

ZONE	REV	SCR NUMBER	DESCRIPTION	BY	DATE	APPROVED
ALL	A	DCOY-ABRK3N.VER01	NEW RELEASE	HCL-SD	05/12/2016	D.COVEY

DRW NO. C-940-612F-500 SH 1 REV A

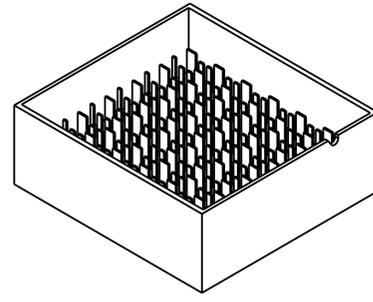
9 4 0 - 6 1 X F - X 0 X
 6 PAIR F = 12" POS

XCede ORTHOGONAL BACKPLANE MODULE MALE STANDARD LOAD

2 = 90°(100 OHM)
 3 = 270°(100 OHM)
 4 = 90°(85 OHM)
 5 = 270°(85 OHM)

NUMBER	SIGNAL, LG. GROUND & SM GND. WIPE LENGTH, COMPLIANT PIN SIZE
9	2.5MM WIPE SIGNAL, 3.5MM WIPE LG GND, 2.5MM WIPE SM GND. Ø0.0177" DRILL
B	2.0MM WIPE SIGNAL, 3.5MM WIPE LG GND, 3.5MM WIPE SM GND. Ø0.0177" DRILL
C	2.5MM WIPE SIGNAL, 3.5MM WIPE LG GND, 3.5MM SM GND, Ø0.0177" DRILL
D	2.0MM WIPE SIGNAL, 3.5MM WIPE LG GND, 2.5MM WIPE SM GND. Ø0.0177" DRILL
E	3.0MM WIPE SIGNAL, 4.0MM WIPE LG GND, 4.0MM WIPE SM GND, Ø0.0177" DRILL
F	2.0MM WIPE SIGNAL, 3.0MM WIPE LG GND, 2.5MM WIPE SM GND. Ø0.0177" DRILL
G	3.0MM WIPE SIGNAL, 4.0MM WIPE LG GND, 2.5MM WIPE SM GND, Ø0.0177" DRILL
H	2.0MM WIPE SIGNAL, 3.0MM WIPE LG GND, 3.0MM WIPE SM GND. Ø0.0177" DRILL

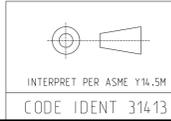
PLATING ④	
LETTER	DESCRIPTION
D	Ni SULFAMATE, STANDARD GOLD, LEAD-FREE
E	Ni SULFAMATE, HIGH GOLD, LEAD-FREE
H	NANO Ni, STANDARD GOLD, LEAD-FREE
J	NANO Ni, HIGH GOLD, LEAD-FREE



ISOMETRIC VIEW
SCALE 2/1

- NOTES:
- REFER TO TB-2150 FOR XCede PRODUCT SPECIFICATIONS.
 - ④ NOTCH DESIGNATES "ROW A" SIDE OF SHROUD. NOTCH FEATURE ON OPPOSITE SIDE FROM PART MARKING.
 - SEE TB-2325 FOR PART MARKING REQUIREMENTS.
 - ④ 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.
 - ④ SEE TB-2149 FOR ROUTING GUIDELINES & PTH REQ'S.
 - ④ SEE DOC C190-1001-000 FOR TOOLING KEEPOUT ZONES.
 - ④ BACKPLANE DATUM REFERENCE.
 - ④ DIMENSIONS APPLY FOR BOTH COMPLIANT PIN SIZES.

