VC2602-PA-VSVH1760
VC2802-PA-VSVH1760
VE2602-PA-VSVH1760
VE2802-PA-VSVH1760

LOADSLAMMER
TRUST AND VERIFY

Passive Adaptors to test power delivery network to Versal ACAP VSVH1760 series FPGAs

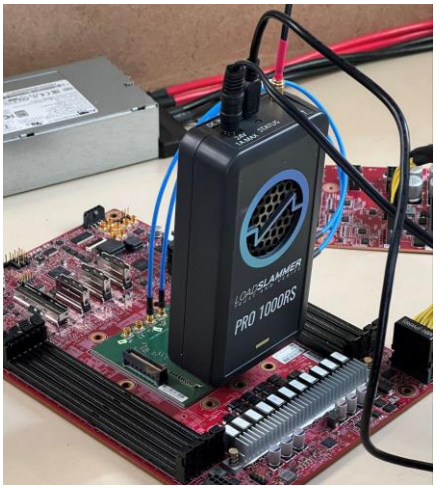
ProGrAnalog Corp.
04/7/2023
Rev 2.0

Features

- Tray of 3 Passive Adaptors (PA) for PDN testing AMD Xilinx Versal ACAP AI VSVH1760 series FPGAs
- Options available for VC2602, VC2802, VE2602, VE2802
- 6 Samtec connectors to test: VCCINT, VCC_IO, VCC_SOC, VGTY_AVTT, VCCAUX, AVCC
- 8 mini SMP connectors for measuring: VCCINT_SENSE, GND_SENSE, GND, VCC_IO, VCC_SOC, VGTY_AVTT, VCCAUX, AVCC
- PA with BGA footprint reflows onto VSVH1760 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

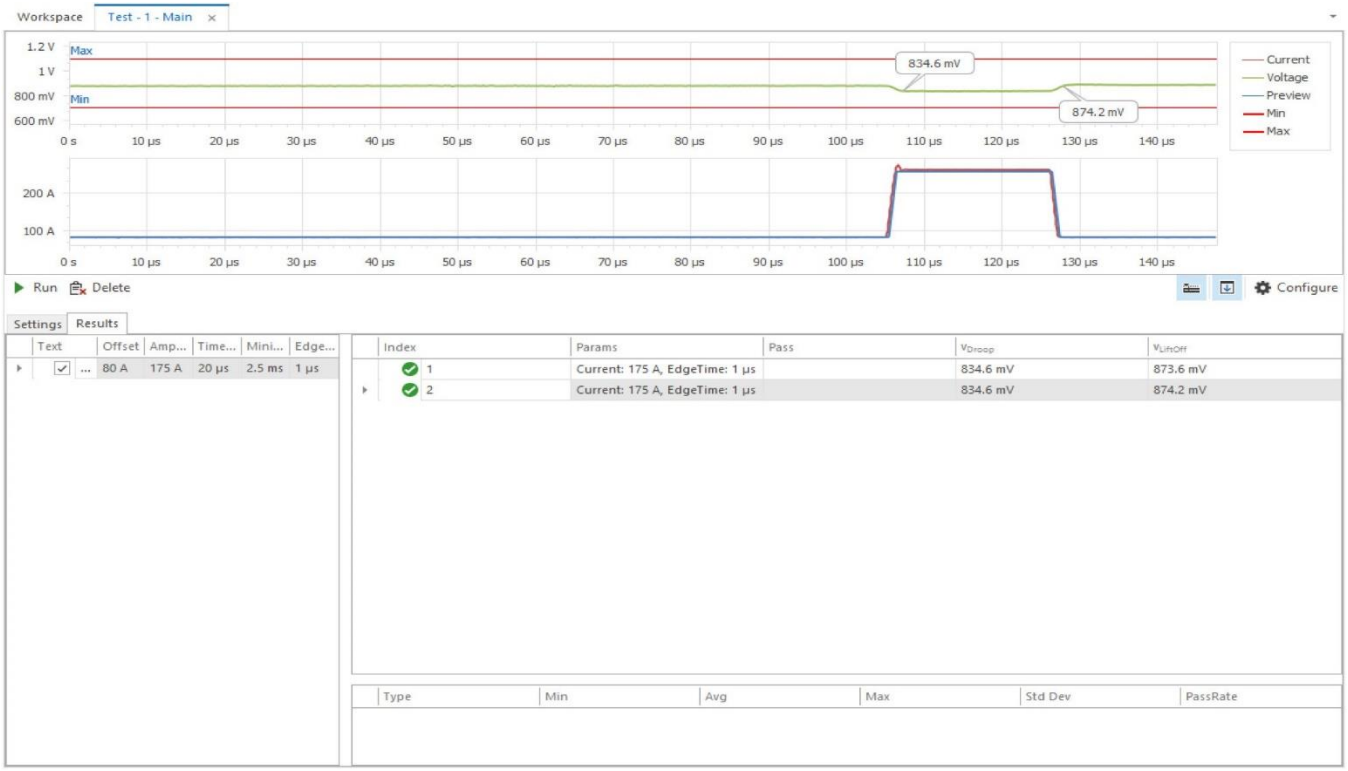
- Passive Adaptor reflowed onto the test board.
- LSP1000RS connected into VCCINT connector.



