VC1902-PA-VSVD1760
VC1802-PA-VSVD1760
VM1302-PA-VSVD1760
VM1402-PA-VSVD1760
VM1802-PA-VSVD1760

LOADSLAMMER
TRUST AND VERIFY

Passive Adaptors to test power delivery network to Versal ACAP AI-VSVD1760 series FPGAs

ProGrAnalog Corp.
04/7/2023
Rev 2.0

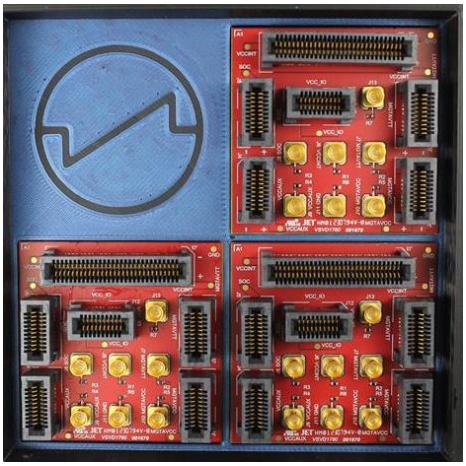
Features

- Set of 3 Passive Adaptors (PA) for PDN testing AMD Xilinx Versal ACAP AI VSVD1760 series FPGAs
- Options available for VC1902, VC1802, VM1302, VM1402, VM1802
- 6 Samtec connectors to slam: VCCINT, VCC_IO, VCC_SOC, VGTY_AVTT, VCCAUX, AVCC
- 7 SMP connectors for measuring: GND, VCCINT, VCC_IO, VCC_SOC, VGTY_AVTT, VCCAUX, AVCC
- PA with BGA footprint reflows onto VSVD1760 PCB pads.
- Remote Vsense on Samtec connectors and SMP mini connectors.
- Most rails can be tested with an LSP200 controller.
- VCCINT >100A support with an LSP1000RS controller.
- GUI supports transient, pulse train, impedance and 3D plots.

Typical Test Setup

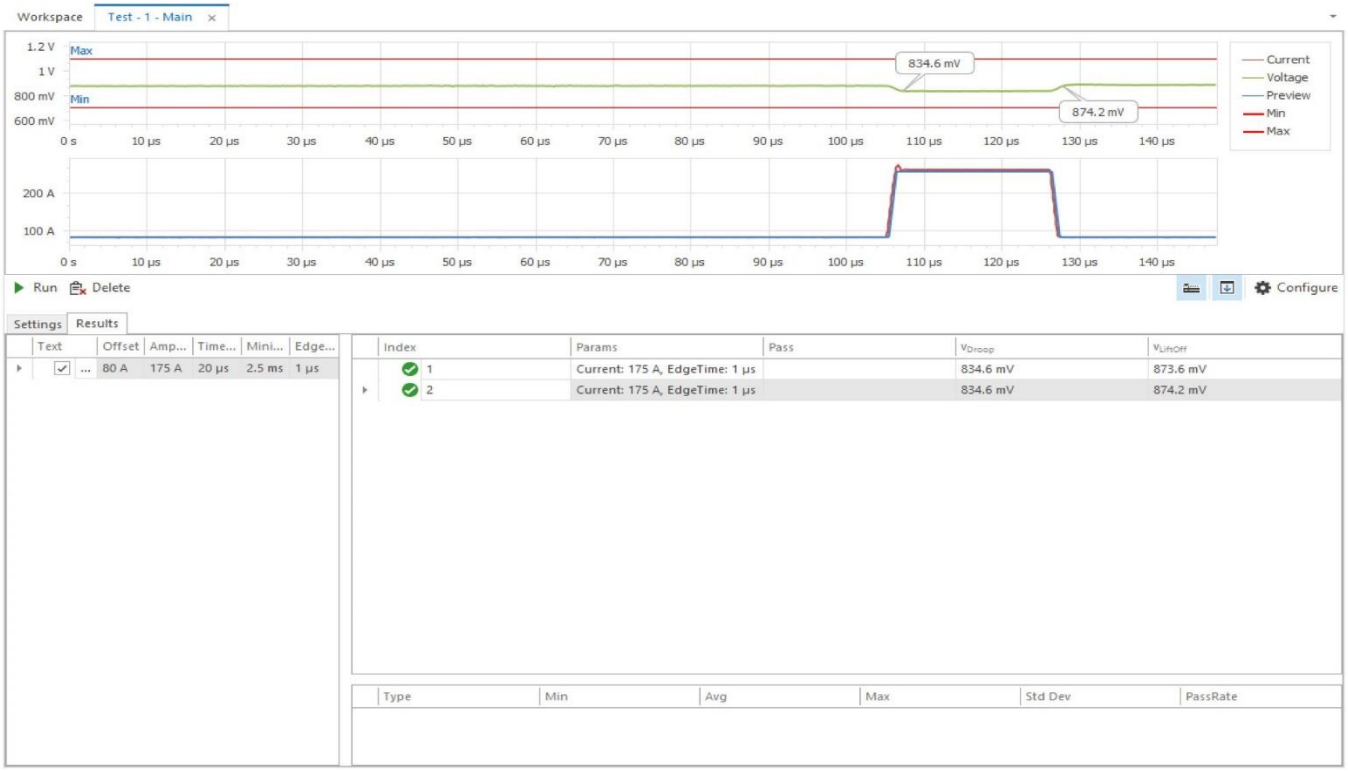
Passive Adaptor reflowed onto the test board.
LSP1000RS connected into VCCINT connector.