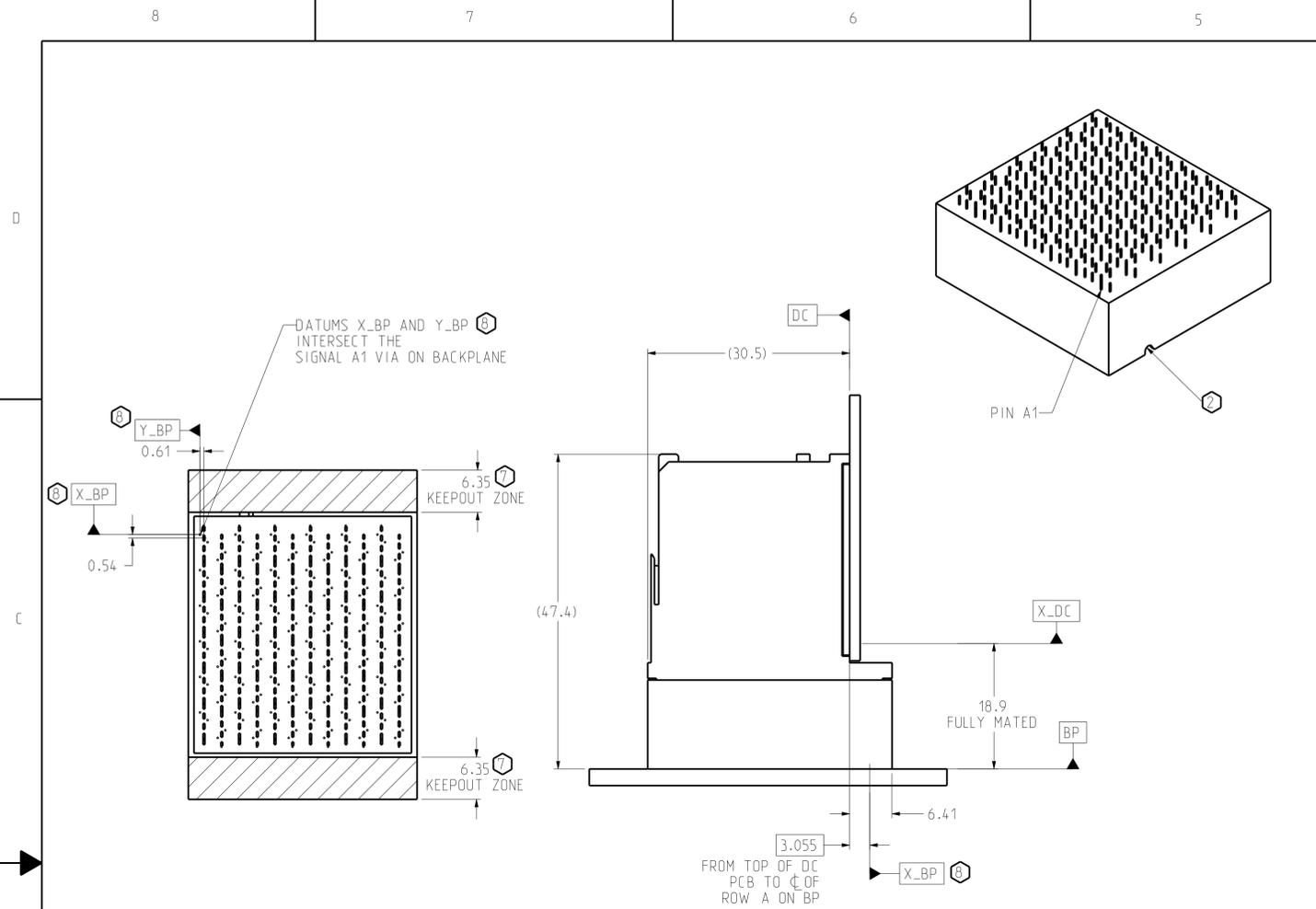
TOLERANCES	DESIGN 09/01/2011 M.RECEPUTO	Amphenol TCS A Division of Amphenol Corporation 200 Innovative Way, Nashua, NH 03062 603.879.3000	TITLE	DBL WALL BP MOD., VERT MALE HEADER XCede ORTHO. 6PAIR	PART NO.	SEE PN TREE SHEET 1	REV	N/A
0.0 ±0.25	DRAWN 08/30/2011 M.RECEPUTO		DRAWING NO.	C-940-612F-500	REV	A		
0.00 ±0.13	CHK 08/30/2011 J.DUNHAM		ASSEMBLY	ASSEM C940-BP-SHRD-GEN	1.15			
0.000 ± -	APVD 08/30/2011 J.DUNHAM		DRAWING NO.	C-940-612F-500	1.20			
ANGLES ± 3°	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MM. DECIMAL MARKER IS A PERIOD.	CUSTOMER USE DRAWING		SCALE	1/1	SHEET	1 OF 6	