Pack of 3 -VSVH1760 Series PA's

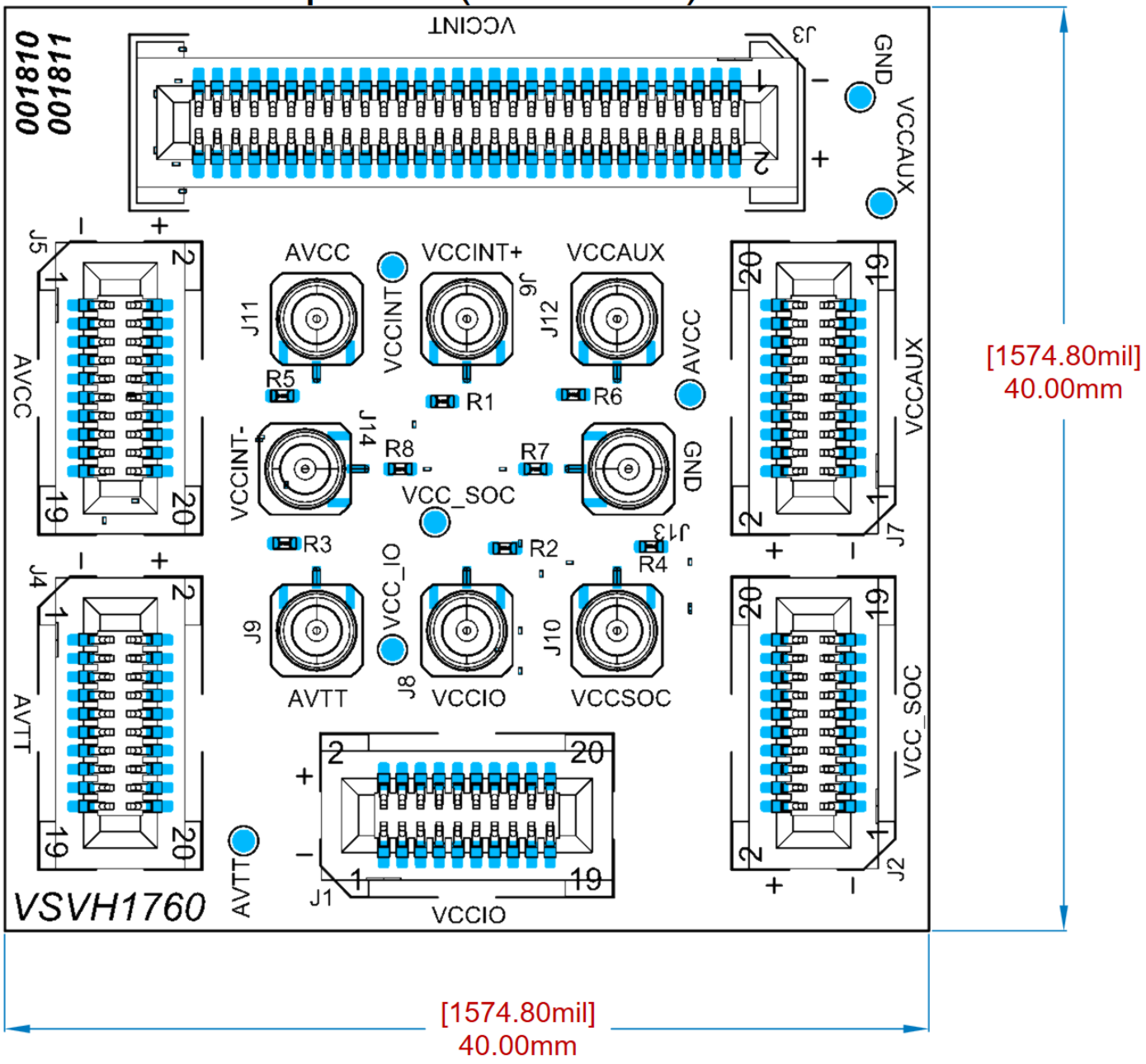
LoadSlammer GUI

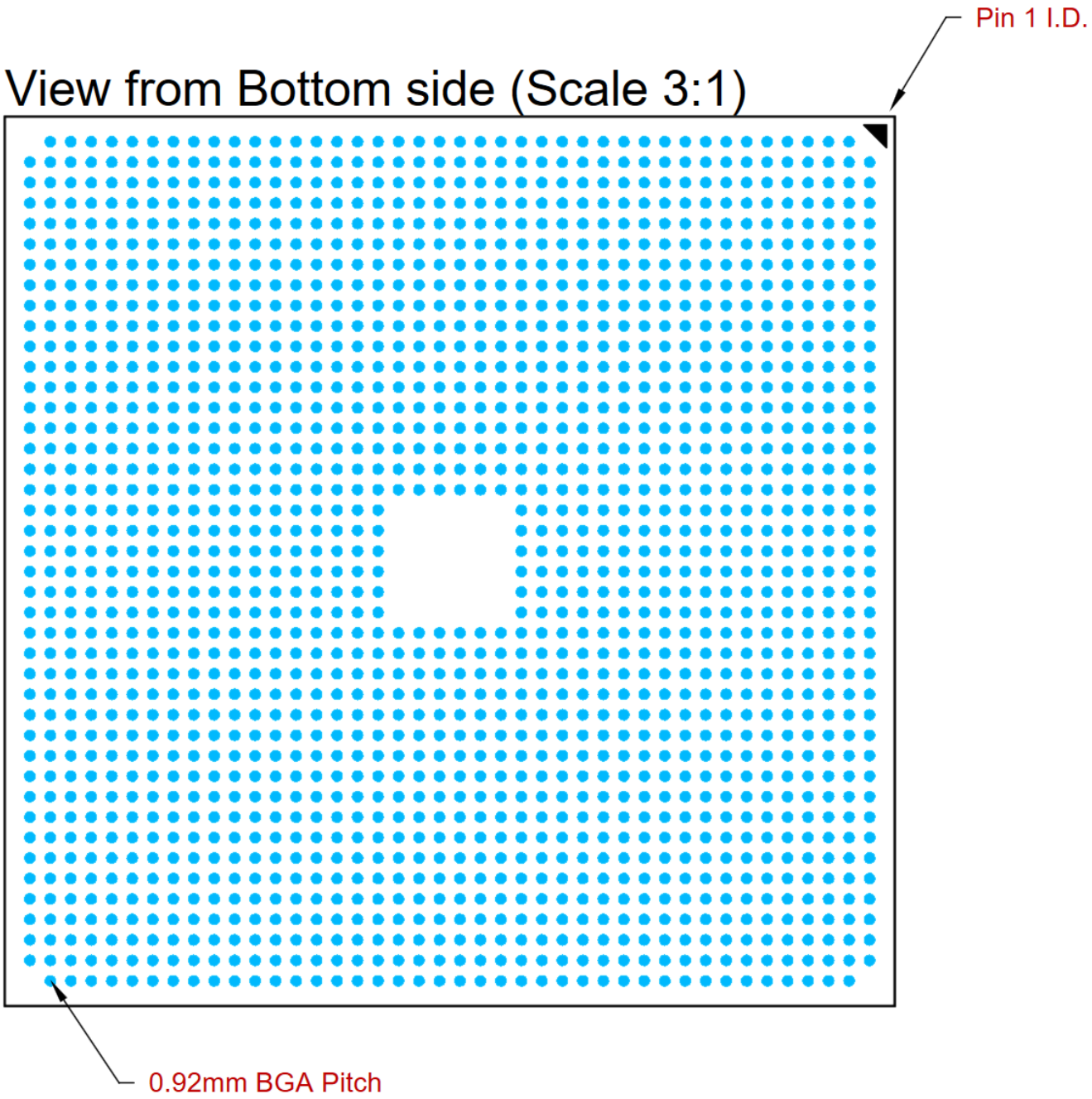
Transient test



Mechanical Specs

View from Top side (Scale 3:1)