Pack of 3 -VSVD1760 Series PA's

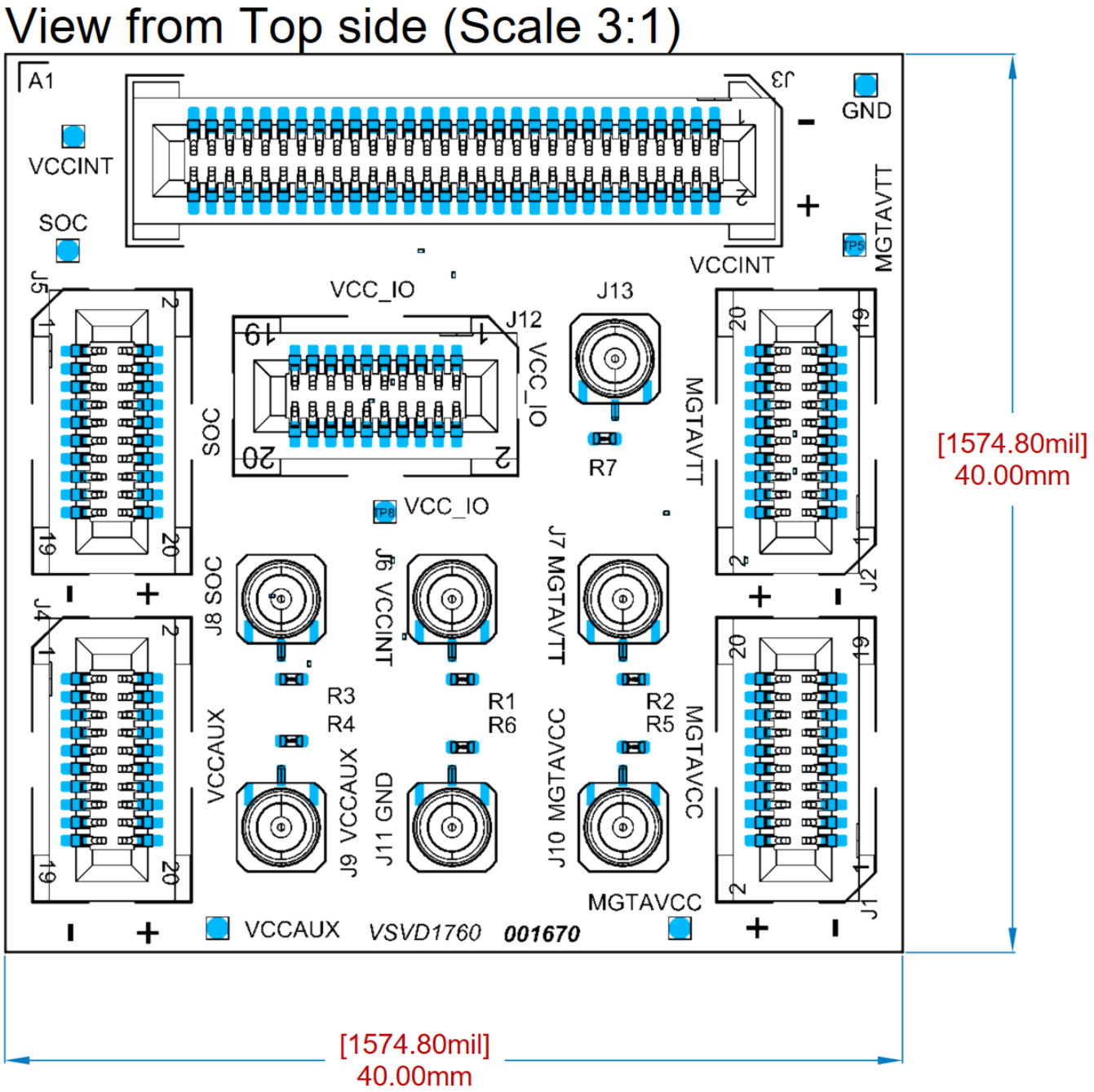


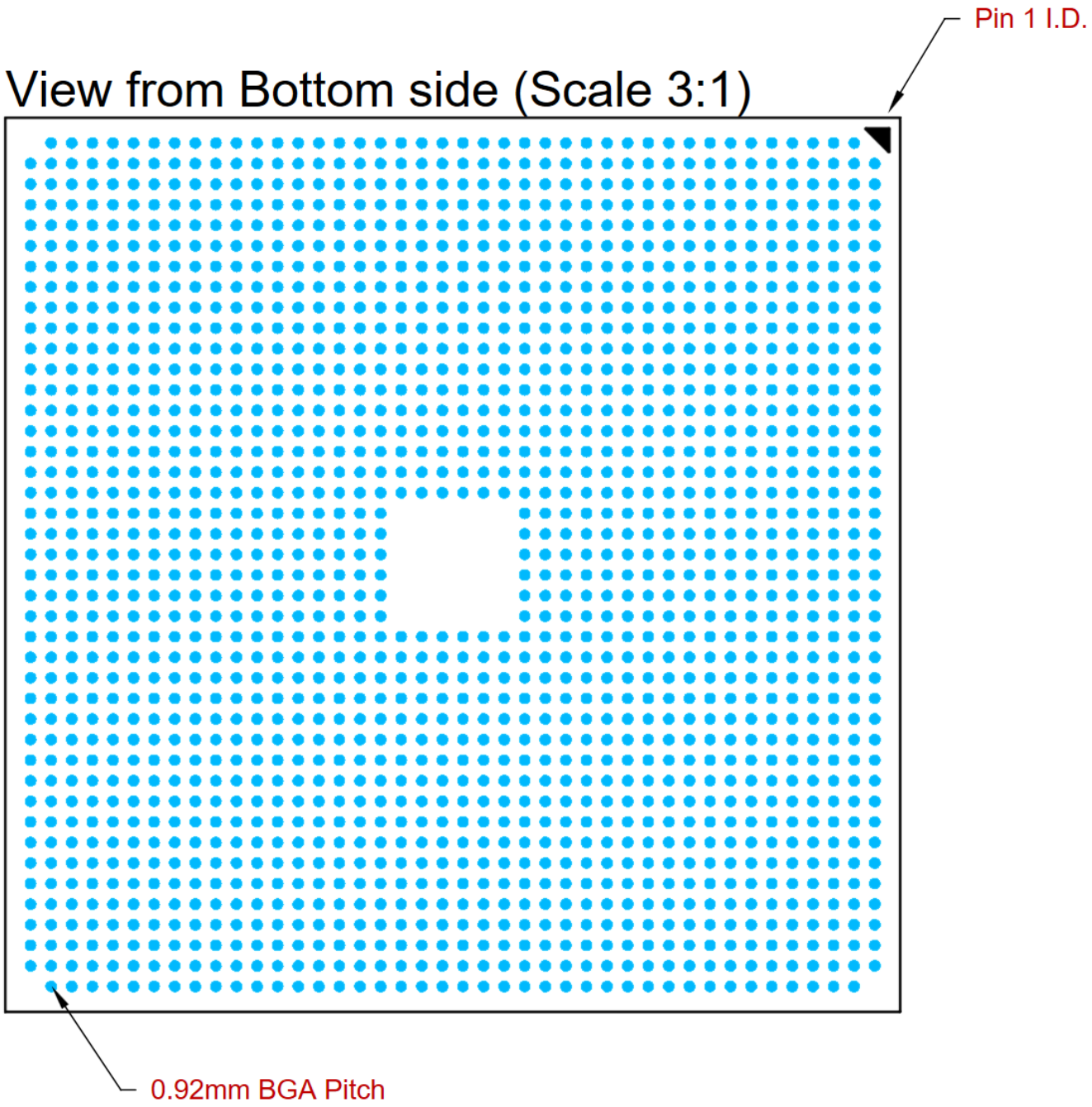
