

XCede ORTHOGONAL BACKPLANE MODULE MALE STANDARD LOAD

4 PAIR

TWO WALL

0	90° 100 OHM
1	270° 100 OHM
2	90° 85 OHM
3	270° 85 OHM

ZONE	REV	SCR NUMBER	DESCRIPTION	BY	DATE	APPROVED
ALL	A	DSMH-8GYHZB.VER01	NEW RELEASE	HCL-PS	07/12/2011	D.SMITH
	B	TNIF-9RQJM.VER01	UPDATED WIPE LENGTH OPTIONS UPDATED PLASTIC TO BLADE TIP DIMENSIONS REMOVED LEFT AND RIGHT POLARIZING OPTIONS	HCL-RM	12/17/2014	T.NIERENDORF
	C	DCOY-A84GPZ.VER01	UPDATED PART MARKING REQUIREMENTS IN NOTES	HCL-SD	04/08/2016	D.COVEY

PLATING⁴

LETTER	DESCRIPTION
D	NI SULFAMATE, STANDARD GOLD, LEAD-FREE
E	NI SULFAMATE, HIGH GOLD, LEAD-FREE
H	NANO NI, STANDARD GOLD, LEAD-FREE
J	NANO NI, HIGH GOLD, LEAD-FREE

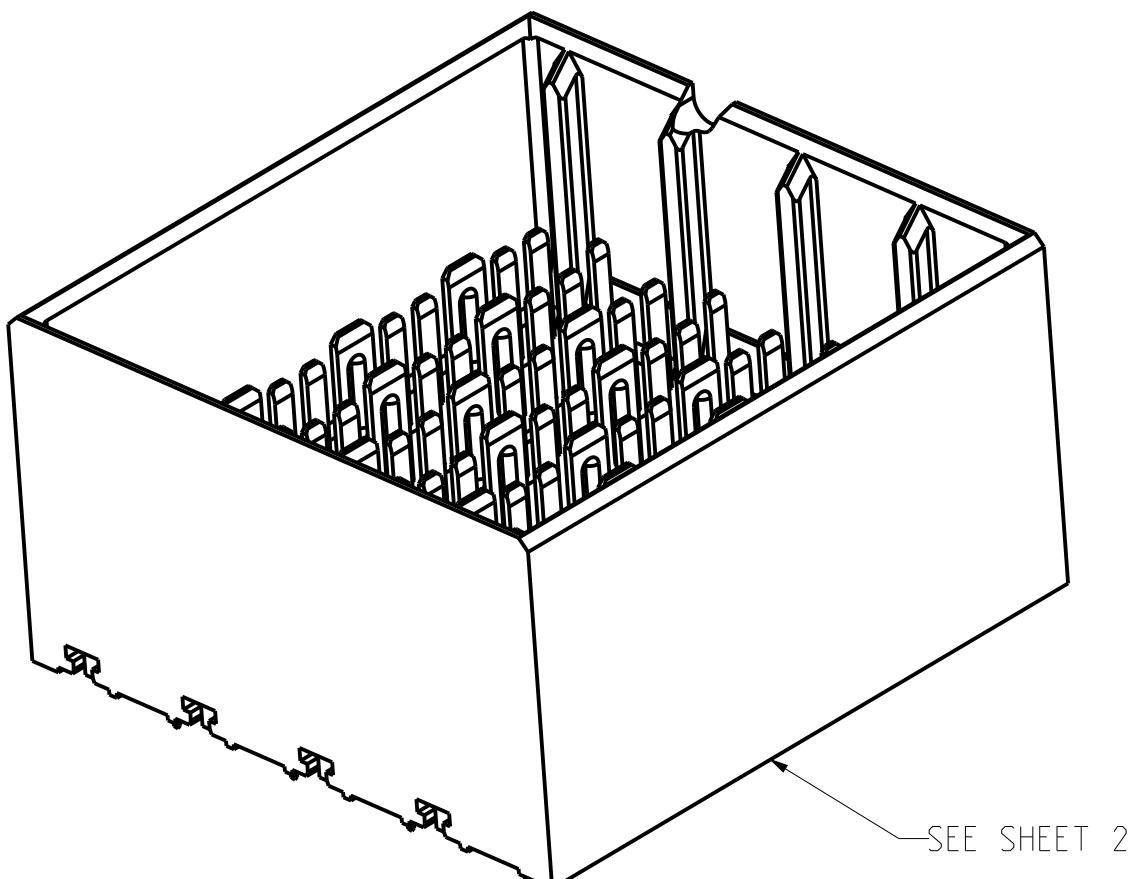
TABLE 1		
	GROUNDED	UNGROUNDED
FHS	Ø 2.35-2.55	Ø 2.35-2.55
PAD	Ø5.50	N/A
PLATED	YES	NO
DRILL (mm)	2.58 mm	2.44 mm
DRILL (in)	0.1015"	0.096"

TABLE 2		
SCREW P/N	DESCRIPTION	BOARD THICKNESS
577-0014-000	# 2-56 X 0.375" LG. PHILIPS PANHEAD W/SQ CONICAL WASHER	1.60 - 5.00 mm
577-0015-000	# 2-56 X 0.5" LG. PHILIPS PANHEAD W/SQ CONICAL WASHER	5.00 - 10.00 mm

2.5 MM WIPE SIGNAL, 3.5 MM WIPE LG GND, 3.5 MM SM GND, Ø.0177" DRILL

NOTES:

- REFER TO TB-2150 FOR XCede PRODUCT SPECIFICATIONS.
- NOTCH DESIGNATES "ROW A" SIDE OF SHROUD. NOTCH FEATURE ON OPPOSITE SIDE FROM PART MARKING.
- SEE TB-2325 FOR PART MARKING REQUIREMENTS.
- PLATING THICKNESS OF SIGNAL CONTACT AND GROUND CONTACT IS DETERMINED BY PLATING CODE. SEE PART NUMBER TREE SHEET 1.
- REPAIR PROCEDURE FOR MODULE, SEE TB-2210.
- SEE TB-2149 FOR ROUTING GUIDELINES & PTH REQUIREMENTS.
- SEE DOC C190-1001-000 FOR TOOLING KEEPOUT ZONES.
- BACKPLANE DATUM REFERENCE.
- OPTIONAL HOLE/MOUNTING SCREW LOCATION FOR GROUNDED PIN OR ADDITIONAL GUIDE PIN SUPPORT. REFER TO TB-2211 FOR PROPER GUIDE PIN SELECTION AND DRAWING C942-4010-000 FOR OPTIONAL HOLE DETAILS.
- ONLY APPLIES FOR MACHINED GUIDE PIN APPLICATIONS.
- DIMENSIONS APPLY FOR BOTH COMPLIANT PIN SIZES.
- REFER SHEETS 9-12 FOR DETAILS OF XCede ORTHOGONAL 4 X 8 DOUBLE ENDWALL.
- REFER SHEETS 13-16 FOR DETAILS OF XCede ORTHOGONAL 4 X 8 DOUBLE ENDWALL LEFT GUIDE.

ISOMETRIC VIEW
SCALE 4/1

DRAWING NO. C-951-4090-500	DESIGN 03/05/2010 M.RECEPUTO DRAWN 09/07/2010 HCL-VS CHK 09/07/2010 J.DUNHAM APVD 09/07/2010 J.DUNHAM	Amphenol TCS	
		A Division of Amphenol Corporation 200 Innovative Way, Nashua, NH 03062 603.879.3000	
		TITLE	BACKPLANE MODULES, VERTICAL MALE HEADER XCede ORTHOGONAL, 4 PAIR 8 POSITION
		PART NO.	SEE PN TREE SHEET 1
		REV	N/A
		DRAWING NO.	C-951-4090-500
		REV	C
		ASSEM:	C951-4090-BP4-BWF
		1.6	A.5
		SIZE D	SCALE 1/1

CUSTOMER USE
DRAWING
CODE IDENT 31413
INTERPRET PER ASME Y14.5M
DRAFTING DATE 09/07/2010
DRAWING NO. C-951-4090-500
REV C
ASSEM: C951-4090-BP4-BWF
DRAWING: C951-4090-500
SIZE D SCALE 1/1 SHEET 1 OF 7