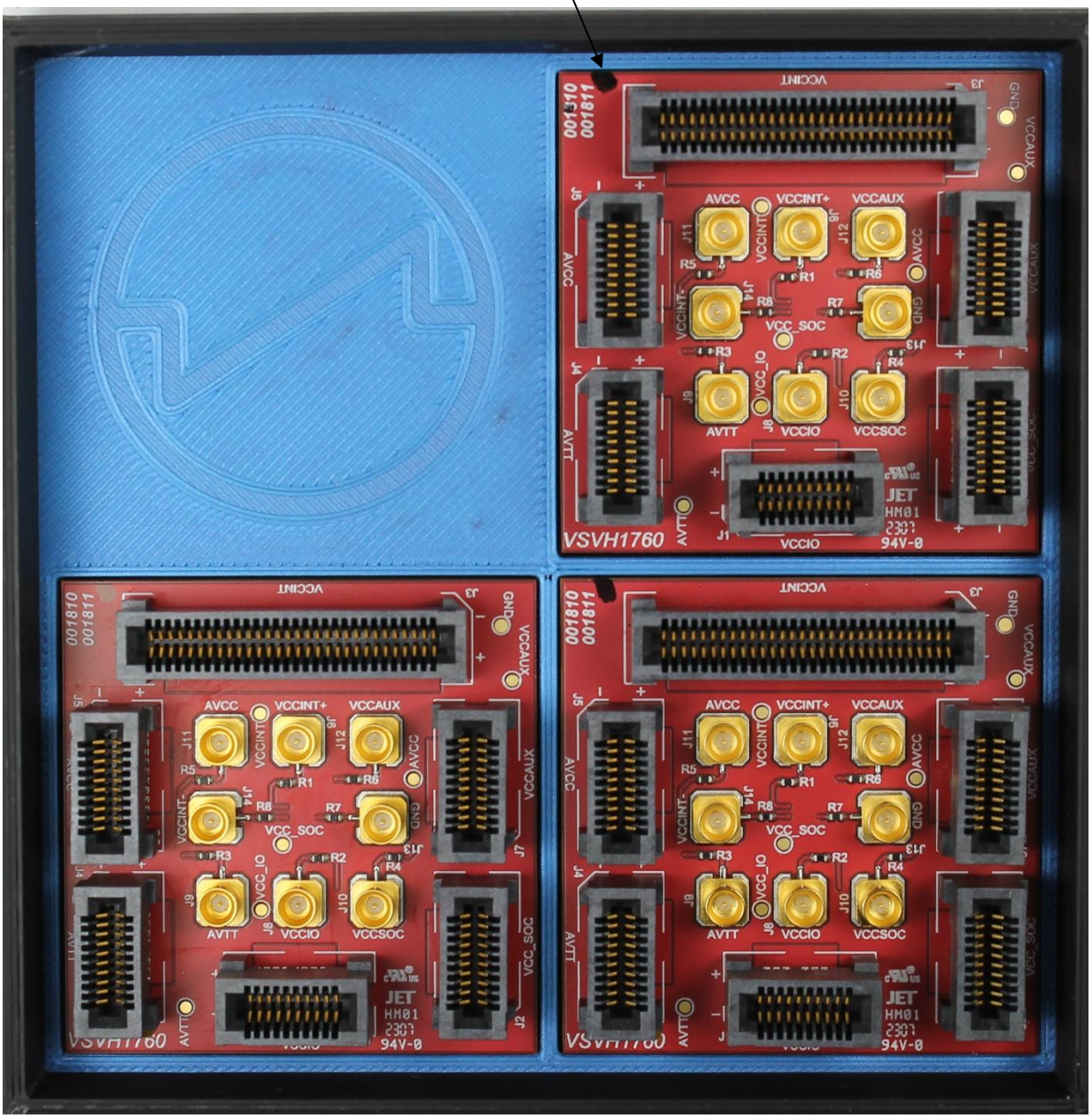


Sn96.5-Ag3.0-Cu0.5 0.6mm balls

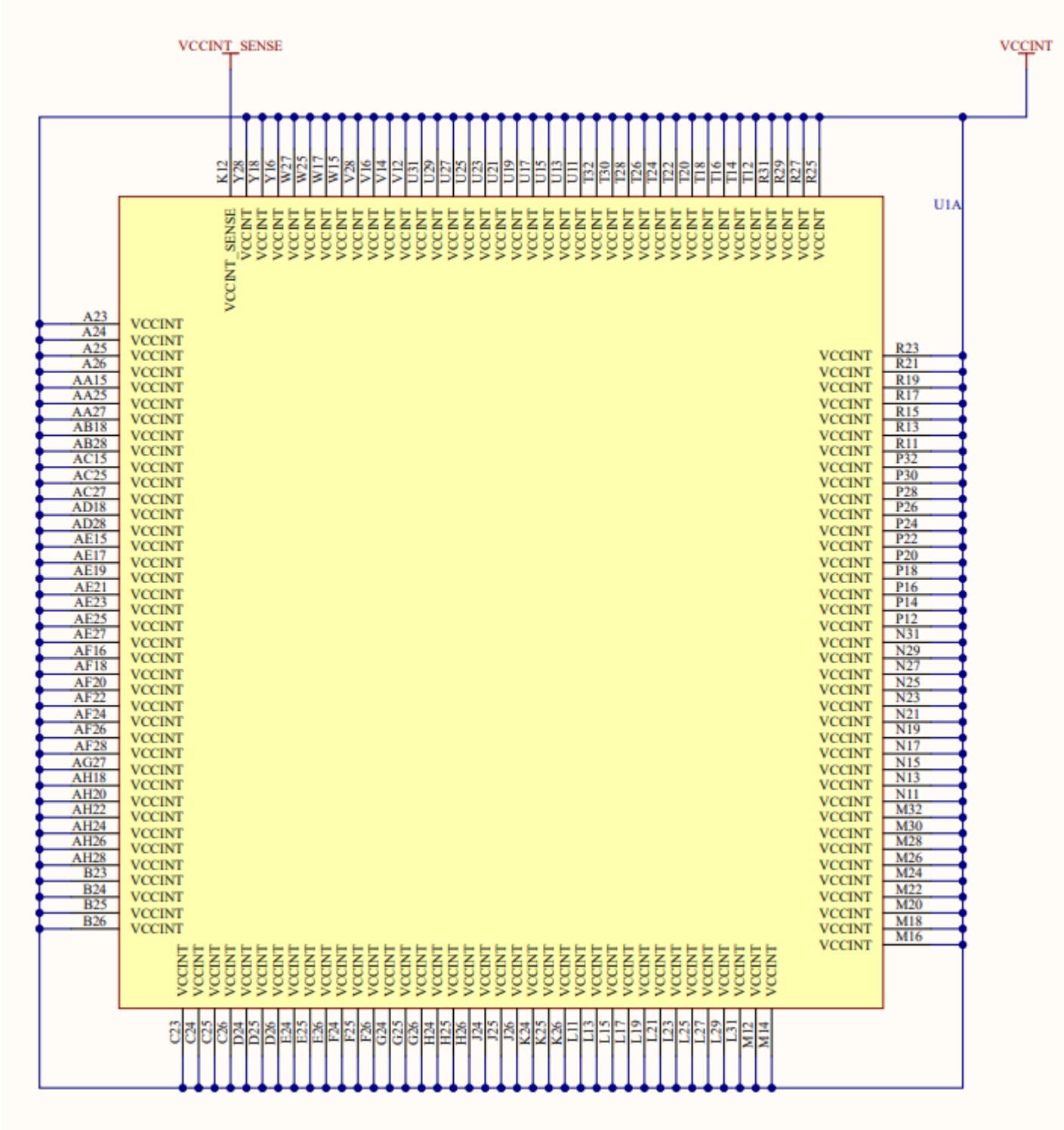
Packing Tray Specs

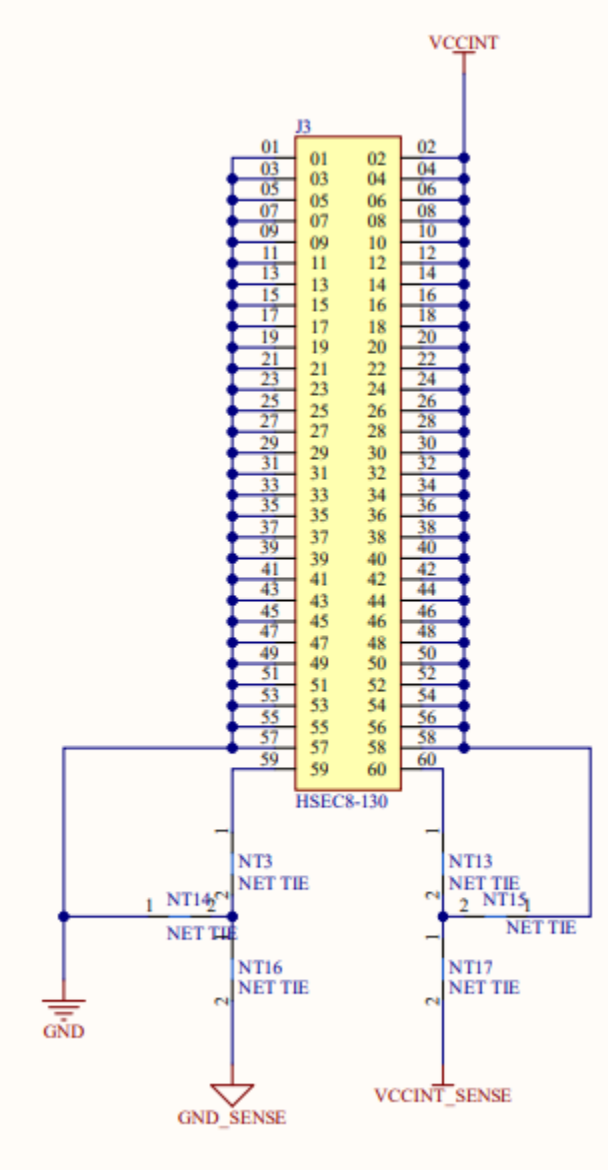
40x40mm package will have a 92x92x15mm tray