LoadSlammer GUI

Transient test



Mechanical Specs

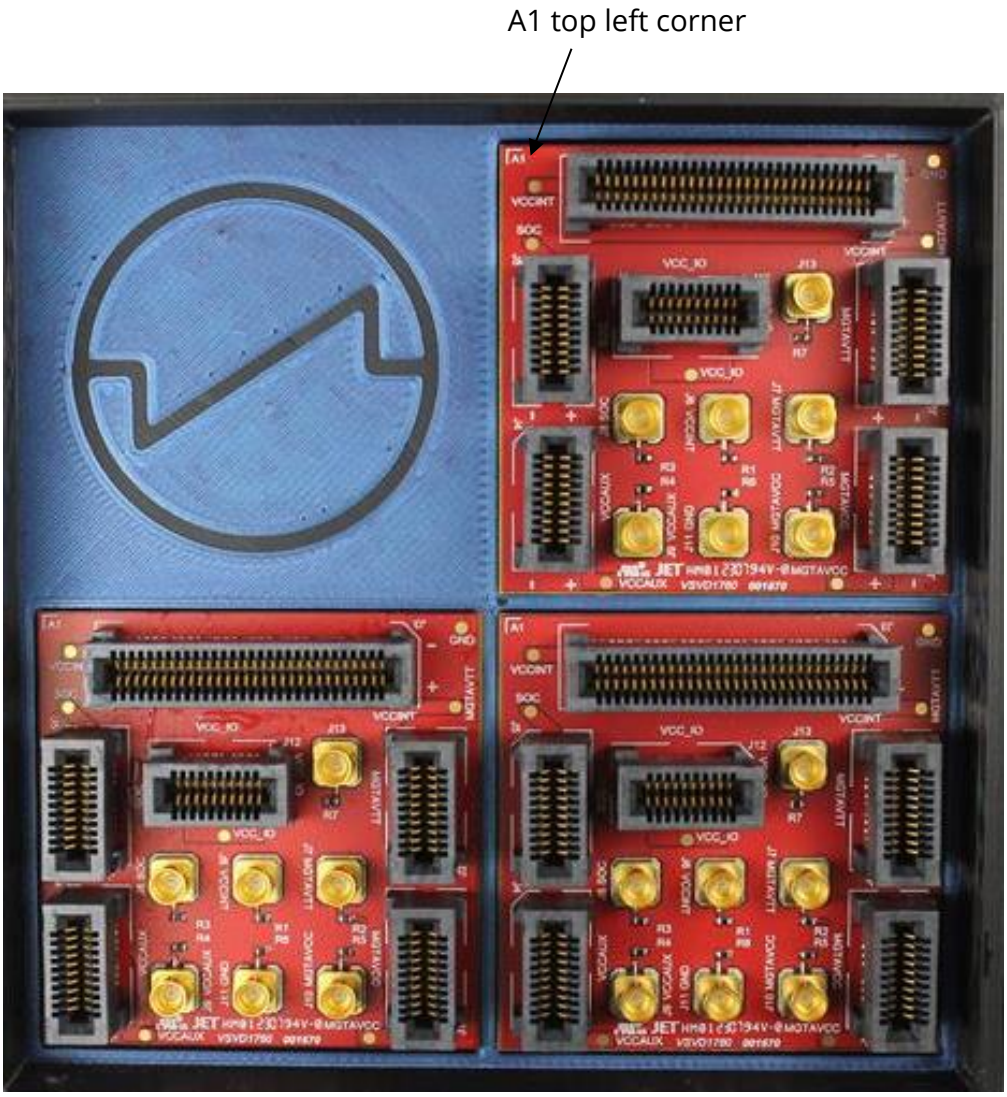