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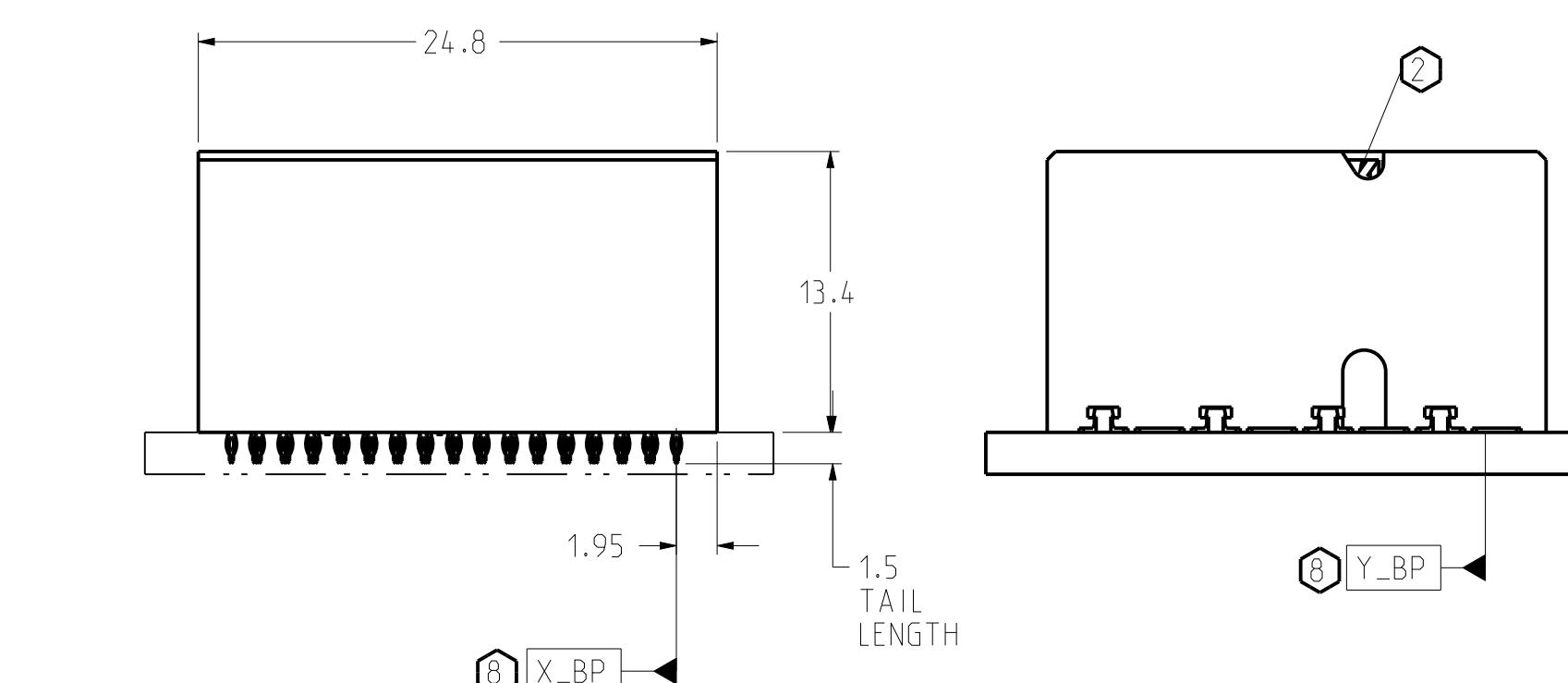
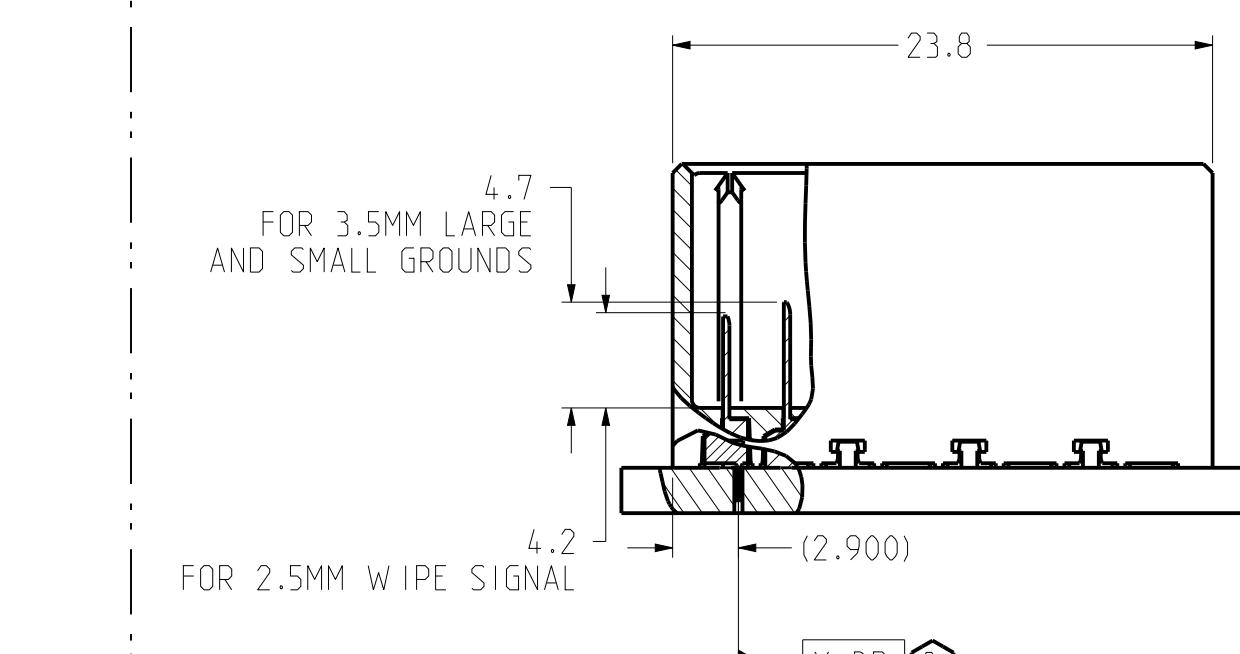
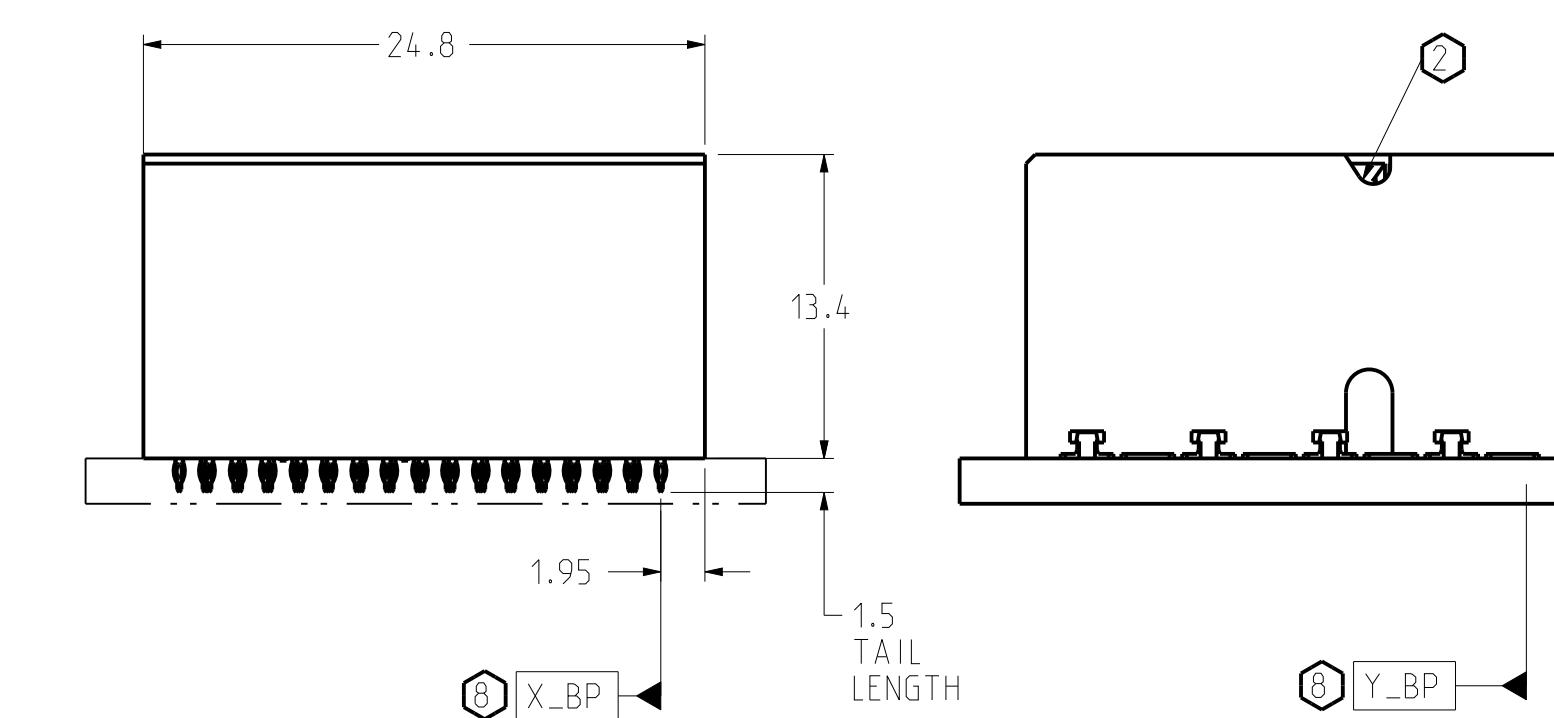
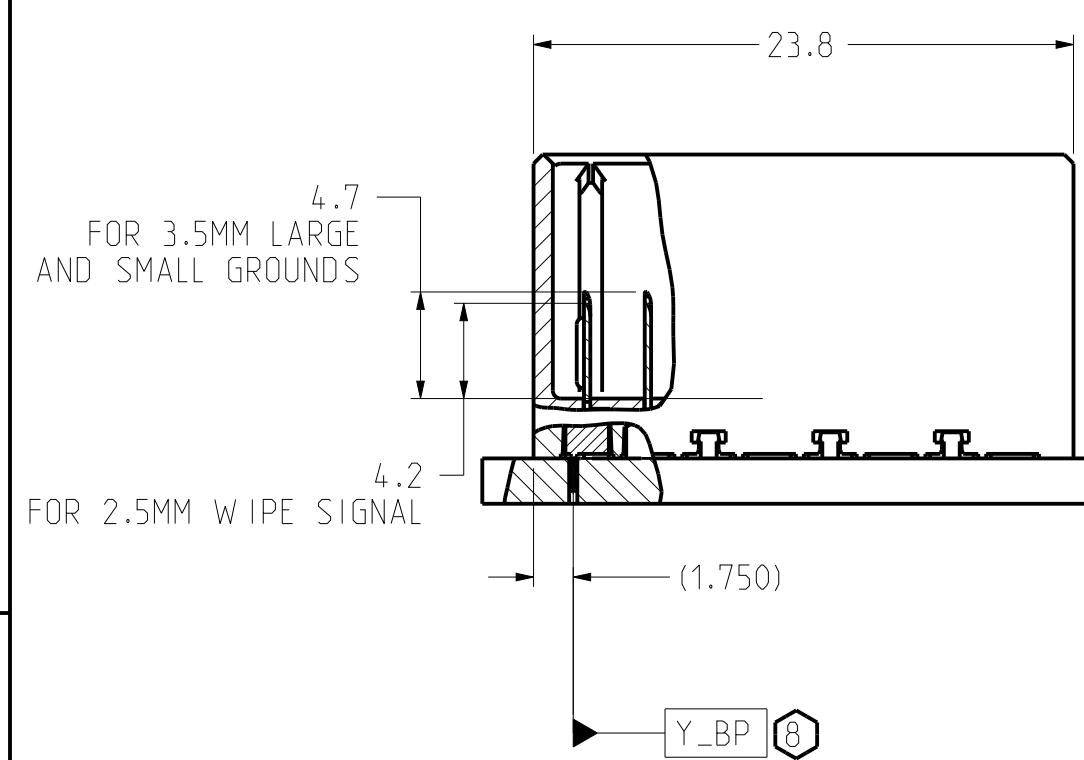
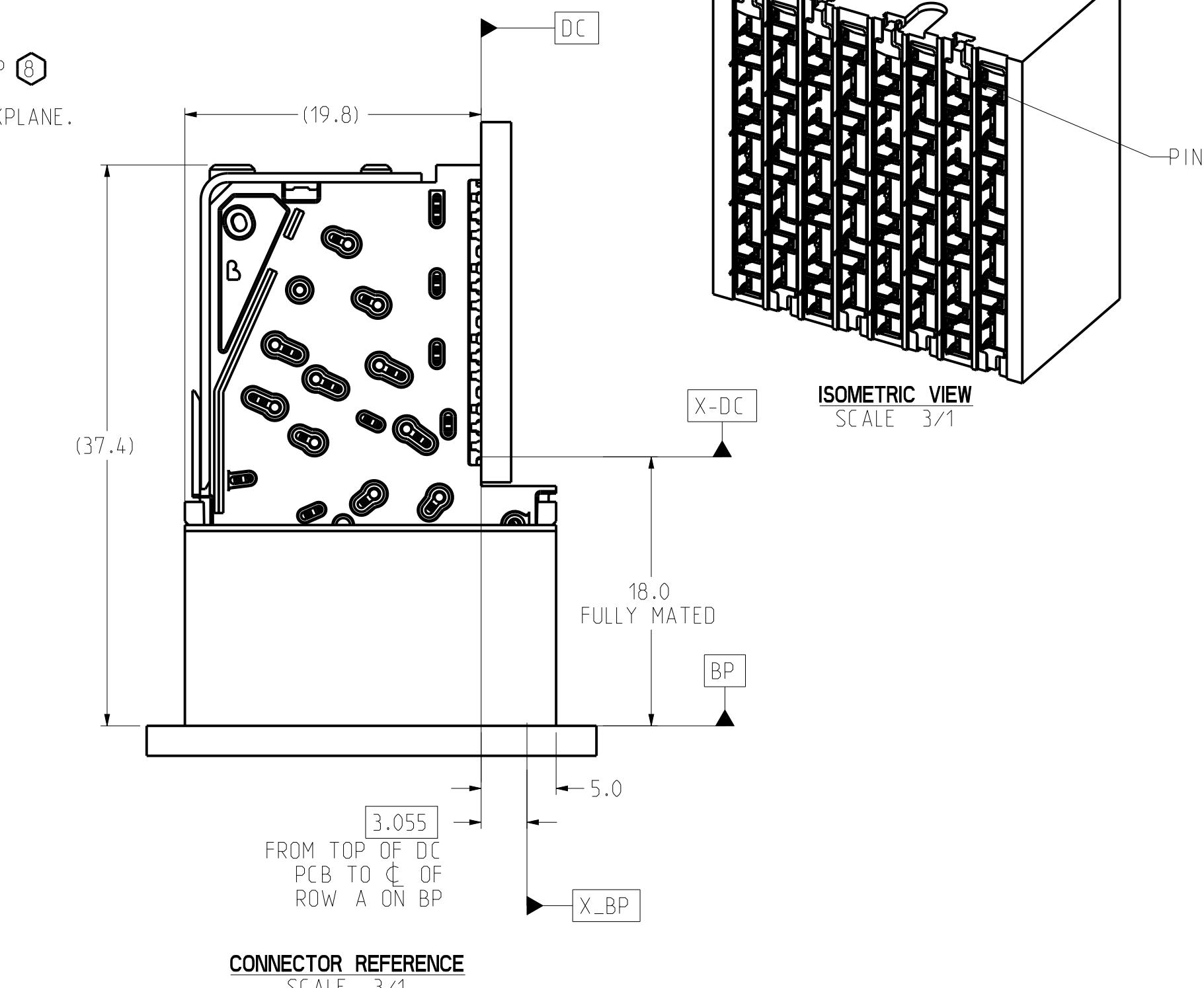
