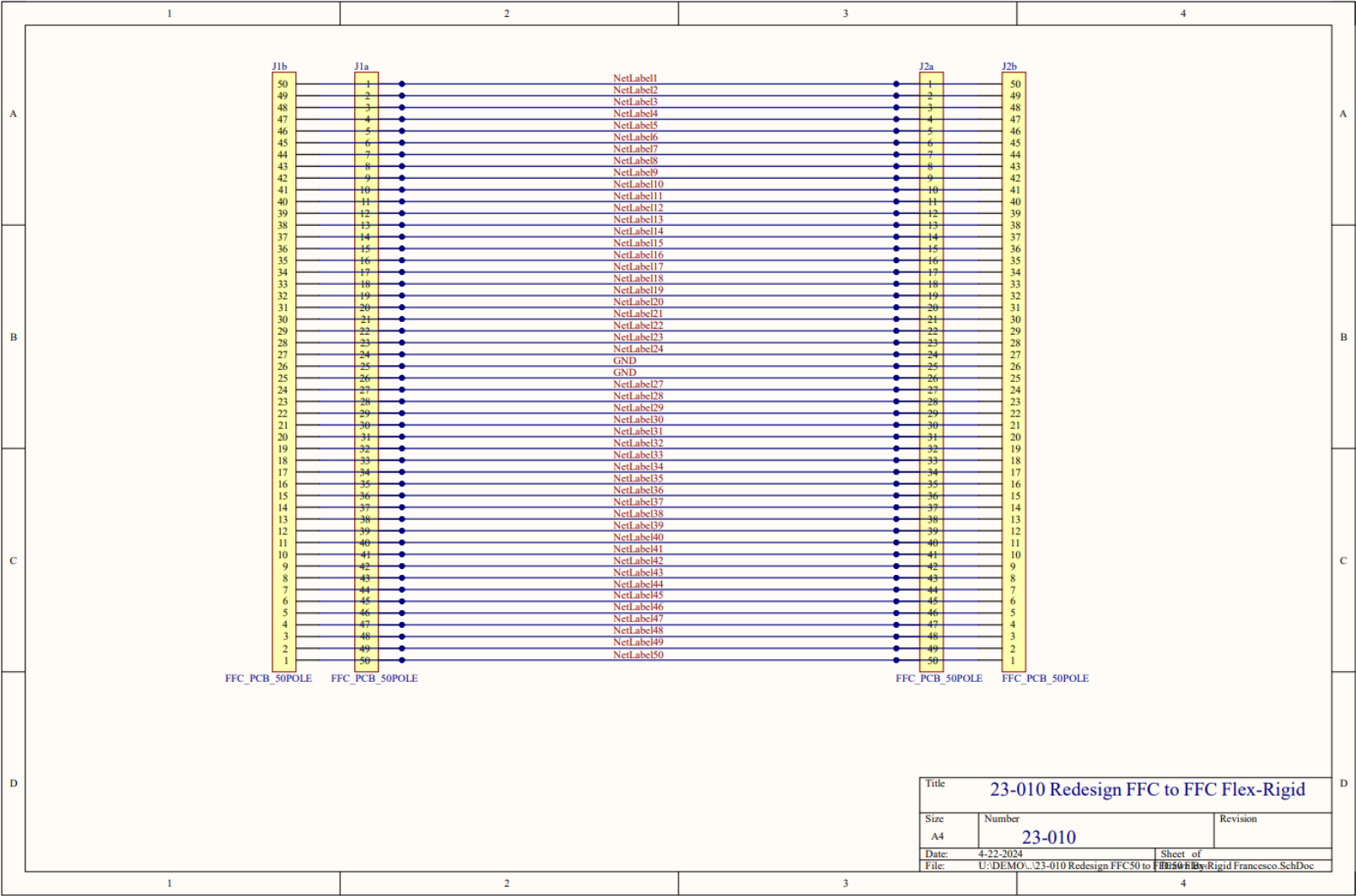
[Schematic](#)