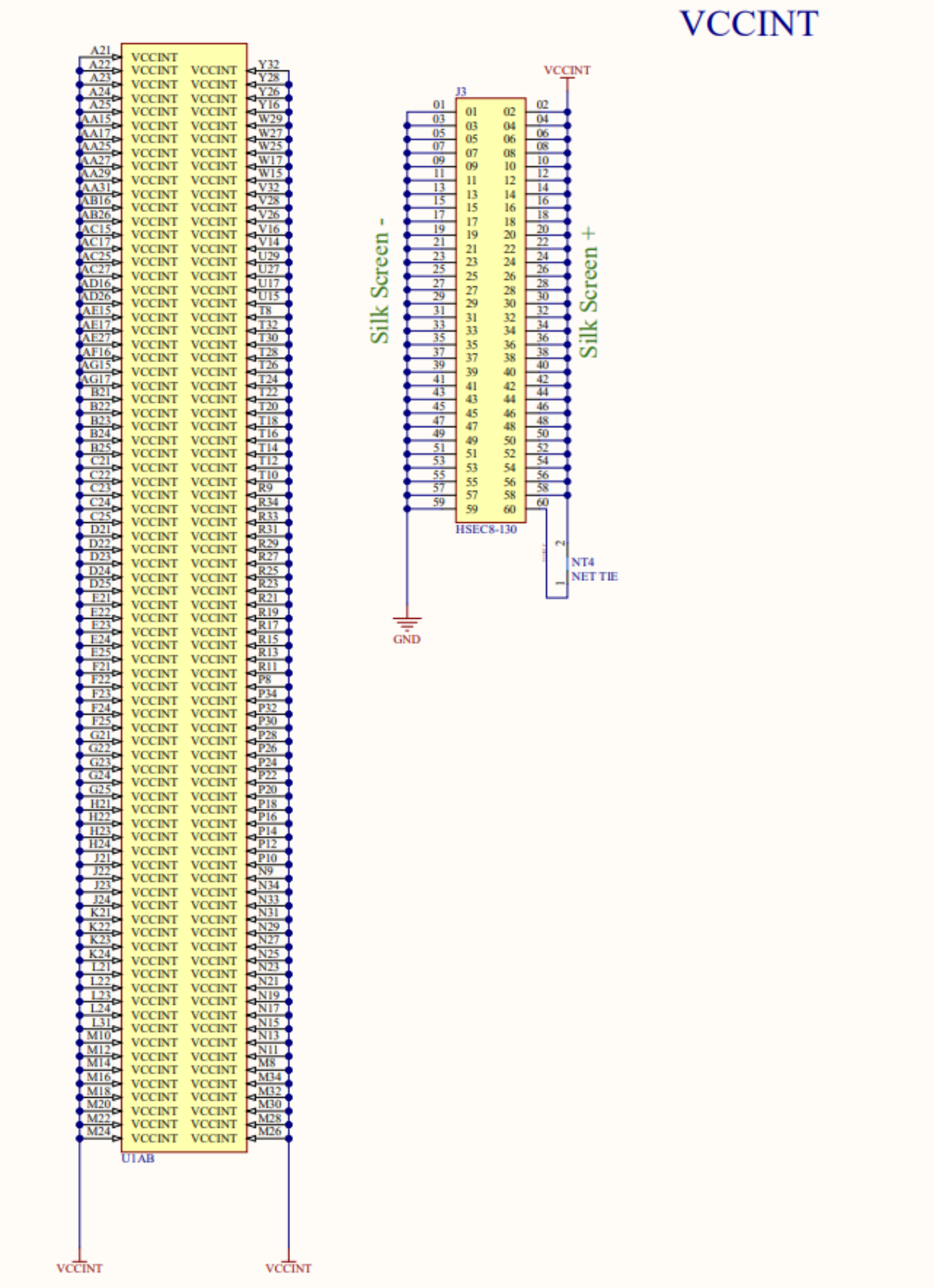
Sn96.5-Ag3.0-Cu0.5 0.6mm balls

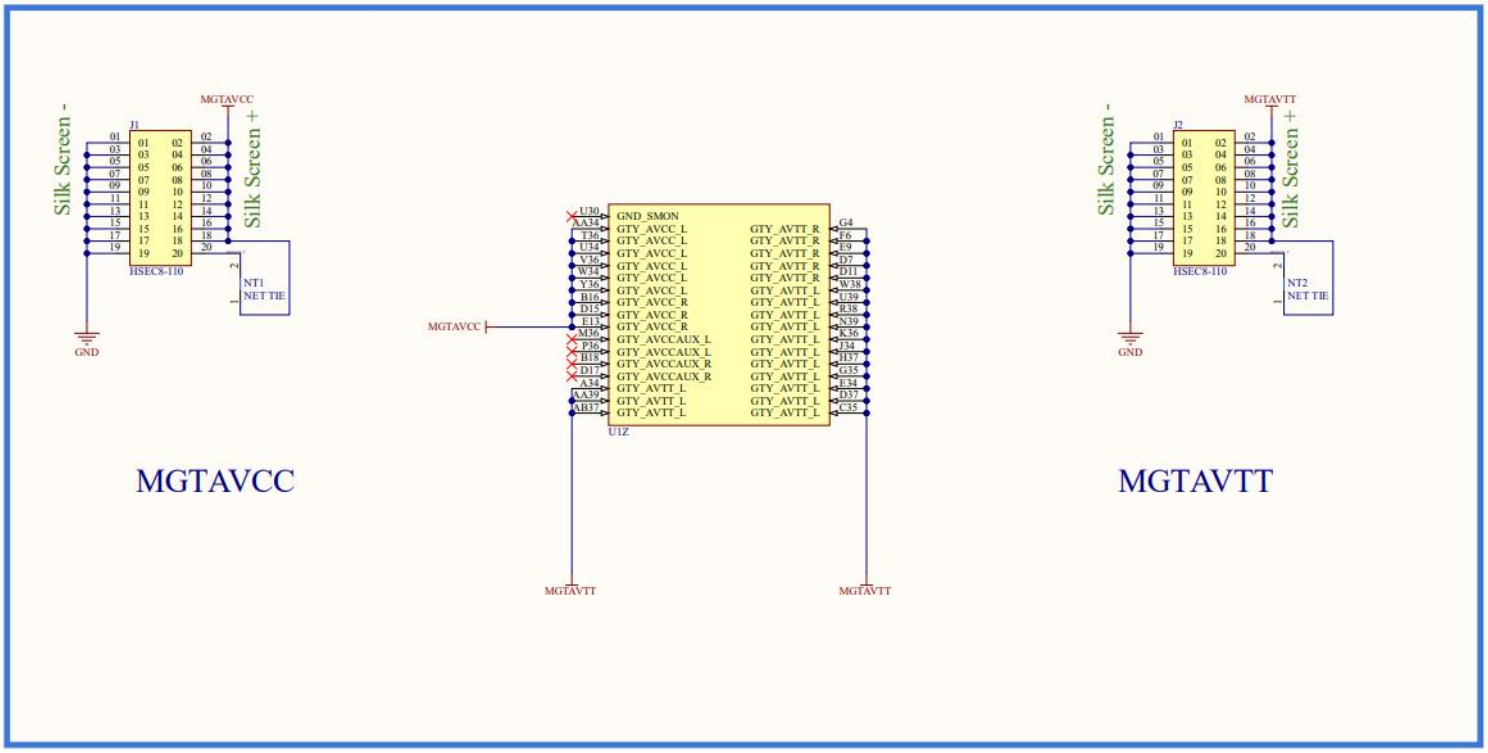