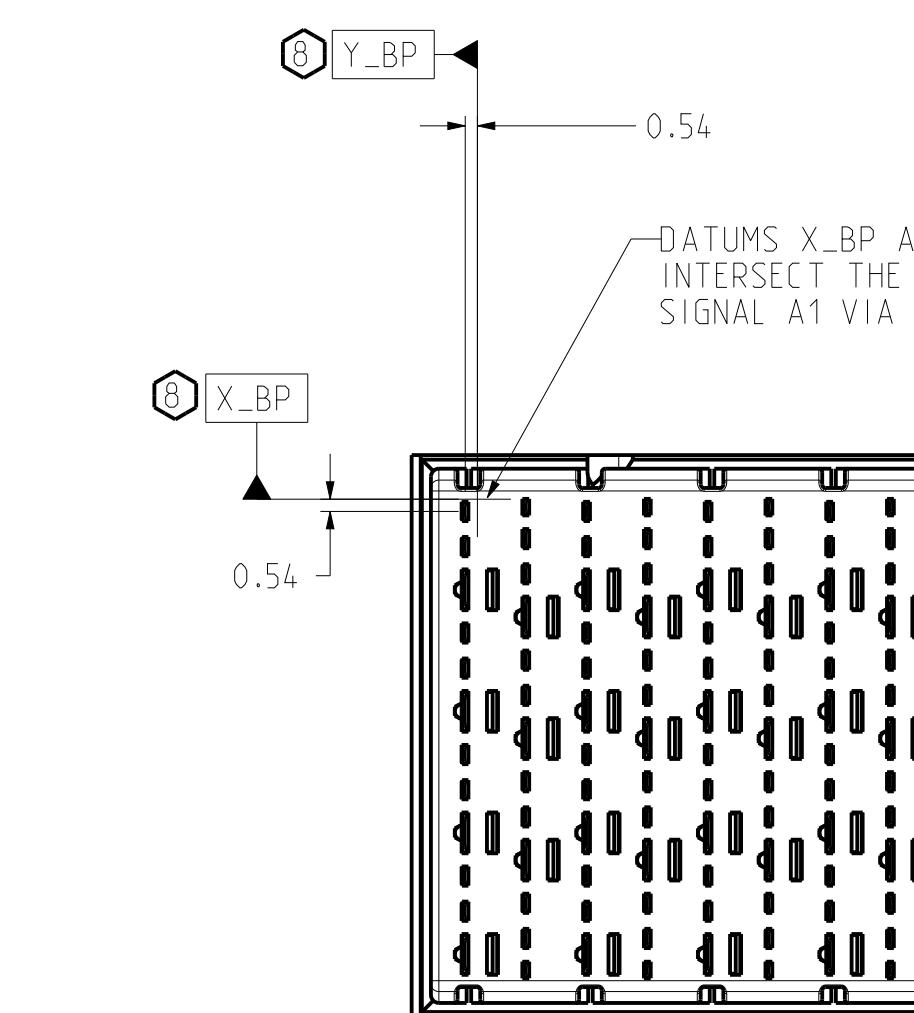
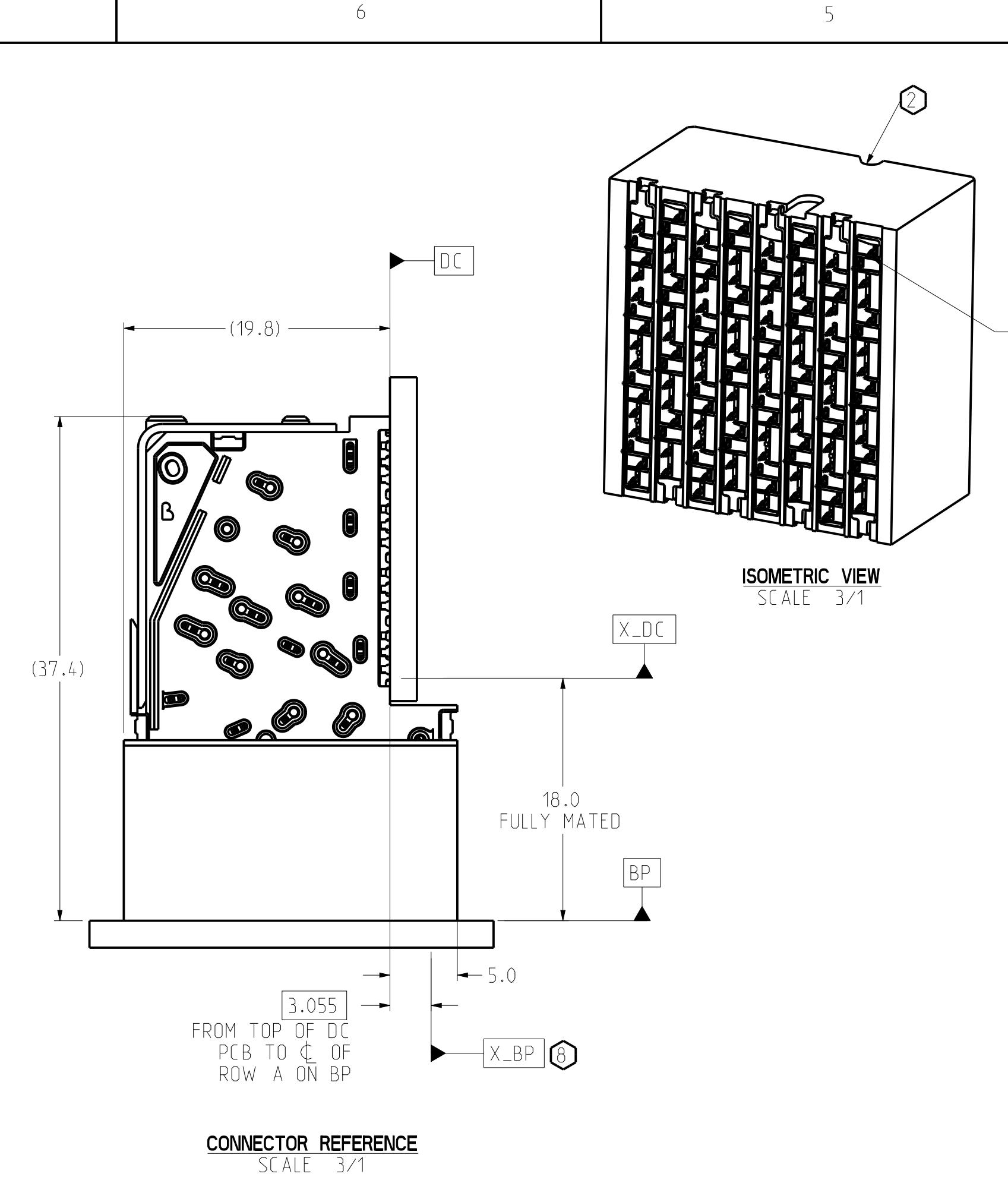
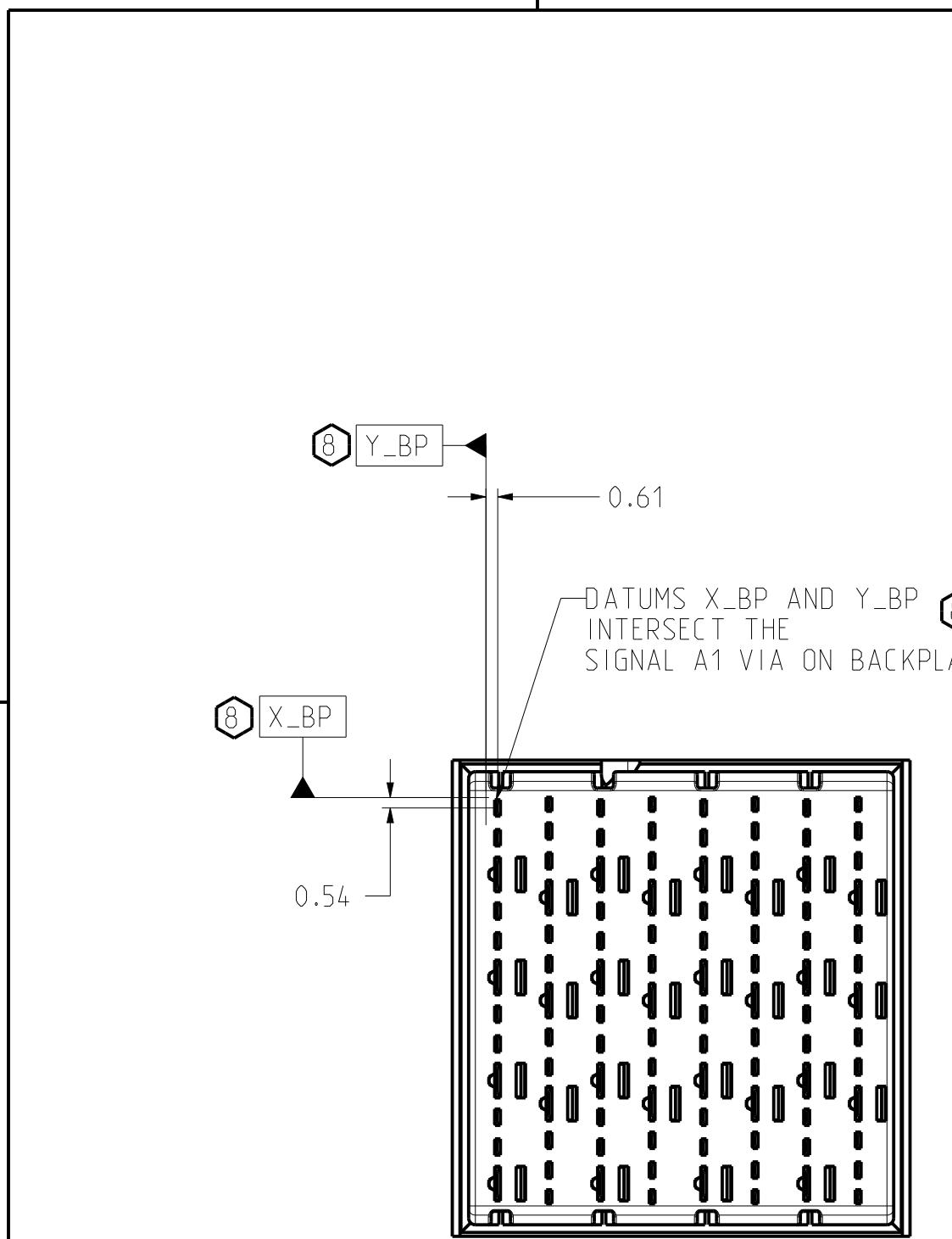
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DRW NO.	C-951-4090-500	SH	2	REV	C	
ZONE	REV	SCR NUMBER	DESCRIPTION	BY	DATE	APPROVED
			SEE SHEET 1			