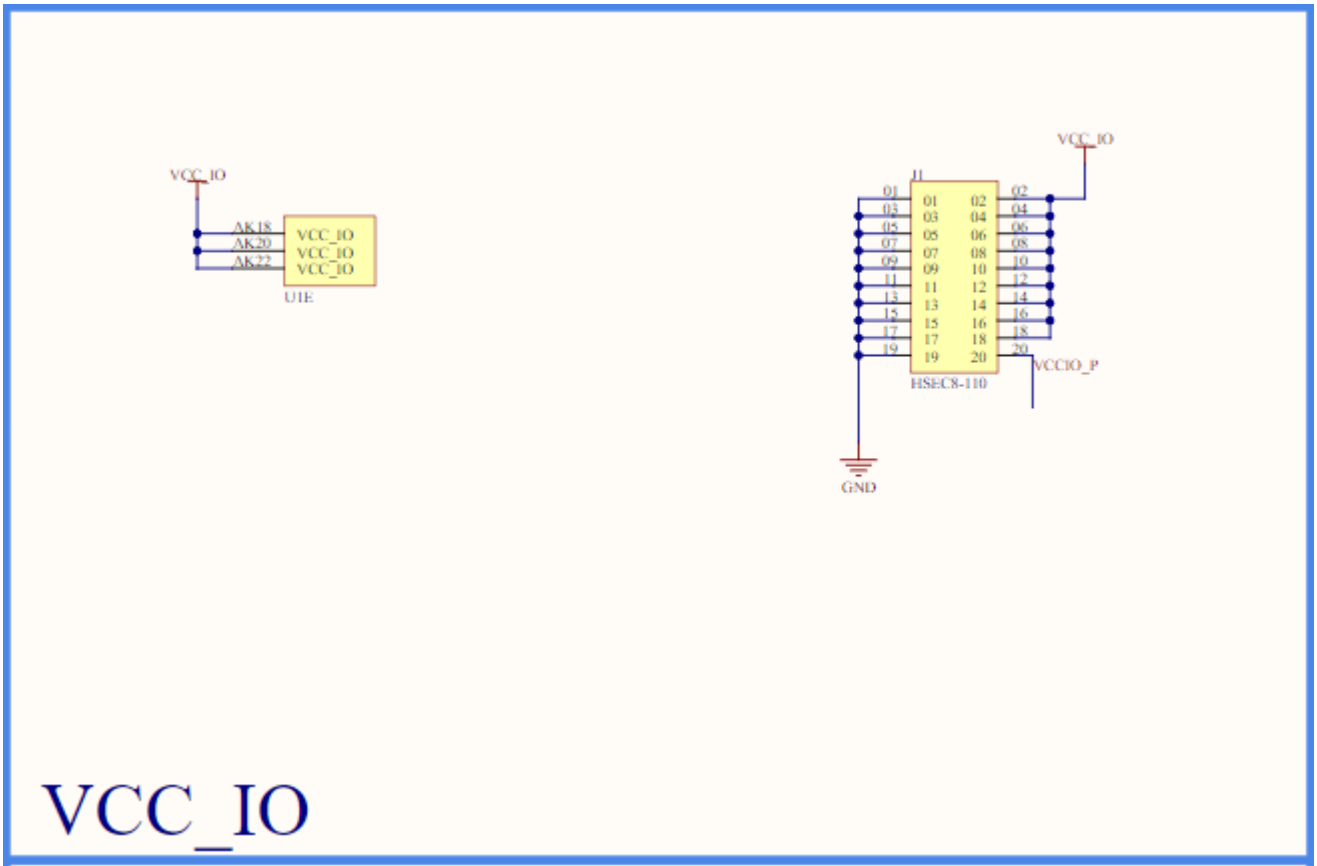
A1 marked - top left corner



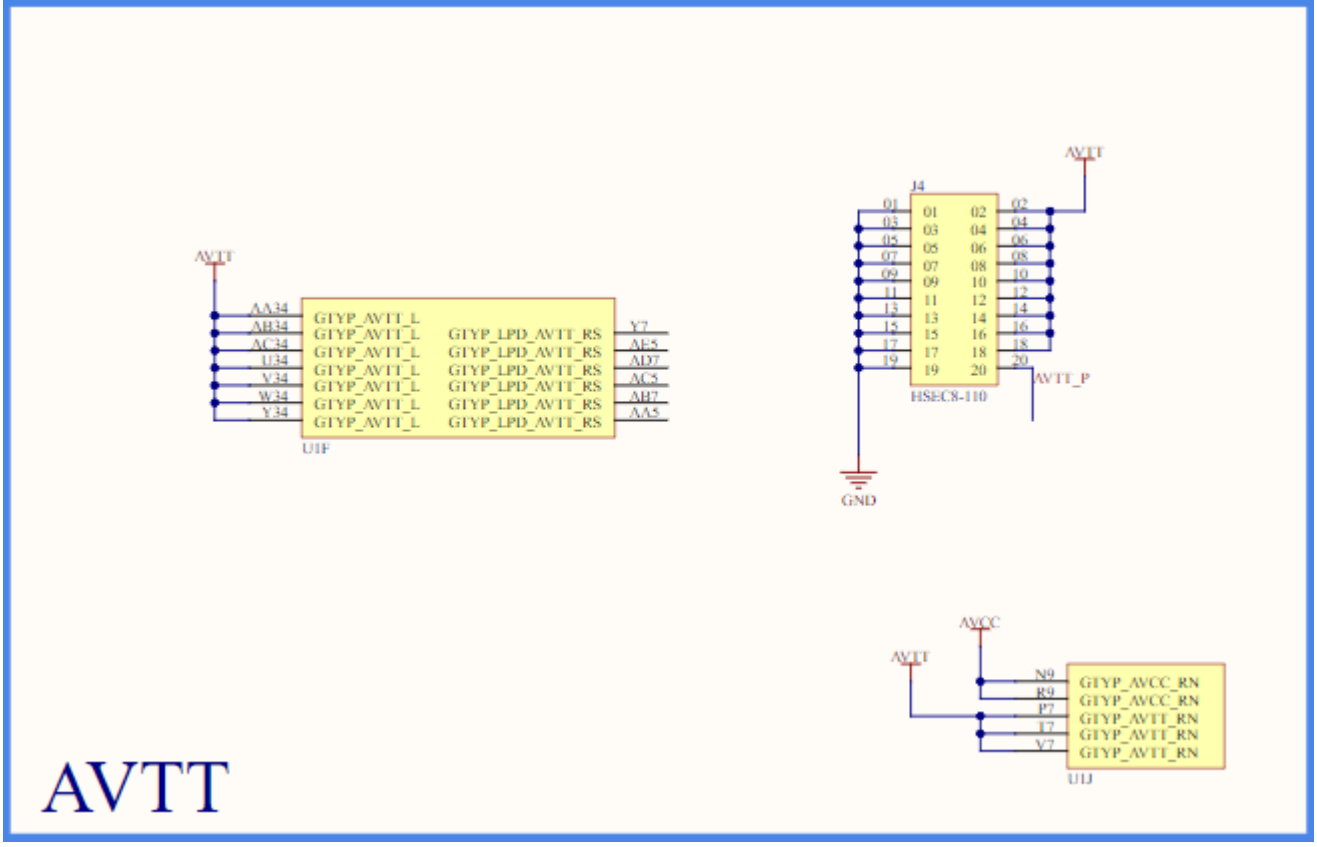
Schematics


VCCINT_SENSE
VCCINT
U1A
K12 Y28 Y18 Y16 W27 W25 W17 W15 V28 V16 V14 V12 U31 U29 U27 U25 U23 U21 U19 U17 U15 U13 U11 T32 T30 T28 T26 T24 T22 T20 T18 T16 T14 T12 R31 R29 R27 R25
A23 A24 A25 A26 AA15 AA25 AA27 AB18 AB28 AC15 AC25 AC27 AD18 AD28 AE15 AE17 AE19 AE21 AE23 AE25 AE27 AF16 AF18 AF20 AF22 AF24 AF26 AF28 AG27 AH18 AH20 AH22 AH24 AH26 AH28 B23 B24 B25 B26
R23 R21 R19 R17 R15 R13 R11 P32 P30 P28 P26 P24 P22 P20 P18 P16 P14 P12 N31 N29 N27 N25 N23 N21 N19 N17 N15 N13 N11 M32 M30 M28 M26 M24 M22 M20 M18 M16
C23 C24 C25 C26 D24 D25 D26 E24 E25 E26 F24 F25 F26 G24 G25 G26 H24 H25 H26 J24 J25 J26 K24 K25 K26 L11 L13 L15 L17 L19 L21 L23 L25 L27 L29 L31 M12 M14