Packing Tray Specs

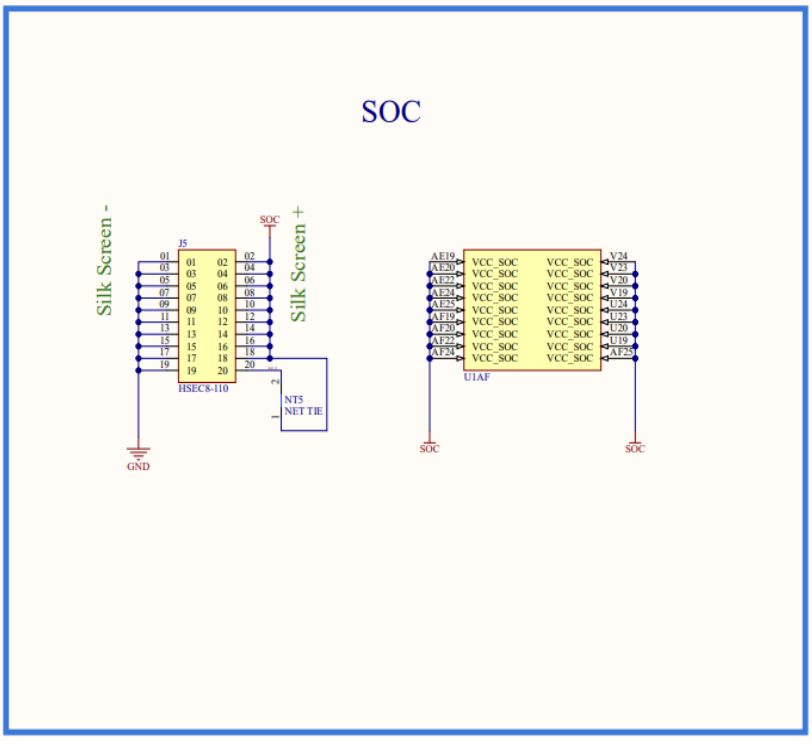
40x40mm package will have a 92x92x15mm tray.