DOUBLE END WALL BACKPLANE MODULE DIMENSION - 90°

DOUBLE END WALL BACKPLANE MODULE DIMENSION - 270°

TOLERANCES	0.0 ±0.25	DESIGN 03/05/2010 M.RECEPUTO
	0.00 ±0.13	DRAWN 09/07/2010 HCL-VS
	0.000 ± -	CHK 09/07/2010 J.DUNHAM
ANGLES	± 3°	APVD 09/07/2010 J.DUNHAM
		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MM, DECIMAL MARKER IS A PERIOD
		SEE PN TREE SHEET 1 N/A
		DRAWING NO. C-951-4090-500 REV C
		ASSEM: C951-4090-BP4-BWF 1.6
		DRAWING: C951-4090-500 A.5
CODE IDENT	31413	SHEET 2 OF 7

CUSTOMER USE DRAWING

Amphenol TCS

A Division of Amphenol Corporation
200 Innovative Way, Nashua, NH 03062 603.879.3000

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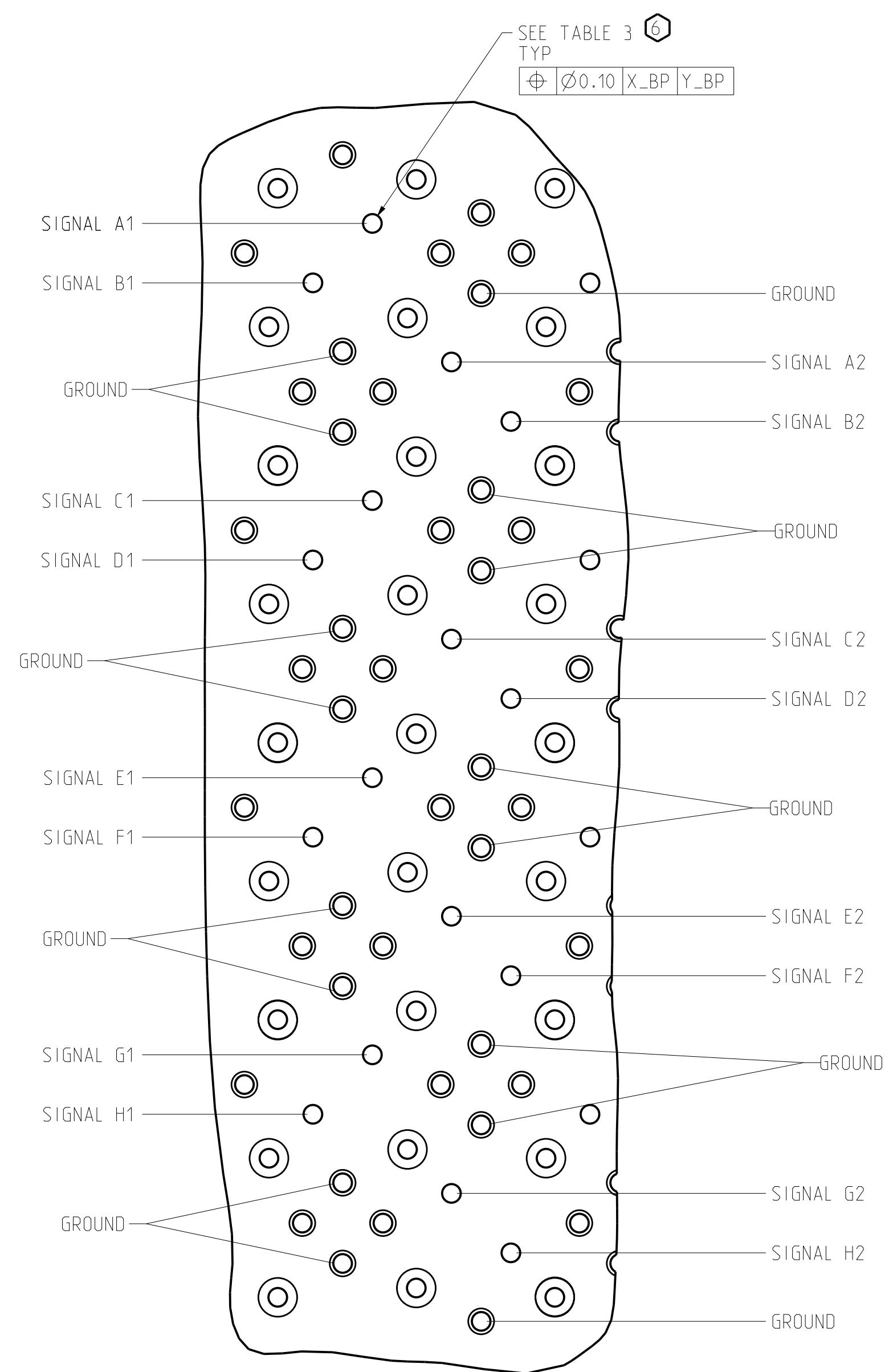
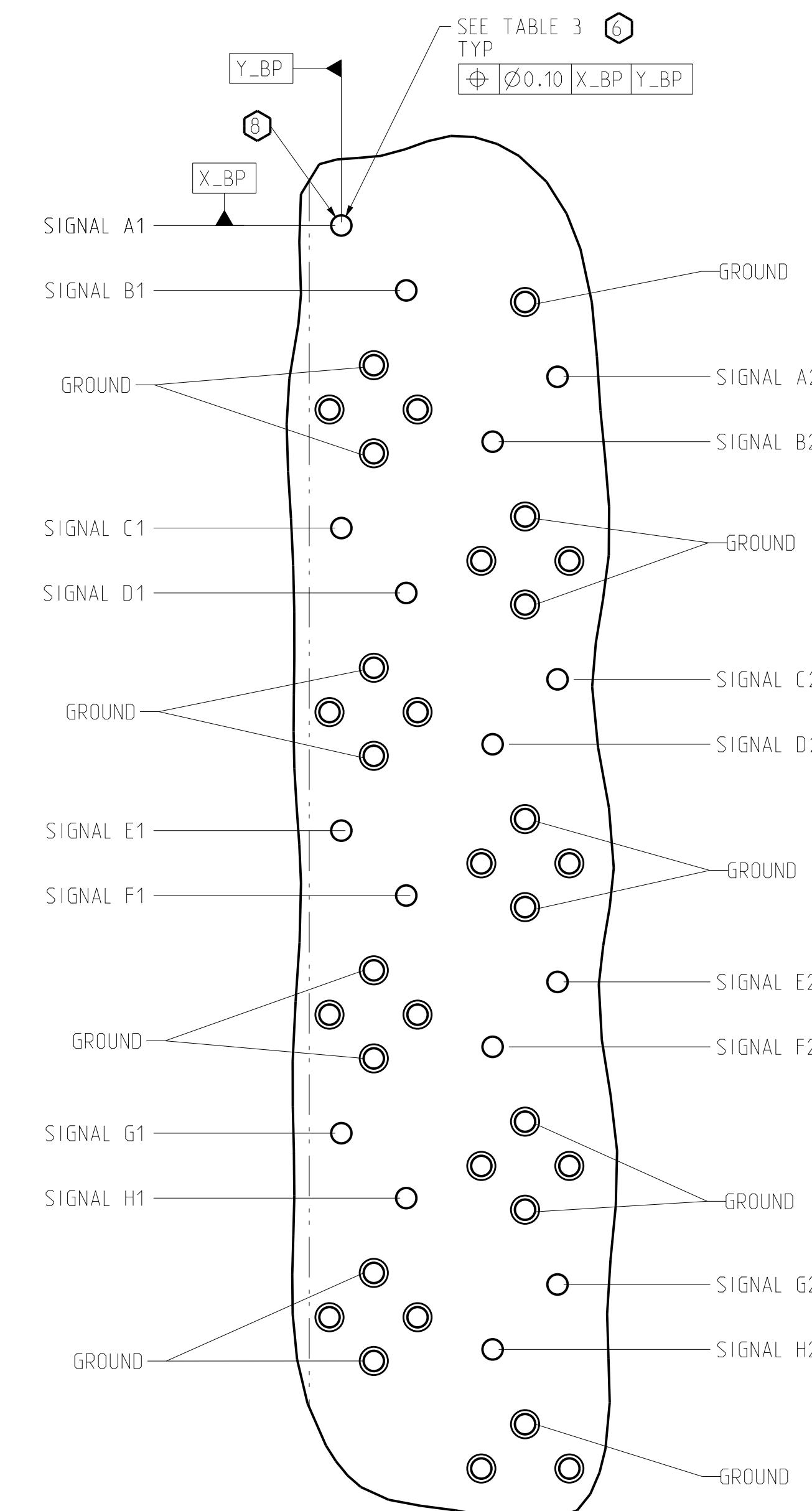
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DRW NO.
C-951-4090-500SH
3REV
C