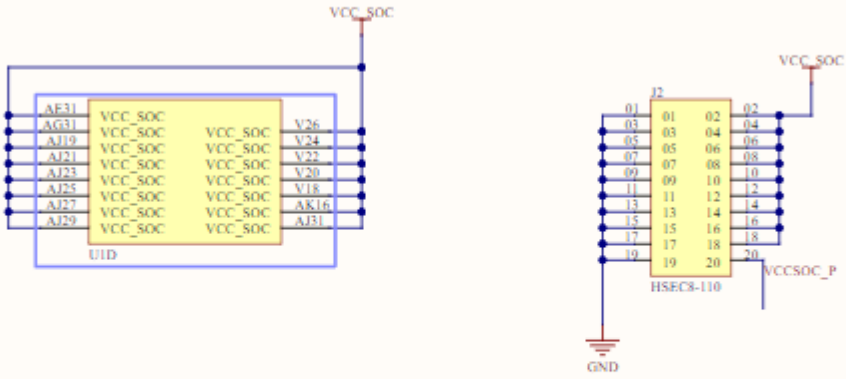

VCCINT
J3
HSEC8-130
NT3
NET TIE
NT14
NET TIE
NT16
NET TIE
NT13
NET TIE
NT15
NET TIE
NT17
NET TIE
GND
GND_SENSE
VCCINT_SENSE


VCC_IO
AK18
AK20
AK22
VCC_IO
VCC_IO
VCC_IO
U1E
VCC_IO
J1
HSEC8-110
VCCIO_P
GND
VCC_IO

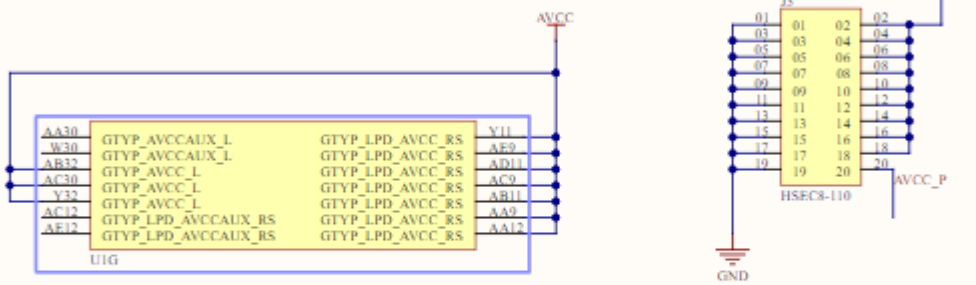
VCC_IO


AVTT
AA34
AB34
AC34
U34
V34
W34
Y34
GTYP_AVTT_L
GTYP_AVTT_L
GTYP_AVTT_L
GTYP_AVTT_L
GTYP_AVTT_L
GTYP_AVTT_L
GTYP_AVTT_L
GTYP_LPD_AVTT_RS
GTYP_LPD_AVTT_RS
GTYP_LPD_AVTT_RS
GTYP_LPD_AVTT_RS
GTYP_LPD_AVTT_RS
GTYP_LPD_AVTT_RS
GTYP_LPD_AVTT_RS
Y7
AE5
AD7
AC5
AB7
AA5
U1F
AVTT
J4
HSEC8-110
AVTT_P
GND
AVTT
AVCC
N9
R9
P7
T7
V7
GTYP_AVCC_RN
GTYP_AVCC_RN
GTYP_AVTT_RN
GTYP_AVTT_RN
GTYP_AVTT_RN
U1J