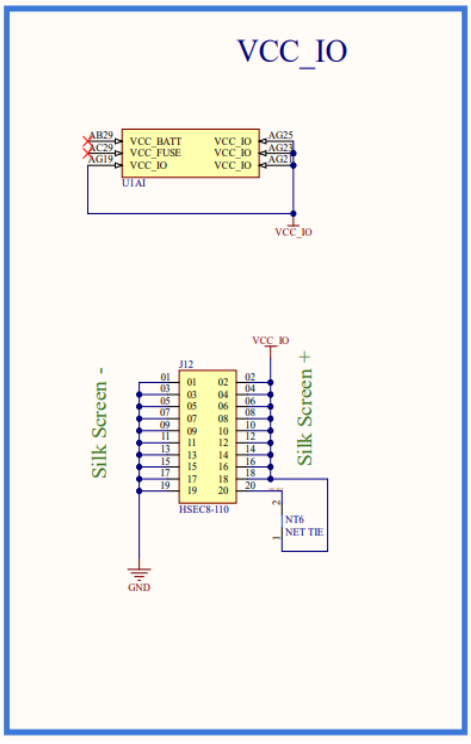


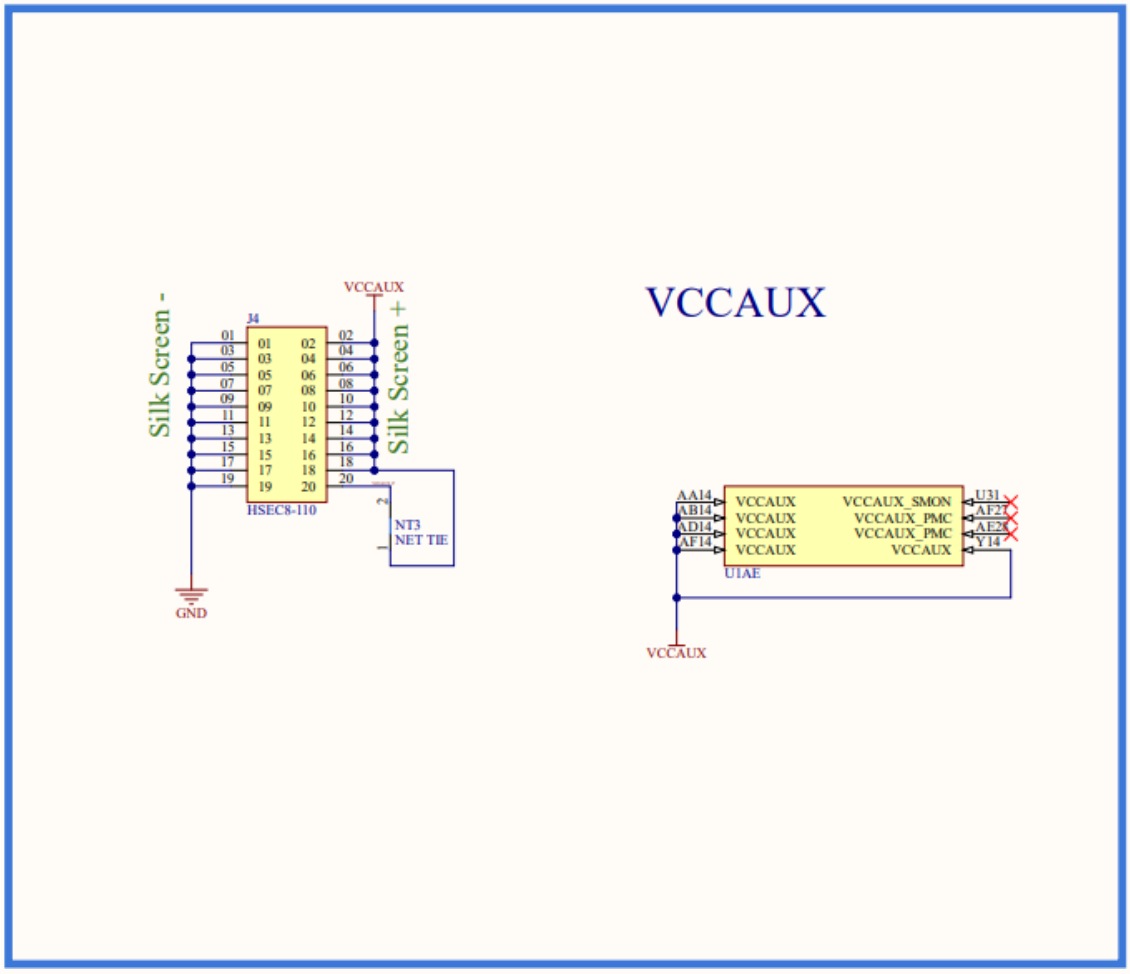
Schematics

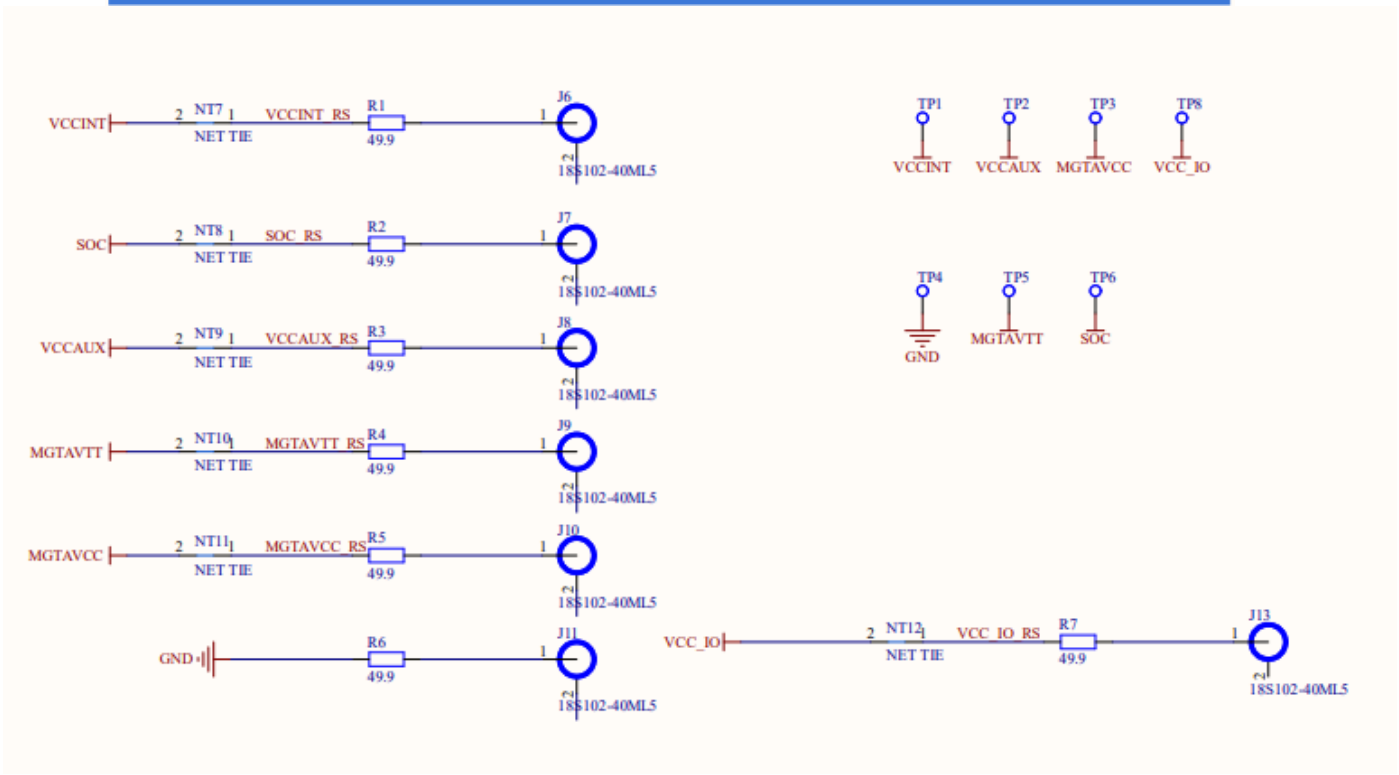

VCCINT
J3
HSEC8-130
Silk Screen -
Silk Screen +
NT4
NET TIE
GND
UTAB
VCCINT


MGTAVCC
Silk Screen -
Silk Screen +
J1
HSEC8-110
NT1
NET TIE
GND
GND_SMON
GTY_AVCC_L
GTY_AVCC_R
GTY_AVCCAUX_L
GTY_AVCCAUX_R
GTY_AVTT_L
GTY_AVTT_R
U1Z
MGTAVTT
MGTAVTT
MGTAVTT
Silk Screen -
Silk Screen +
J2
HSEC8-110
NT2
NET TIE
GND