ZONE	REV	SCR NUMBER	DESCRIPTION	BY	DATE	APPROVED
		SEE SHEET 1				



DETAIL D
HSD PINOUTS
90°FOOTPRINT AS
SEEN FROM THE PRIMARY SIDE
SCALE 12/1

HSD PINOUTS
270°FOOTPRINT AS
SEEN FROM THE SECONDARY SIDE
SCALE 12/1

TOLERANCES	DESIGN 03/05/2010 M.RECEPUTO	DRAWN 09/07/2010 HCL-VS CHK 09/07/2010 J.DUNHAM APVD 09/07/2010 J.DUNHAM
0.0	±0.25	
0.00	±0.13	
0.000	± -	
ANGLES	± 3°	TITLE BACKPLANE MODULES, VERTICAL MALE HEADER XCede ORTHOGONAL, 4 PAIR 8 POSITION
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MM, DECIMAL MARKER IS A PERIOD		PART NO. SEE PN TREE SHEET 1 N/A
DRAWING NO. C-951-4090-500 REV C		DRAWING NO. C-951-4090-500 REV C
ASSEM: C951-4090-BP4-BWF 1.6 DRAWING: C951-4090-500 A.5		SIZE D SCALE 1/1 SHEET 3 OF 7
CODE IDENT 31413		Amphenol TCS A Division of Amphenol Corporation 200 Innovative Way, Nashua, NH 03062 603.879.3000

CUSTOMER USE
DRAWING
INTERPRET PER ASME Y14.5M
CODE IDENT 31413

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DRW NO.
C-951-4090-500

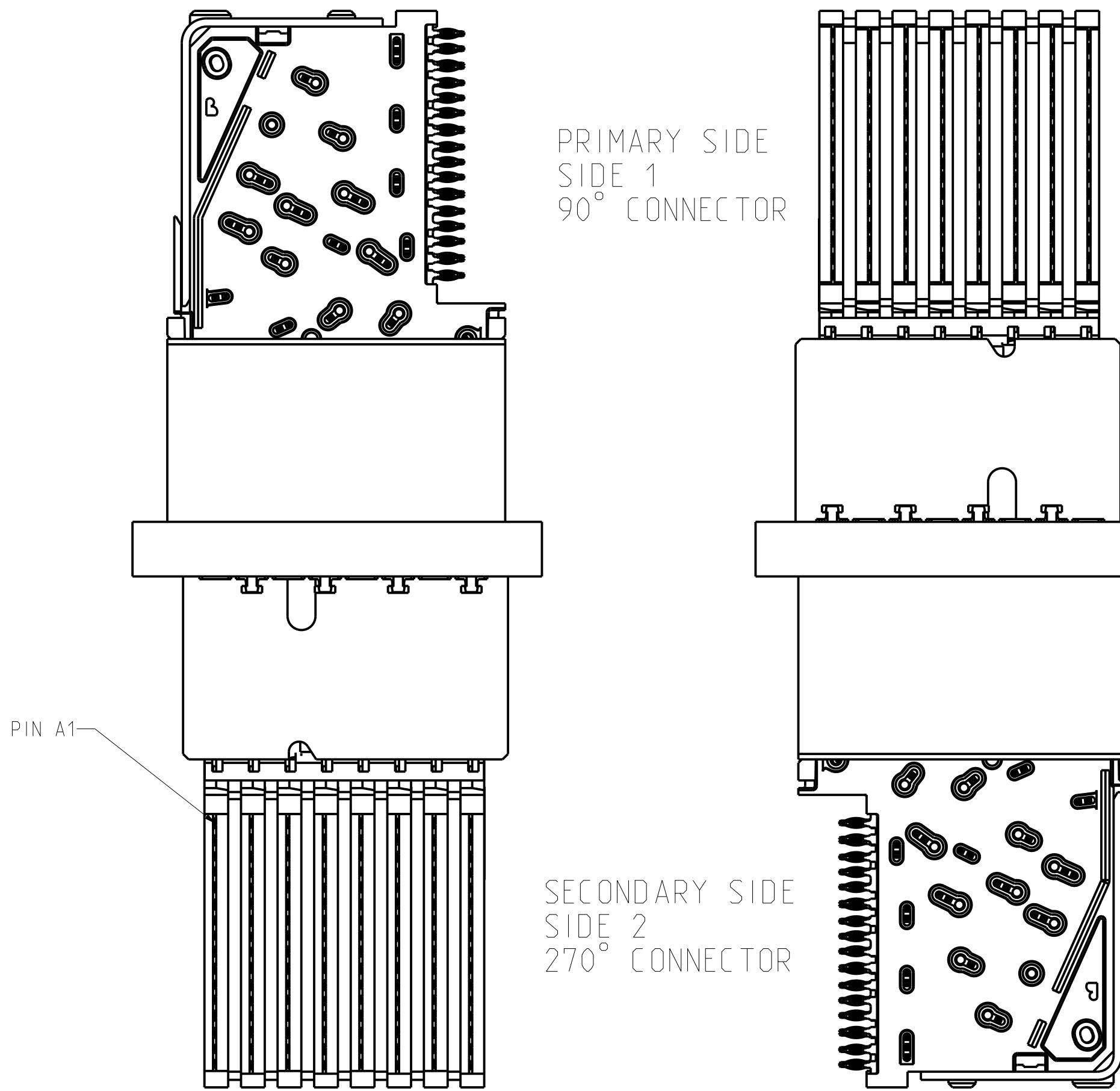
SH

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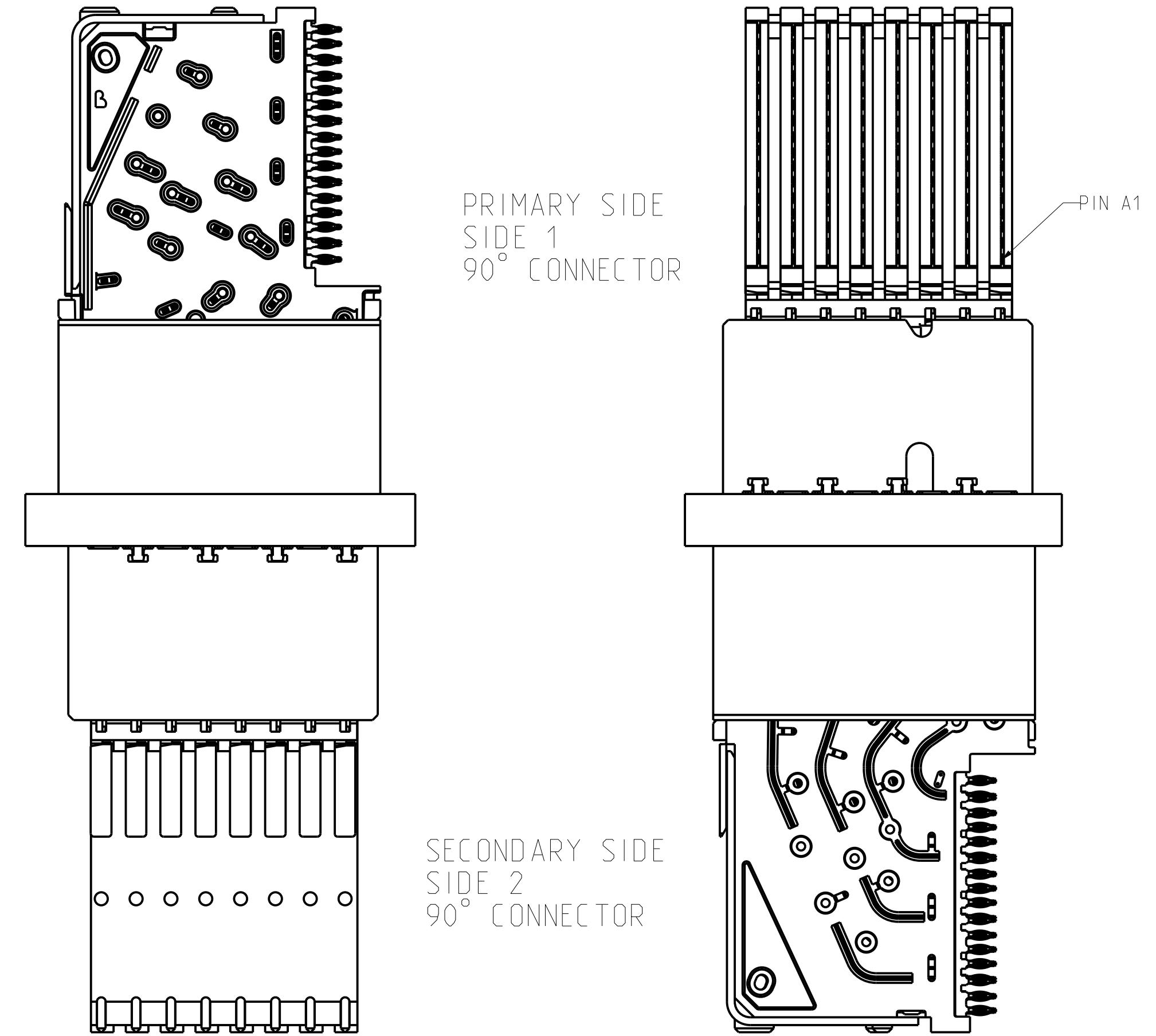
REV