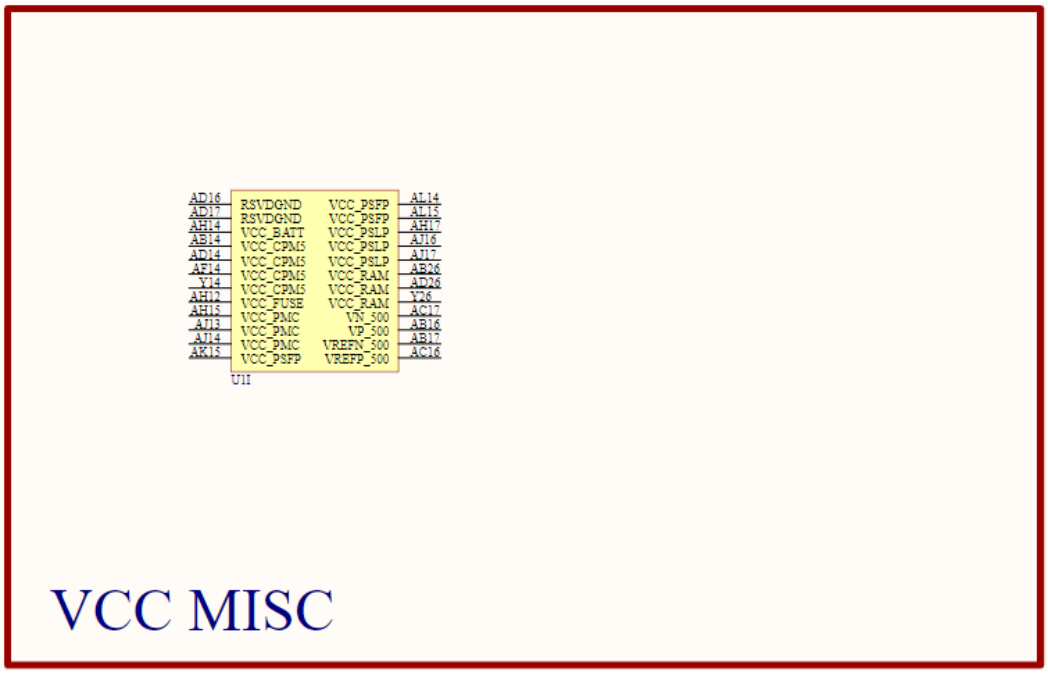
AVTT

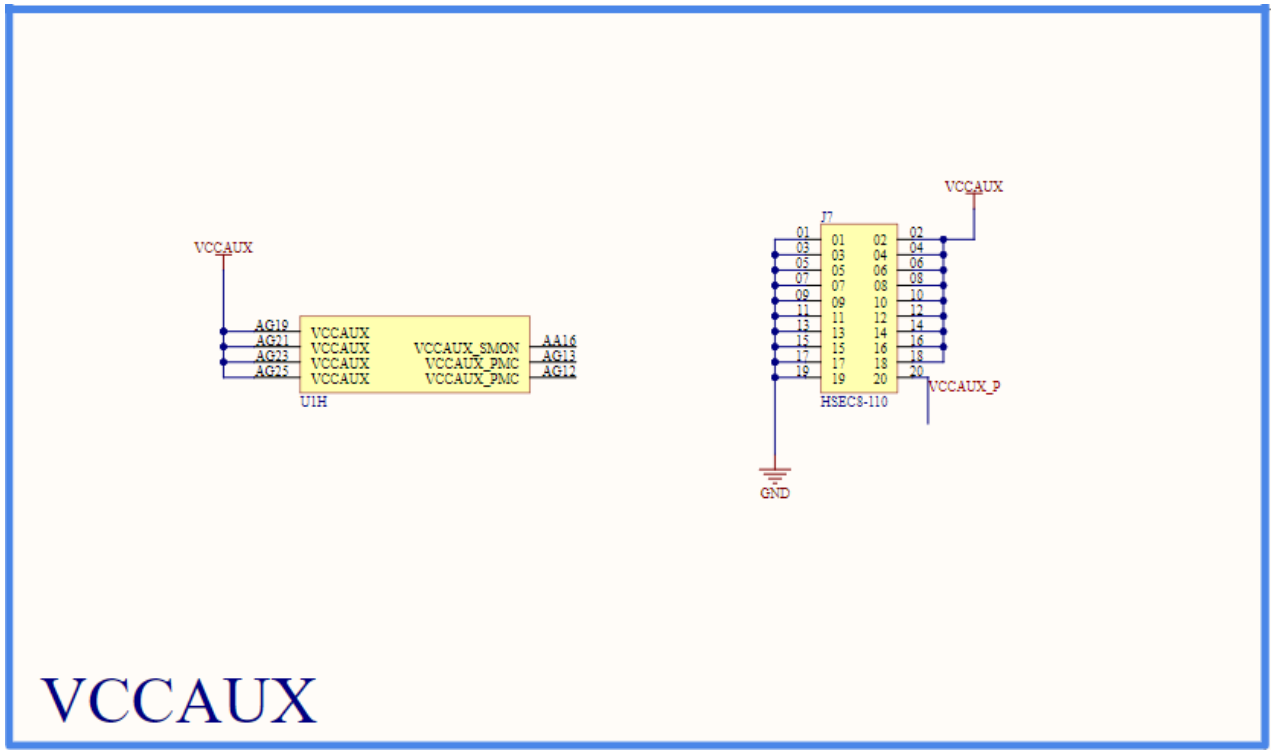

VCC_SOC
AE31
AG31
AJ19
AJ21
AJ23
AJ25
AJ27
AJ29
VCC_SOC
V26
V24
V22
V20
V18
AK16
AJ31
U1D
VCC_SOC
J2
VCCSOC_P
HSEC8-110
GND

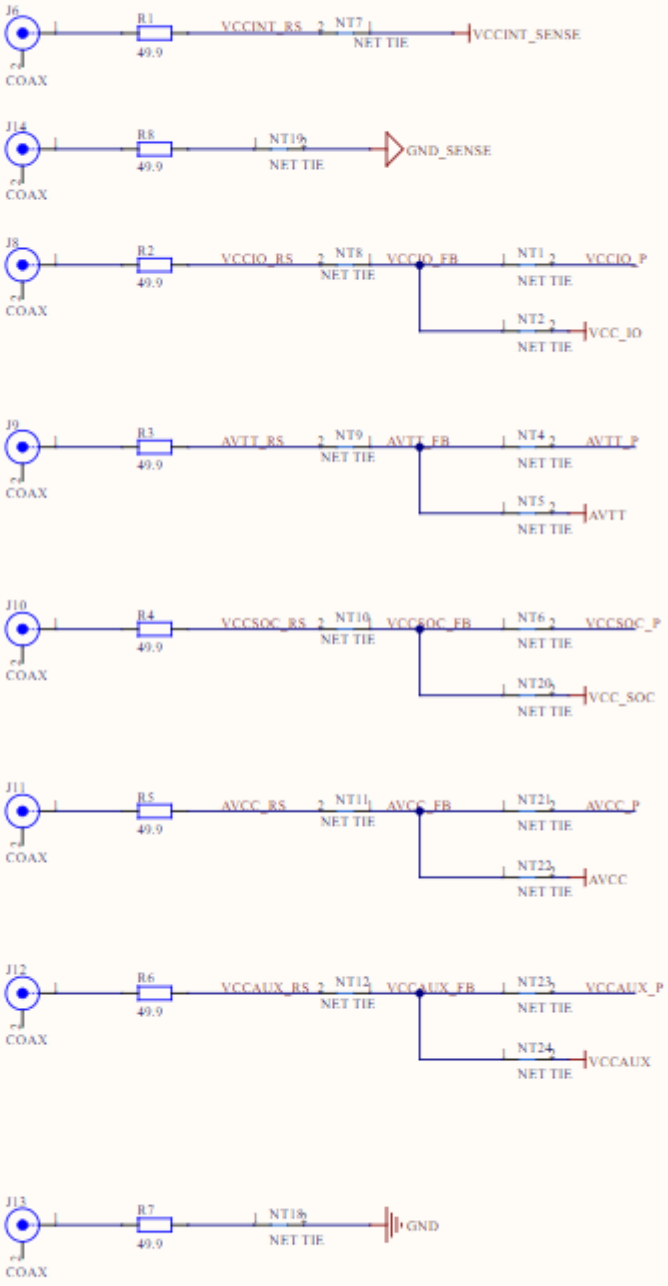
VCC_SOC


AVCC
AA30
W30
AB32
AC30
Y32
AC12
AE12
GTYP_AVCCAUX_L
GTYP_AVCCAUX_L
GTYP_AVCC_L
GTYP_AVCC_L
GTYP_AVCC_L
GTYP_LPD_AVCCAUX_RS
GTYP_LPD_AVCCAUX_RS
GTYP_LPD_AVCC_RS
GTYP_LPD_AVCC_RS
GTYP_LPD_AVCC_RS
GTYP_LPD_AVCC_RS
GTYP_LPD_AVCC_RS
GTYP_LPD_AVCC_RS
Y11
AE9
AD11
AC9
AB11
AA9
AA12
U1G
AVCC
J5
AVCC_P
HSEC8-110
GND