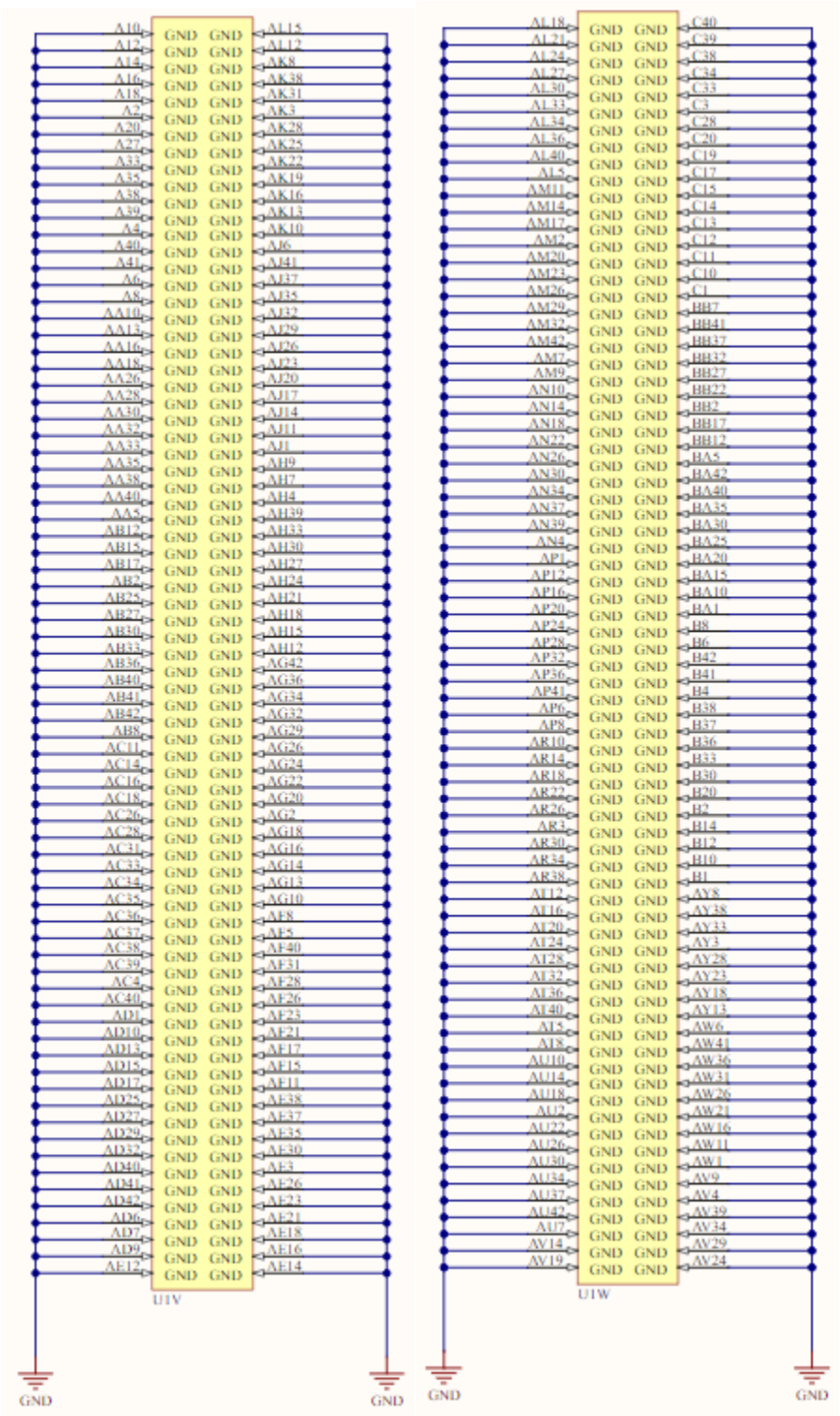

SOC
Silk Screen -
Silk Screen +
SOC
J5
HSEC8-110
NT5
NET TIE
GND
VCC_SOC
U1AF
SOC
SOC

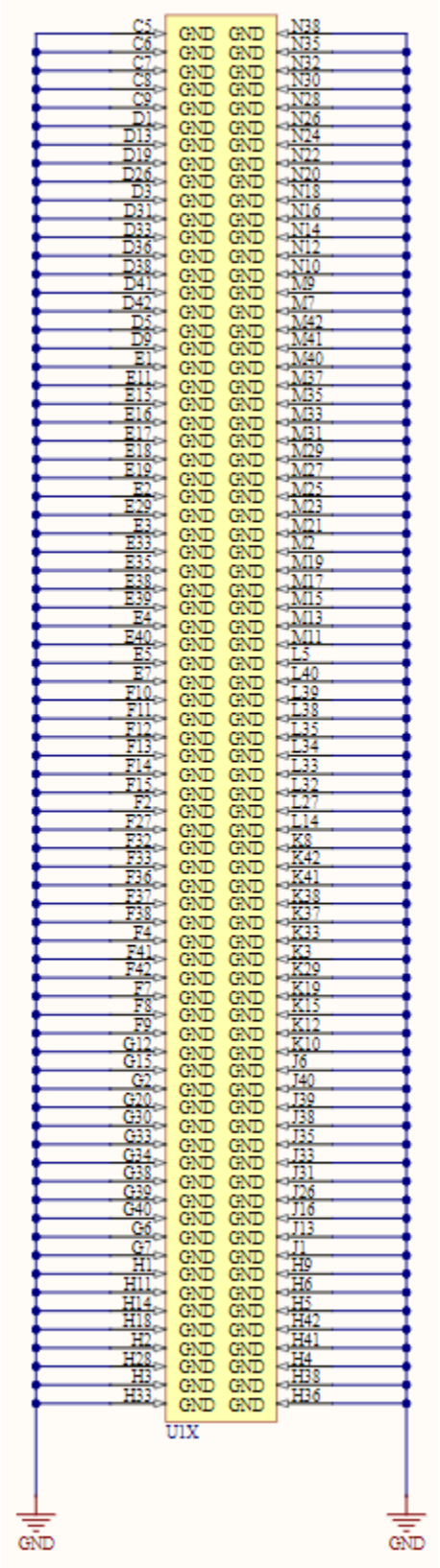

VCC_IO
VCC_BATT
VCC_FUSE
VCC_IO
U1AI
VCC_IO
VCC_IO
Silk Screen -
Silk Screen +
J12
HSEC8-110
NT6
NET TIE
GND