C

951-4191 / 4193-XXX
ORTHOGONAL OPTION #1 - 270° ORIENTATION
DOUBLE WALL



951-4190 / 4192-XXX
ORTHOGONAL OPTION #2 - 90° ORIENTATION
DOUBLE WALL



PASS THROUGH CONFIGURATION 270°									
SIDE1-SIDE2									
A1-H8	A2-G7	A3-F8	A4-E7	A5-D8	A6-C7	A7-B8	A8-A7		
B1-G8	B2-H7	B3-E8	B4-F7	B5-C8	B6-D7	B7-A8	B8-B7		
C1-H6	C2-G5	C3-F6	C4-E5	C5-D6	C6-C5	C7-B6	C8-A5		
D1-G6	D2-H5	D3-E6	D4-F5	D5-C6	D6-D5	D7-A6	D8-B5		
E1-H4	E2-G3	E3-F4	E4-E3	E5-D4	E6-C3	E7-B4	E8-A3		
F1-G4	F2-H3	F3-E4	F4-F3	F5-C4	F6-D3	F7-A4	F8-B3		
G1-H2	G2-G1	G3-F2	G4-E1	G5-D2	G6-C1	G7-B2	G8-A1		
H1-G2	H2-H1	H3-E2	H4-F1	H5-C2	H6-D1	H7-A2	H8-B1		

PASS THROUGH CONFIGURATION 90°								
PIN MAPPING SIDE 1-SIDE 2	SIDE1-SIDE2							
	A1-A1	A2-B2	A3-C1	A4-D2	A5-E1	A6-F2	A7-G1	A8-H2
	B1-B1	B2-A2	B3-D1	B4-C2	B5-F1	B6-E2	B7-H1	B8-G2
	C1-A3	C2-B4	C3-C3	C4-D4	C5-E3	C6-F4	C7-G3	C8-H4
	D1-B3	D2-A4	D3-D3	D4-C4	D5-F3	D6-E4	D7-H3	D8-G4
	E1-A5	E2-B6	E3-C5	E4-D6	E5-E5	E6-F6	E7-G5	E8-H6
	F1-B5	F2-A6	F3-D5	F4-C6	F5-F5	F6-E6	F7-H5	F8-G6
	G1-A7	G2-B8	G3-C7	G4-D8	G5-E7	G6-F8	G7-G7	G8-H8
	H1-B7	H2-A8	H3-D7	H4-C8	H5-F7	H6-E8	H7-H7	H8-G8

TOLERANCES	0.0 ±0.25	DESIGN 03/05/2010 M.RECEPUTO
	0.00 ±0.13	DRAWN 09/07/2010 HCL-VS
	0.000 ± -	CHK 09/07/2010 J.DUNHAM
ANGLES	± 3°	APVD 09/07/2010 J.DUNHAM
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MM, DECIMAL MARKER IS A PERIOD		
SEE PN TREE SHEET 1 N/A		
DRAWING NO. C-951-4090-500 REV C		
ASSEM: C951-4090-BP4-BWF 1.6 DRAWING: C951-4090-500 A.5		
SIZE D	SCALE 1/1	SHEET 4 OF 7

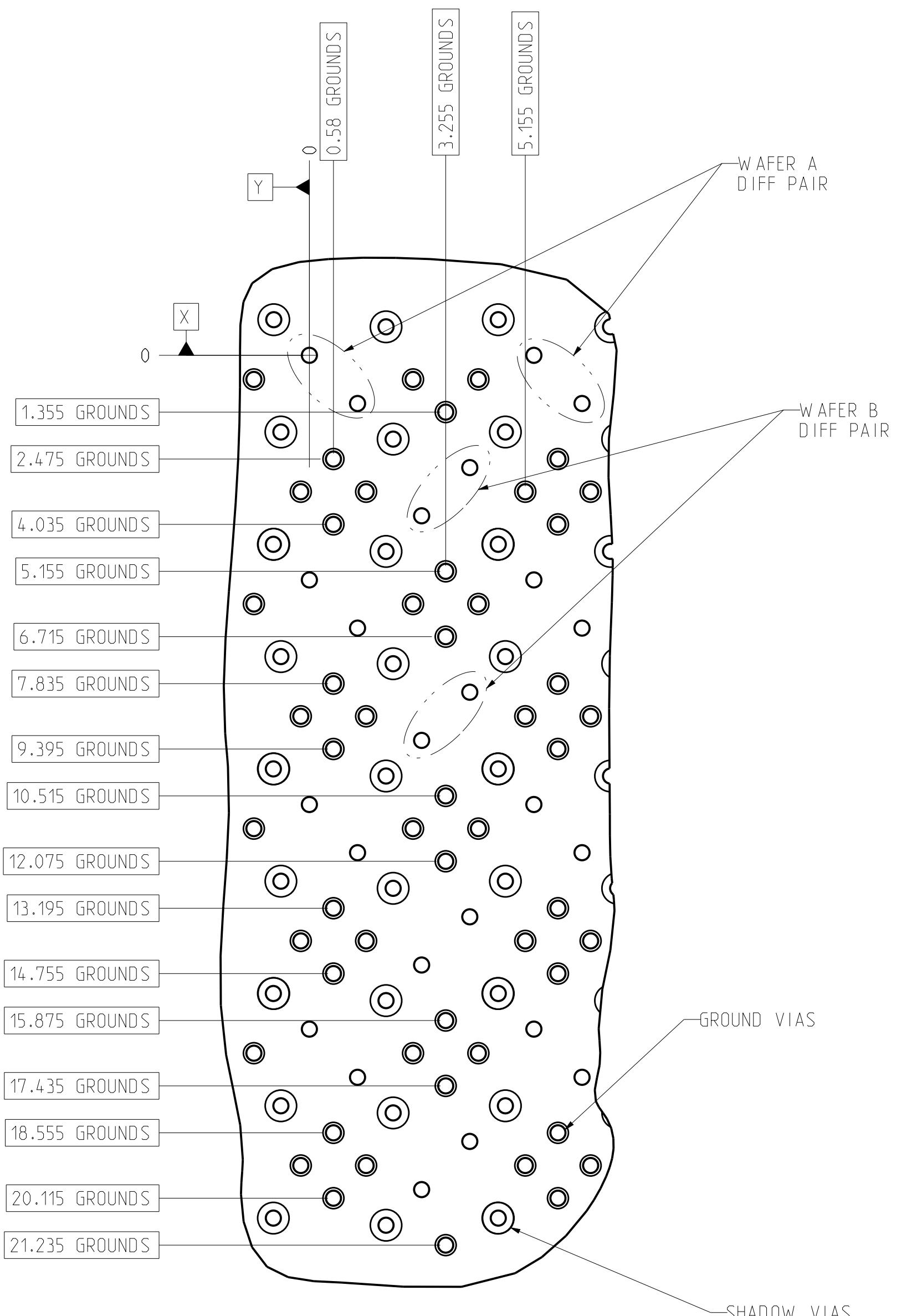
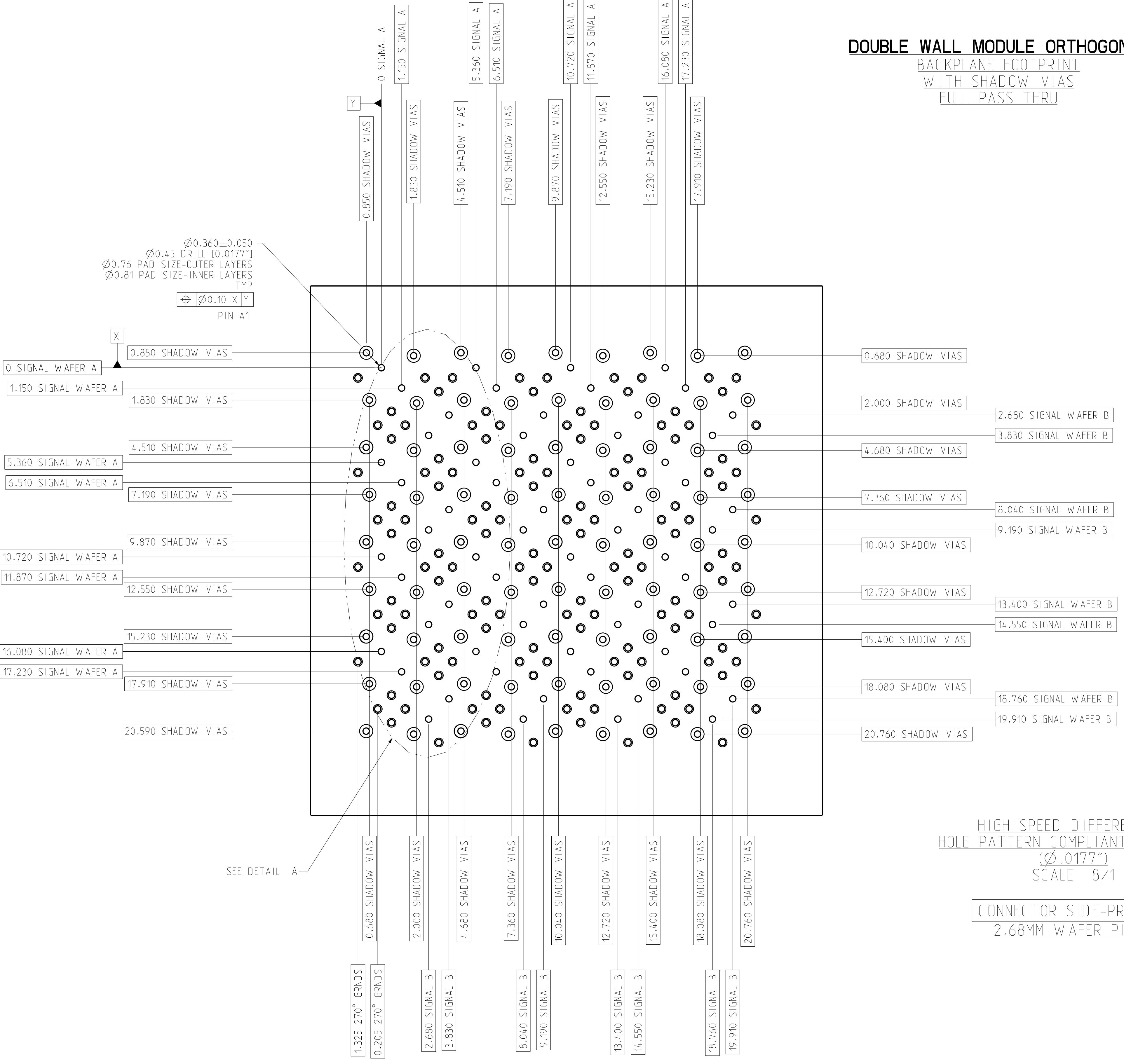
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INTERPRET PER ASME Y14.5M
CODE IDENT 31413