23-010

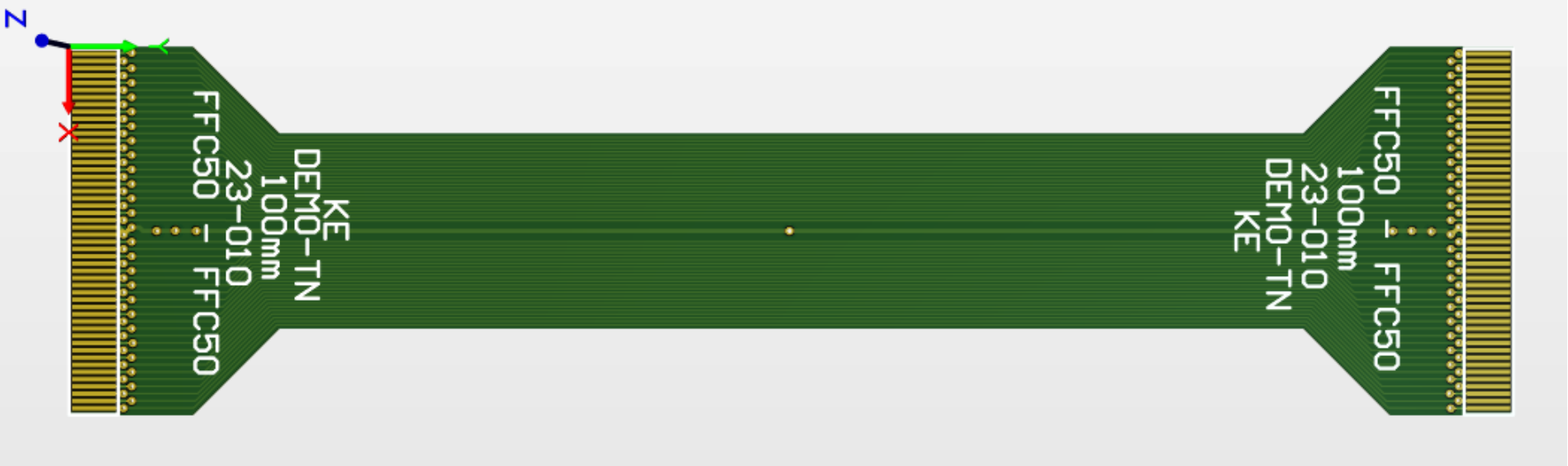
Redesign FFC50 to FFC50

Flex-Rigid Francesco

Board Type	Flex Interface 25/26 GND
Size (L x W x t) (mm)	Type 1: 50 x 25.5 x 0.15 Type 2: 100 x 25.5 x 0.15 Type 3: 120 x 25.5 x 0.15 Type 4: 150 x 25.5 x 0.15 Type 5: 200 x 25.5 x 0.15 Type 6: 225 x 25.5 x 0.15 Type 7: 250 x 25.5 x 0.15 Type 8: 300 x 25.5 x 0.15 Type 9: 400 x 25.5 x 0.15
Material	Polyimide
Layers	2
Copper Finish	Ni / Au
Connector Type	FFC50



Title 23-010 Redesign FFC to FFC Flex-Rigid		
Size A4	Number 23-010	Revision
Date: 4-22-2024	Sheet of 10	
File: U:\DEMO\23-010 Redesign FFC50 to FFC50 Flex-Rigid Francesco.SchDoc		