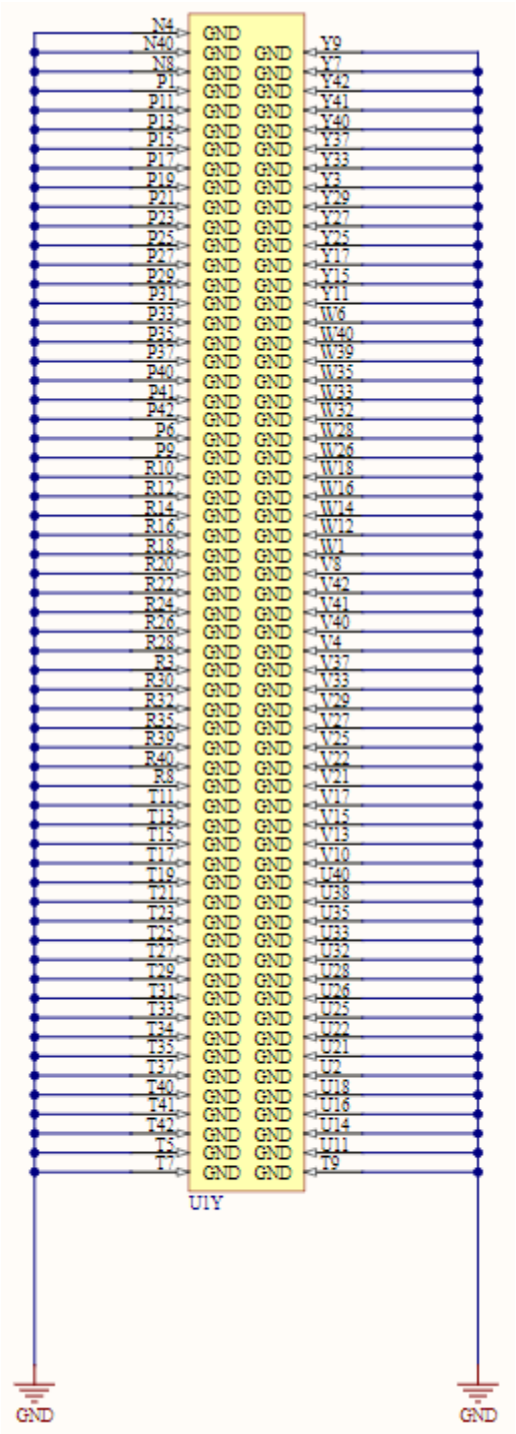

VCCAUX
Silk Screen -
Silk Screen +
J4
HSEC8-110
NT3
NET TIE
GND
VCCAUX
VCCAUX_SMON
VCCAUX_PMC
VCCAUX_PMC
VCCAUX
U31
U1AE


VCCINT
SOC
VCCAUX
MGTAVTT
MGTAVCC
GND
VCC_IO
VCCINT_RS
SOC_RS
VCCAUX_RS
MGTAVTT_RS
MGTAVCC_RS
VCC_IO_RS
R1
R2
R3
R4
R5
R6
R7
49.9
NET TIE
18S102-40ML5
TP1
TP2
TP3
TP8
TP4
TP5
TP6
MGTAVTT

GND:




C5 GND GND N38
C6 GND GND N35
C7 GND GND N32
C8 GND GND N30
C9 GND GND N28
D1 GND GND N26
D13 GND GND N24
D19 GND GND N22
D26 GND GND N20
D3 GND GND N18
D31 GND GND N16
D33 GND GND N14
D36 GND GND N12
D38 GND GND N10
D41 GND GND N8
D42 GND GND M7
D5 GND GND M42
D9 GND GND M41
E1 GND GND M40
E11 GND GND M37
E15 GND GND M35
E16 GND GND M33
E17 GND GND M31
E18 GND GND M29
E19 GND GND M27
E2 GND GND M25
E29 GND GND M23
E3 GND GND M21
E33 GND GND M2
E35 GND GND M19
E38 GND GND M17
E39 GND GND M15
E4 GND GND M13
E40 GND GND M11
E5 GND GND L5
E7 GND GND L40
F10 GND GND L39
F11 GND GND L38
F12 GND GND L35
F13 GND GND L34
F14 GND GND L33
F15 GND GND L32
F2 GND GND L27
F27 GND GND L14
F32 GND GND K8
F33 GND GND K42
F36 GND GND K41
F37 GND GND K38
F38 GND GND K37
F4 GND GND K33
F41 GND GND K3
F42 GND GND K29
F7 GND GND K19
F8 GND GND K15
F9 GND GND K12
G12 GND GND K10
G15 GND GND J6
G2 GND GND J40
G20 GND GND J39
G30 GND GND J38
G33 GND GND J35
G34 GND GND J33
G38 GND GND J31
G39 GND GND J26
G40 GND GND J16
G6 GND GND J13
G7 GND GND J1
H1 GND GND H9
H11 GND GND H6
H14 GND GND H5
H18 GND GND H42
H2 GND GND H41
H28 GND GND H4
H3 GND GND H38
H33 GND GND H36
U1X
GND
GND


N4 GND
N40 GND GND Y9
N8 GND GND Y7
P1 GND GND Y42
P11 GND GND Y41
P13 GND GND Y40
P15 GND GND Y37
P17 GND GND Y33
P19 GND GND Y3
P21 GND GND Y29
P23 GND GND Y27
P25 GND GND Y25
P27 GND GND Y17
P29 GND GND Y15
P31 GND GND Y11
P33 GND GND W6
P35 GND GND W40
P37 GND GND W39
P40 GND GND W35
P41 GND GND W33
P42 GND GND W32
P6 GND GND W28
P9 GND GND W26
R10 GND GND W18
R12 GND GND W16
R14 GND GND W14
R16 GND GND W12
R18 GND GND W1
R20 GND GND V8
R22 GND GND V42
R24 GND GND V41
R26 GND GND V40
R28 GND GND V4
R3 GND GND V37
R30 GND GND V33
R32 GND GND V29
R35 GND GND V27
R39 GND GND V25
R40 GND GND V22
R8 GND GND V21
T11 GND GND V17
T13 GND GND V15
T15 GND GND V13
T17 GND GND V10
T19 GND GND U40
T21 GND GND U38
T23 GND GND U35
T25 GND GND U33
T27 GND GND U32
T29 GND GND U28
T31 GND GND U26
T33 GND GND U25
T34 GND GND U22
T35 GND GND U21
T37 GND GND U2
T40 GND GND U18
T41 GND GND U16
T42 GND GND U14
T5 GND GND U11
T7 GND GND T9
U1Y
GND
GND