CUSTOMER USE DRAWING

DRW NO. C-951-4090-500 SH 5 REV C
SEE SHEET 1

DOUBLE WALL MODULE ORTHOGONAL
BACKPLANE FOOTPRINT
WITH SHADOW VIAS
FULL PASS THRU



HIGH SPEED DIFFERENTIAL
HOLE PATTERN COMPLIANT PIN DRILL
(ϕ .0177")
SCALE 8/1

CONNECTOR SIDE-PRIMARY
2.68MM WAFER PITCH

TOLERANCES	0.0	± 0.25	DESIGN 03/05/2010 M.RECEP TO
	0.00	± 0.13	DRAWN 09/07/2010 HCL-VS
	0.000	$\pm -$	CHK 09/07/2010 J.DUNHAM
ANGLES	$\pm 3^\circ$		APVD 09/07/2010 J.DUNHAM
			UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MM, DECIMAL MARKER IS A PERIOD
			SEE PN TREE SHEET 1
			DRAWING NO. C-951-4090-500 REV C
			ASSEM: C951-4090-BP4-BWF DRAWING: C951-4090-500 1.6 A.5
CODE IDENT	31413		SIZE D SCALE 1/1 SHEET 5 OF 7

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CUSTOMER USE
DRAWING

INTERPRET PER ASME Y14.5M

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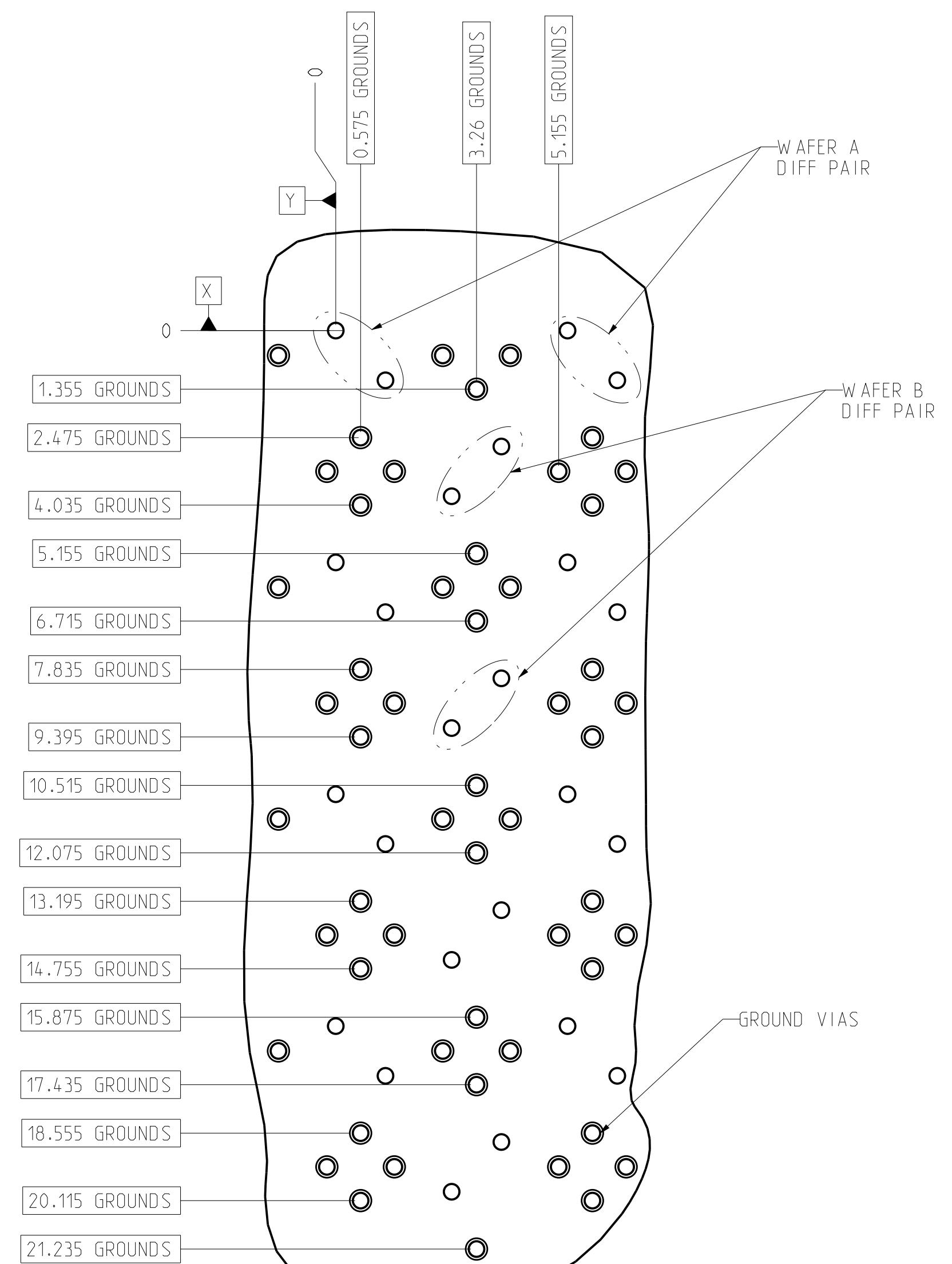
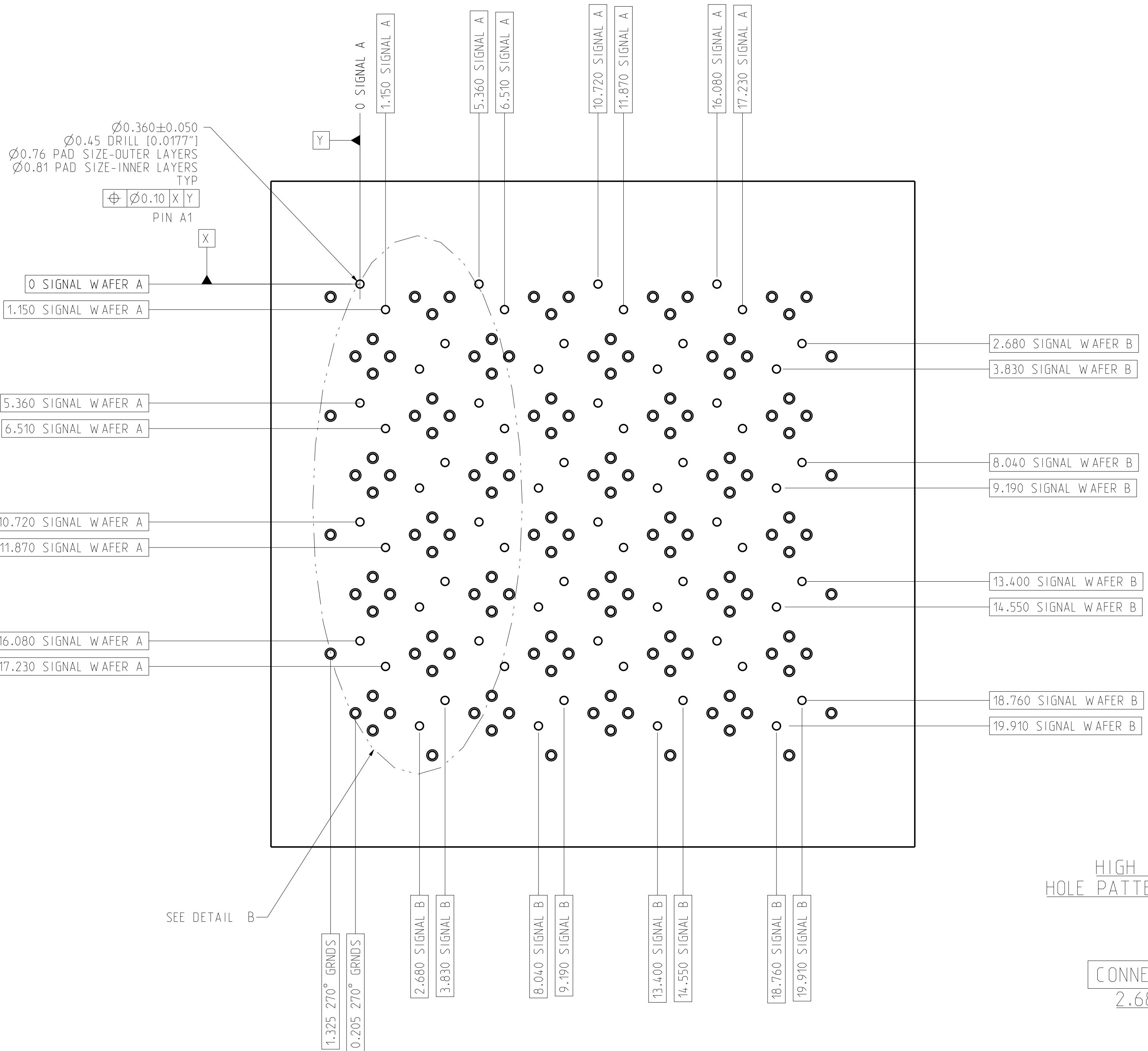
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DRW NO.	C-951-4090-500	SH 6	REV C
SEE SHEET 1			