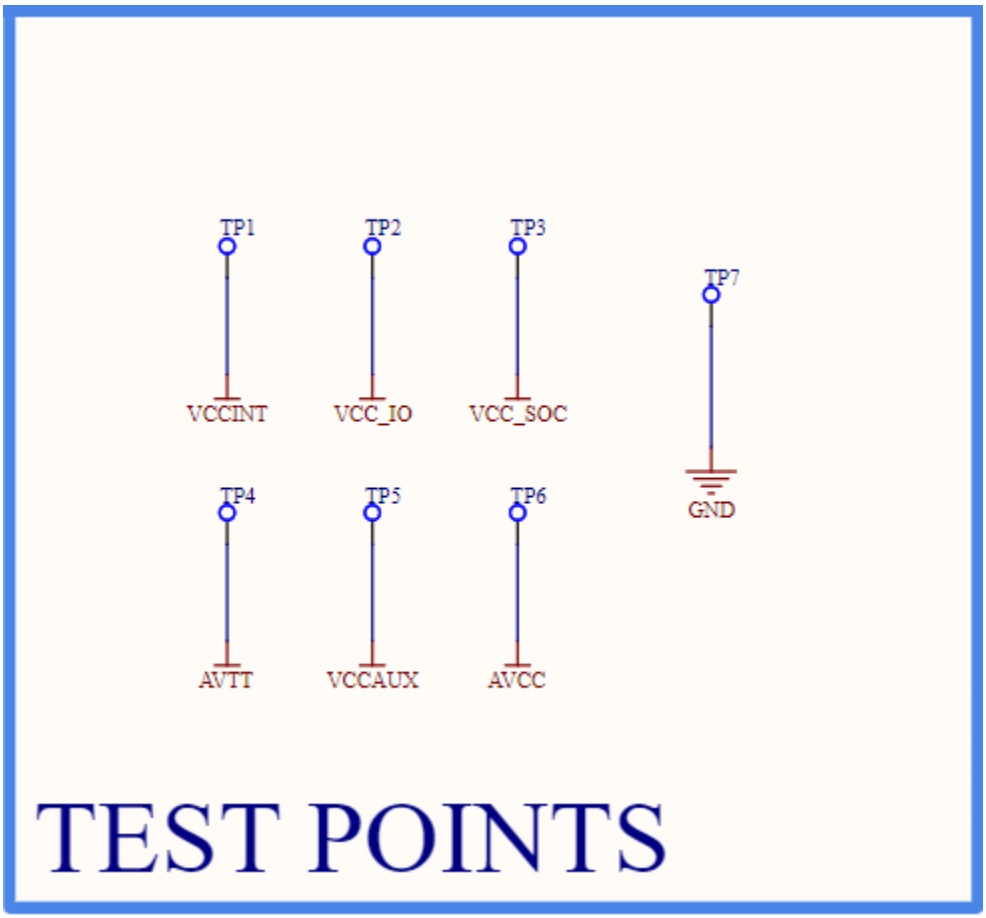
AVCC

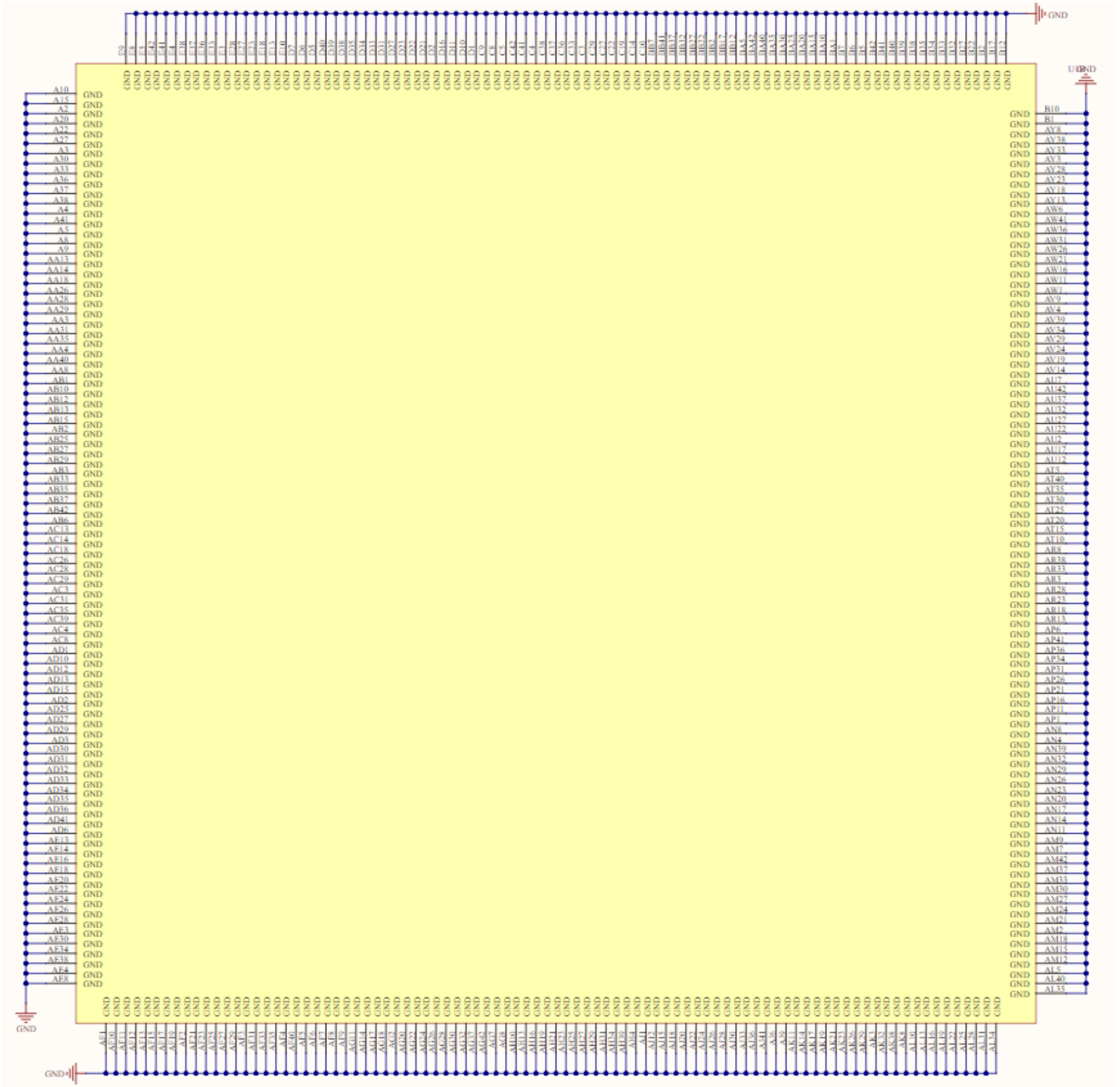

AD16
AD17
AH14
AB14
AD14
AF14
Y14
AH12
AH15
AJ13
AJ14
AK15
RSVDGND
RSVDGND
VCC_BATT
VCC_CPM5
VCC_CPM5
VCC_CPM5
VCC_CPM5
VCC_FUSE
VCC_PMC
VCC_PMC
VCC_PMC
VCC_PSFP
VCC_PSFP
VCC_PSFP
VCC_PSLP
VCC_PSLP
VCC_PSLP
VCC_RAM
VCC_RAM
VCC_RAM
VN_500
VP_500
VREFN_500
VREFP_500
AL14
AL15
AH17
AJ16
AJ17
AB26
AD26
Y26
AC17
AB16
AB17
AC16
U1I
VCC MISC