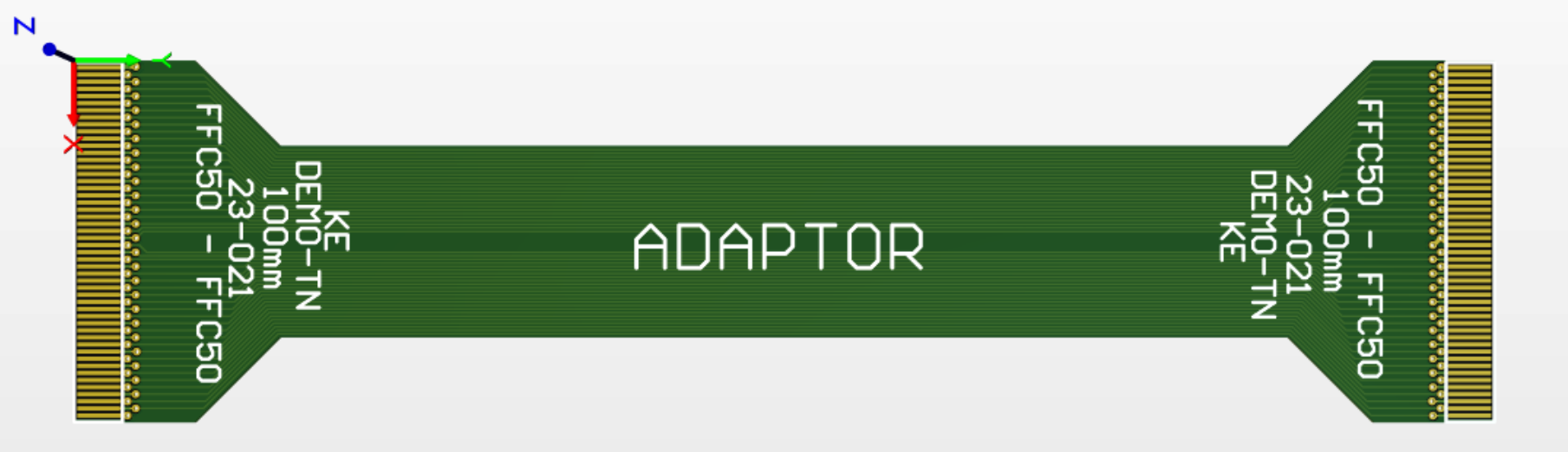
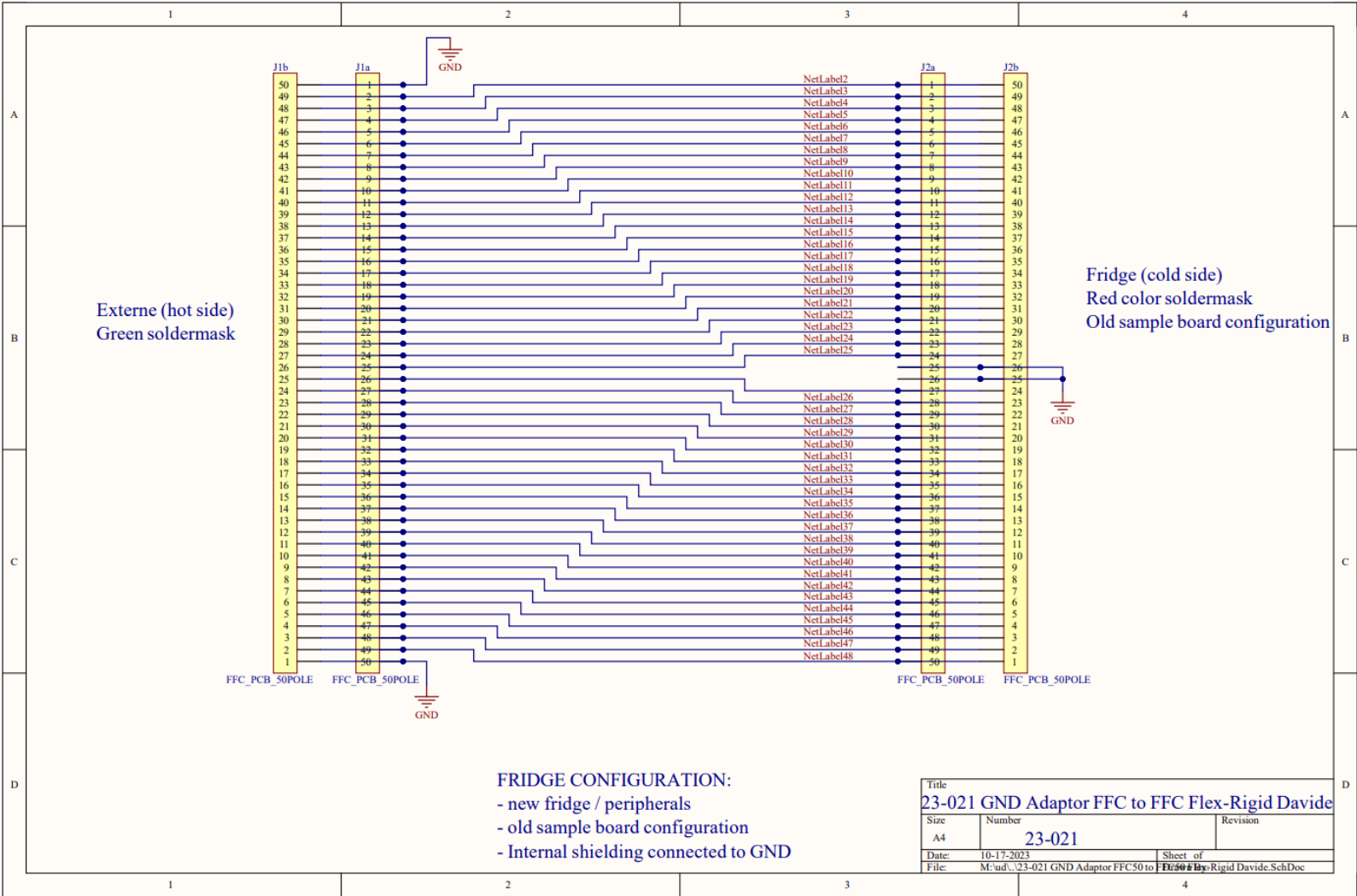
Schematic