DOUBLE WALL MODULE ORTHOGONAL
BACKPLANE FOOTPRINT
WITHOUT SHADOW VIAS
PASS THRU



PRIMARY SIDE
 DETAIL B
 SCALE 10/1

HIGH SPEED DIFFERENTIAL
 HOLE PATTERN COMPLIANT PIN DRILL
 (Φ .0177")
 SCALE 8/1

CONNECTOR SIDE-PRIMARY
 2.68MM WAFER PITCH

TOLERANCES	0.0 ±0.25	DESIGN 03/05/2010 M.RECEPITO
	0.00 ±0.13	DRAWN 09/07/2010 HCL-VS
	0.000 ± -	CHK 09/07/2010 J.DUNHAM
ANGLES	± 3°	APVD 09/07/2010 J.DUNHAM
		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MM, DECIMAL MARKER IS A PERIOD
		SEE PN TREE SHEET 1 N/A
		DRAWING NO. C-951-4090-500 REV C
		ASSEM: C951-4090-BP4-BWF 1.6
		DRAWING: C-951-4090-500 A.5
CODE IDENT	31413	SHEET 6 OF 7

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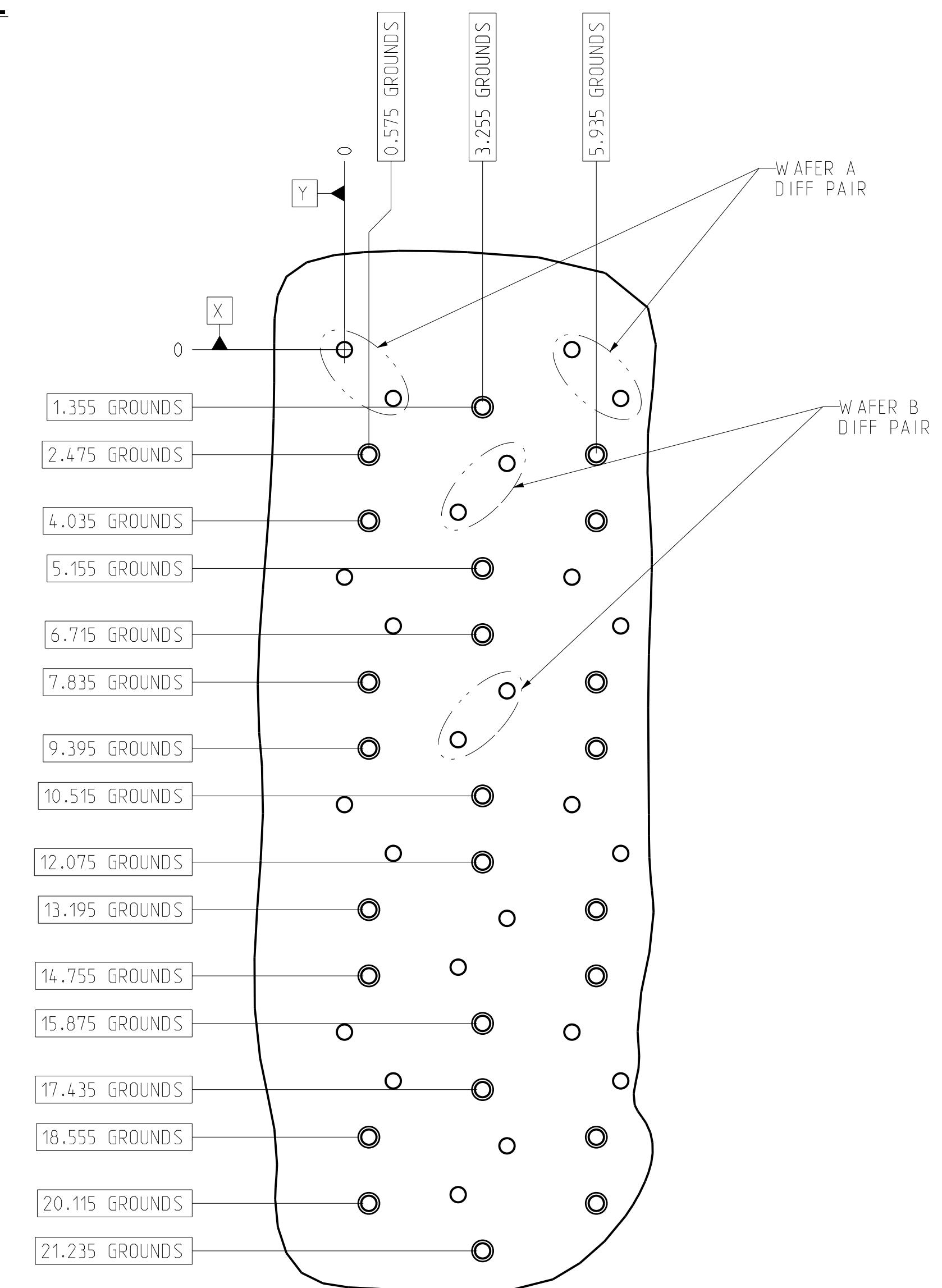
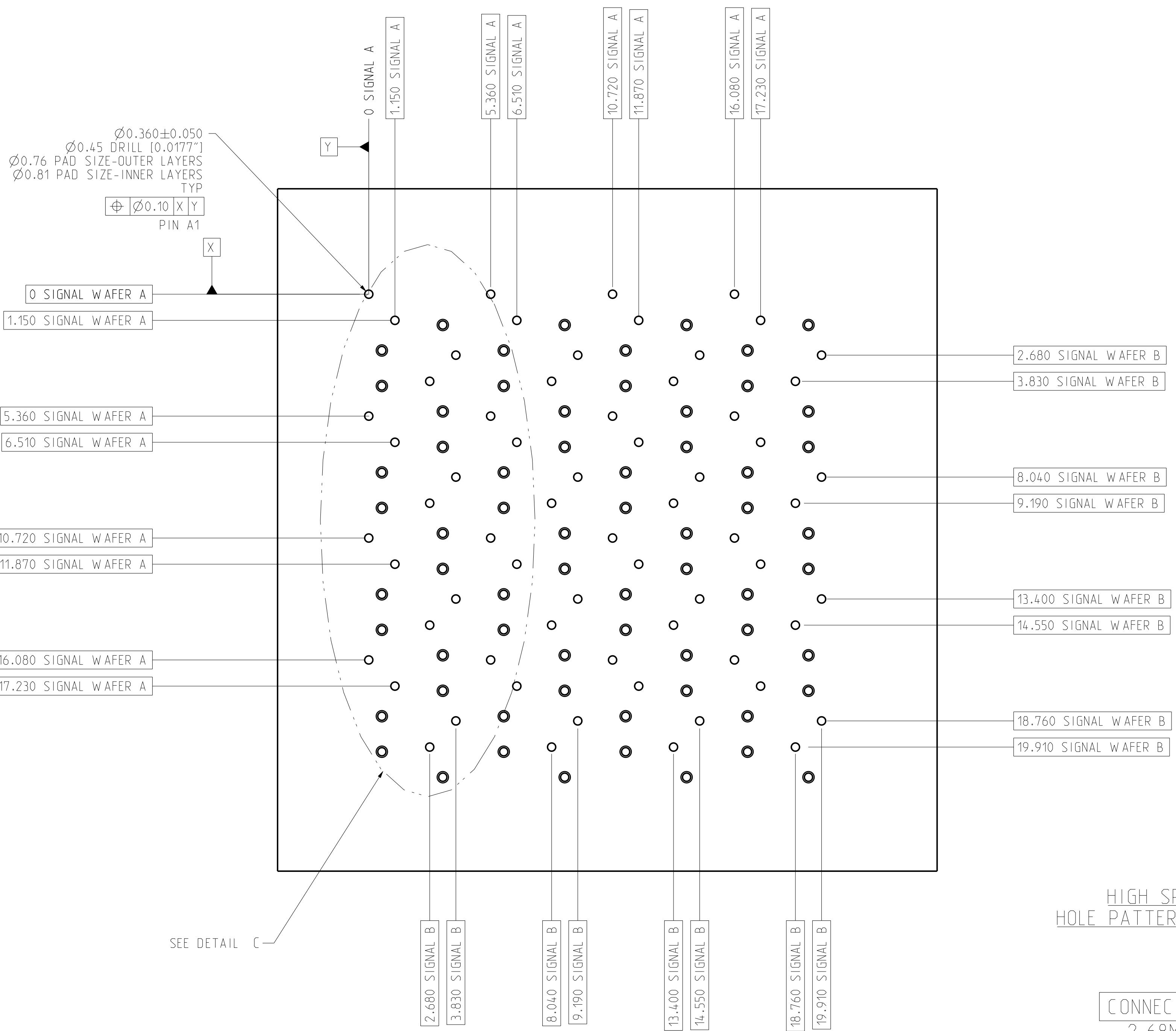
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DRW NO.	C-951-4090-500	SH	7	REV	C	
ZONE	REV	SCR NUMBER	DESCRIPTION	BY	DATE	APPROVED
			SEE SHEET 1			

DOUBLE WALL MODULE ORTHOGONAL
BACKPLANE FOOTPRINT
WITHOUT SHADOW VIAS
NO PASS THRU



PRIMARY SIDE
DETAIL C
SCALE 10/1

HIGH SPEED DIFFERENTIAL
HOLE PATTERN COMPLIANT PIN DRILL
($\phi .0177"$)
SCALE 8/1

CONNECTOR SIDE-PRIMARY
2.68MM WAFER PITCH

TOLERANCES	0.0 ± 0.25	DESIGN 03/05/2010 M.RECEPUTO
	0.00 ± 0.13	DRAWN 09/07/2010 HCL-VS
	0.000 $\pm -$	CHK 09/07/2010 J.DUNHAM
ANGLES	$\pm 3^\circ$	APVD 09/07/2010 J.DUNHAM
		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MM, DECIMAL MARKER IS A PERIOD
		SEE PN TREE SHEET 1 N/A
DRAWING NO.	C-951-4090-500	REV C
	ASSEM: C951-4090-BP4-BWF	1.6
	DRAWING: C951-4090-500	A.5
SIZE D	SCALE 1/1	SHEET 7 OF 7

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CUSTOMER USE
DRAWING
CODE IDENT 31413

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DRW NO. C-951-4090-500
HS 7
REV C