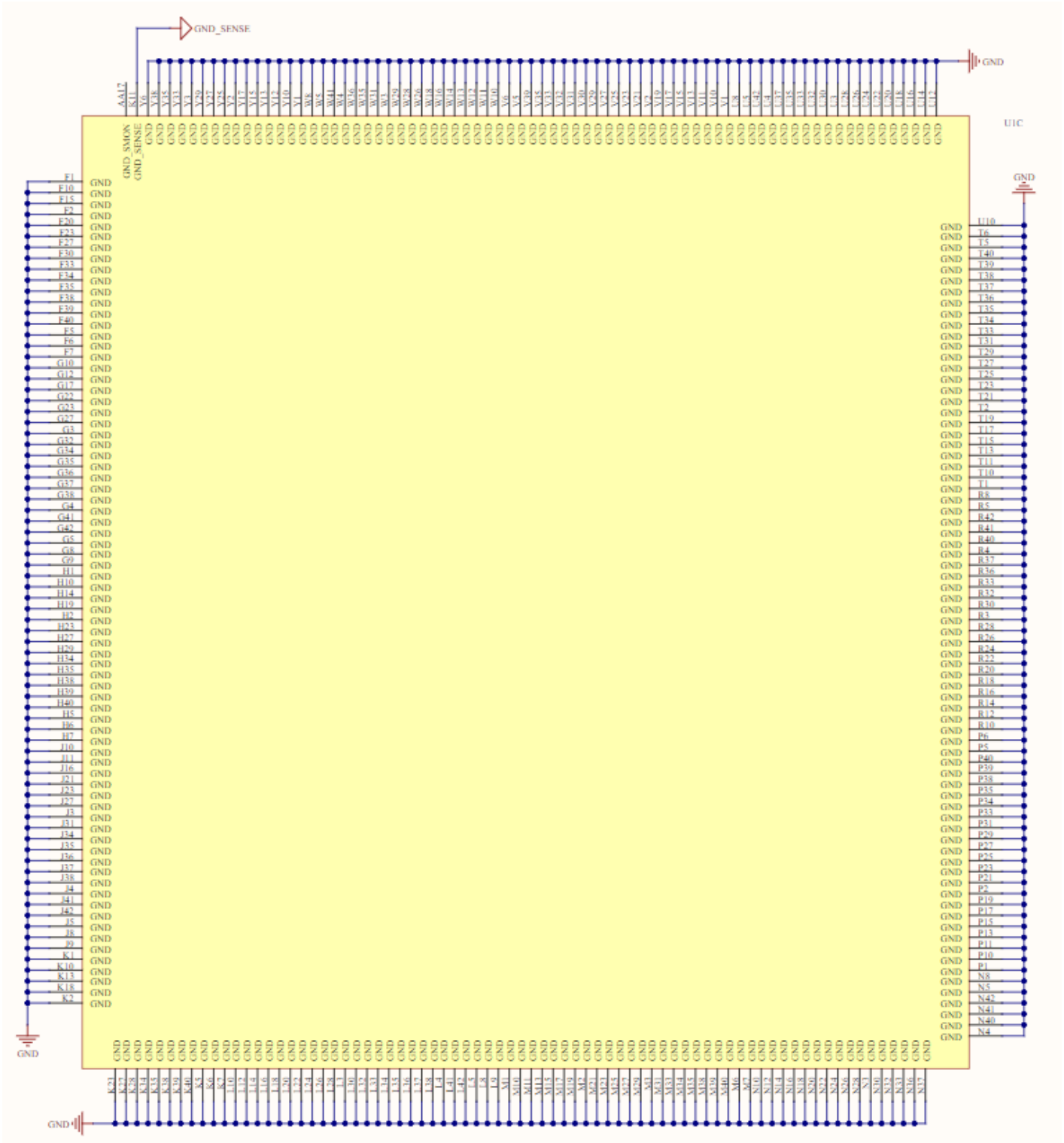

VCCAUX
AG19
AG21
AG23
AG25
VCCAUX
VCCAUX
VCCAUX
VCCAUX
VCCAUX_SMON
VCCAUX_PMC
VCCAUX_PMC
AA16
AG13
AG12
U1H
VCCAUX
J7
01
03
05
07
09
11
13
15
17
19
02
04
06
08
10
12
14
16
18
20
HSEC8-110
VCCAUX_P
GND
VCCAUX


J6
COAX
R1
49.9
VCCINT_RS
NT7
NET TIE
VCCINT_SENSE
J14
COAX
R8
49.9
NT19
NET TIE
GND_SENSE
J8
COAX
R2
49.9
VCCIO_RS
NT8
NET TIE
VCCIO_FB
NT1
NET TIE
VCCIO_P
NT2
NET TIE
VCC_IO
J9
COAX
R3
49.9
AVTT_RS
NT9
NET TIE
AVTT_FB
NT4
NET TIE
AVTT_P
NT5
NET TIE
AVTT
J10
COAX
R4
49.9
VCCSOC_RS
NT10
NET TIE
VCCSOC_FB
NT6
NET TIE
VCCSOC_P
NT20
NET TIE
VCC_SOC
J11
COAX
R5
49.9
AVCC_RS
NT11
NET TIE
AVCC_FB
NT21
NET TIE
AVCC_P
NT22
NET TIE
AVCC
J12
COAX
R6
49.9
VCCAUX_RS
NT12
NET TIE
VCCAUX_FB
NT23
NET TIE
VCCAUX_P
NT24
NET TIE
VCCAUX
J13
COAX
R7
49.9
NT18
NET TIE
GND

COAX SMP


TP1
TP2
TP3
TP7
VCCINT
VCC_IO
VCC_SOC
GND
TP4
TP5
TP6
AVTT
VCCAUX
AVCC
TEST POINTS




GND_SENSE
GND
U1C
GND_SMON
GND_SENSE
GND

Availability

Xilinx part number	ProGrAnalog part number
VC2602-VSVH1760	PA-KIT-VC2602-VSVH1760
VC2802-VSVH1760	PA-KIT-VC2802-VSVH1760
VE2602-VSVH1760	PA-KIT-VE2602-VSVH1760
VE2802-VSVH1760	PA-KIT-VE2802-VSVH1760

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https://www.mouser.com
https://www.avnet.com

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https://www.forenext.com

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Taiwan:
https://www.forenext.com

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support@prograngalog.com