23-021

GND Adaptor FFC50 to FFC50

Flex-Rigid Davide

Board Type	Flex Adaptor Interface 1/50 to 25/26 GND
Size (L x W x t) (mm)	Type 1: 50 x 25.5 x 0.15 Type 2: 100 x 25.5 x 0.15 Type 3: 120 x 25.5 x 0.15 Type 4: 150 x 25.5 x 0.15 Type 5: 200 x 25.5 x 0.15 Type 6: 225 x 25.5 x 0.15 Type 7: 250 x 25.5 x 0.15 Type 8: 300 x 25.5 x 0.15 Type 9: 400 x 25.5 x 0.15
Material	Polyimide / FR4
Layers	2 (Flex) 4 (Rigid)
Copper Finish	Ni / Au
Connector Type	FFC50



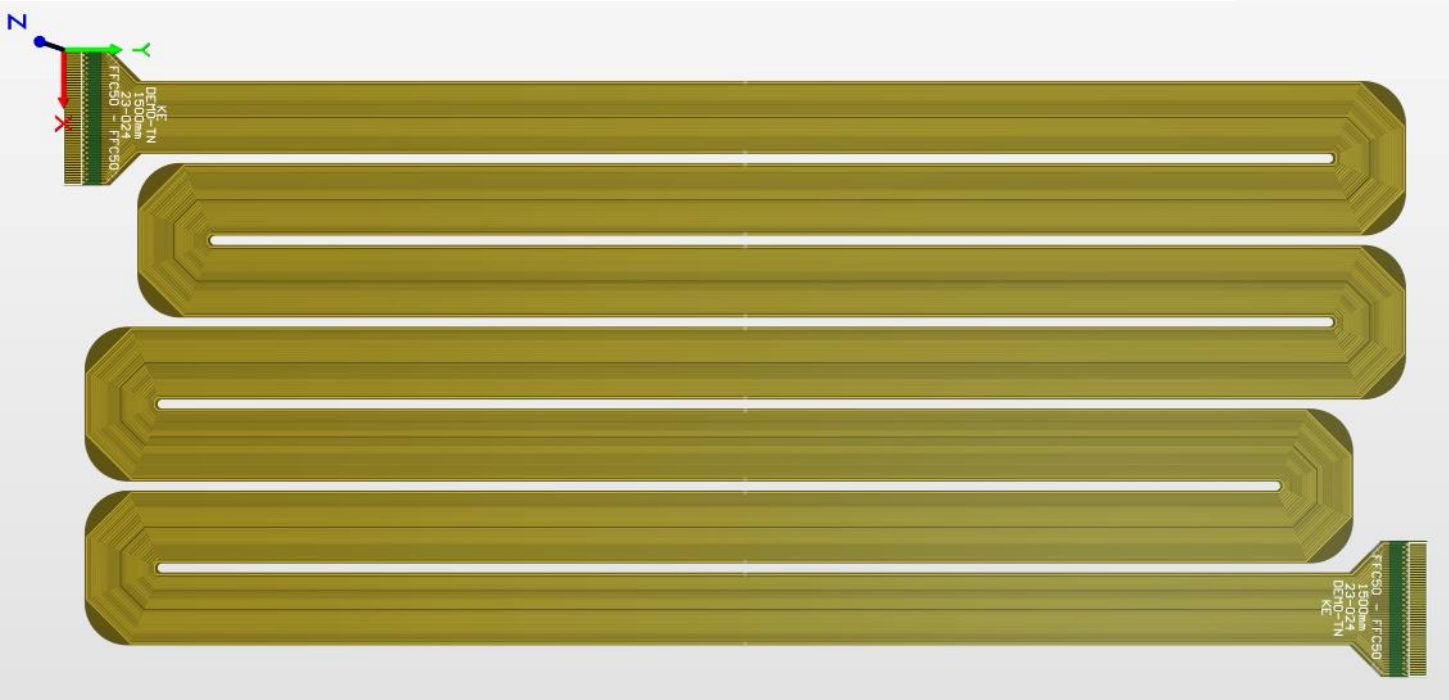
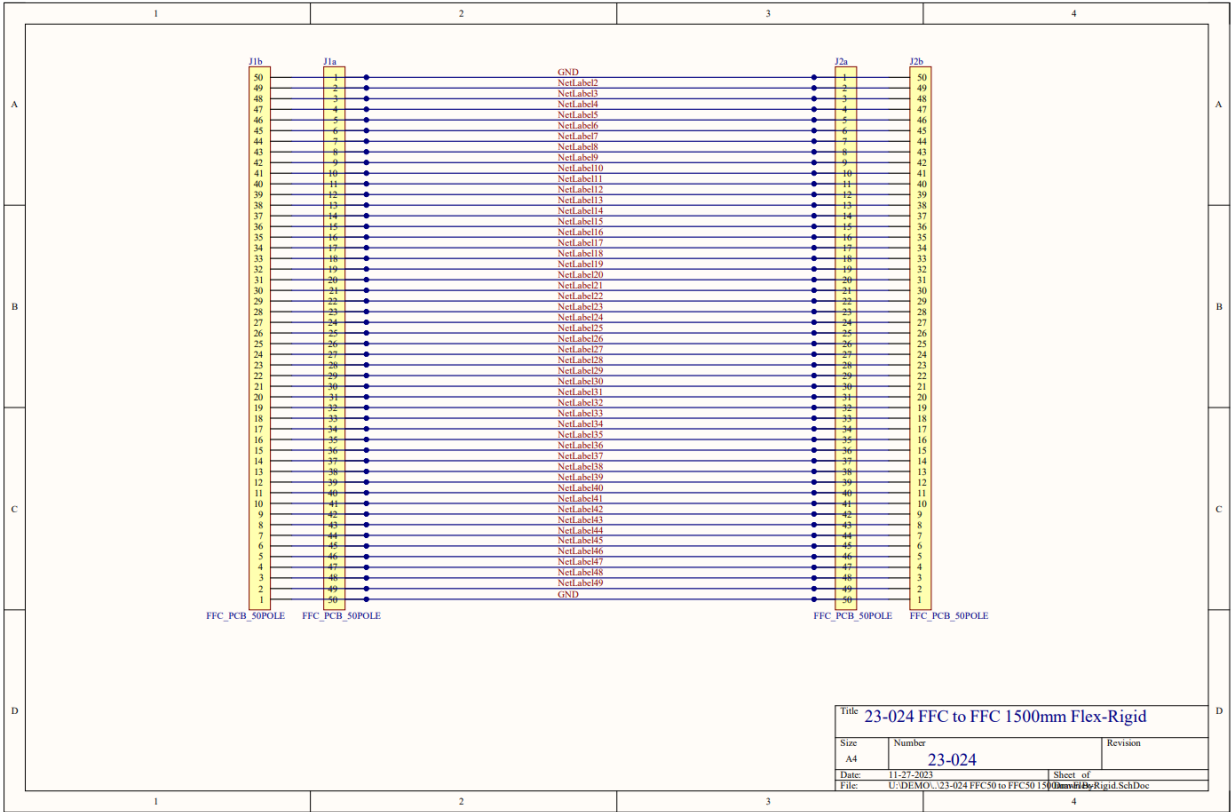
Schematic

23-024

FFC50 to FFC50 1500mm

Flex-rigid

Board Type	Flex-Rigid Interface 1/50 GND
Size (L x W x t) (mm)	1500 x 25.5 x 0.15
Material	Polyimide / FR4
Layers	2 (Flex) 4 (Rigid)
Copper Finish	Ni / Au
Connector Type	FFC50



[Schematic](#)