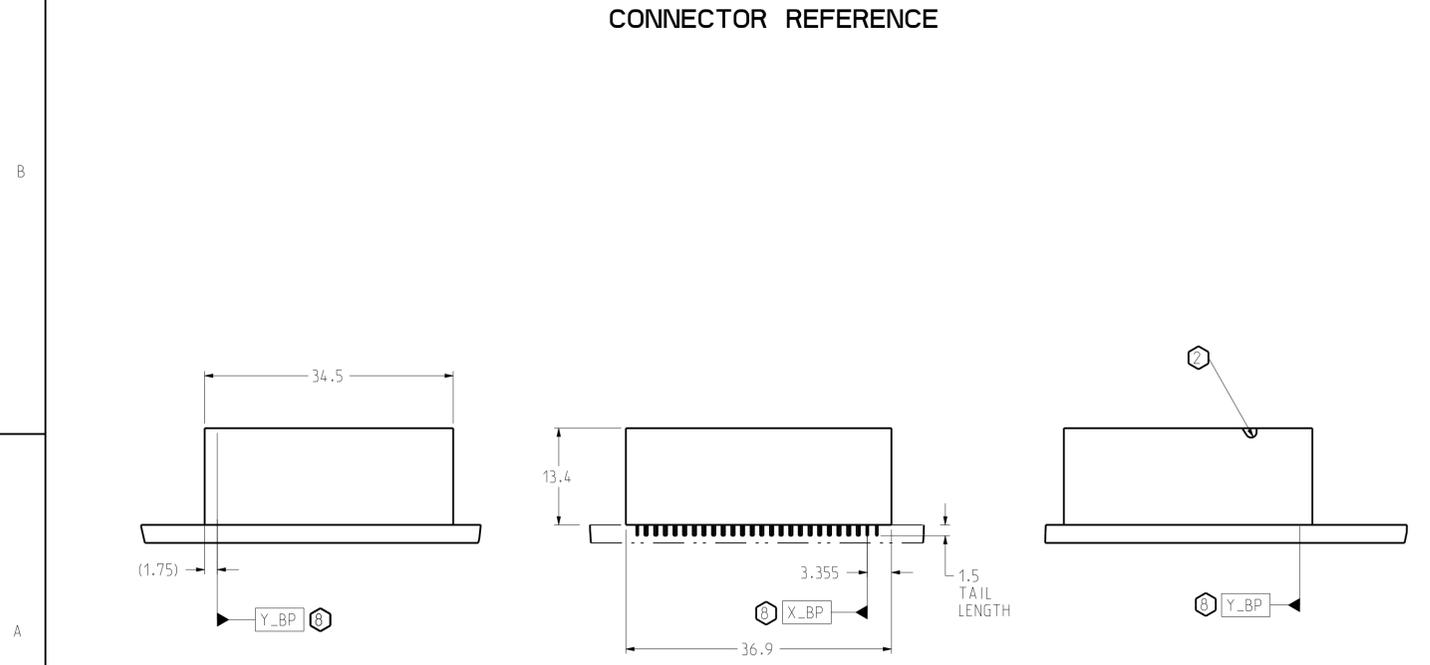
DRW NO. C-940-612F-500

SH 1 REV A

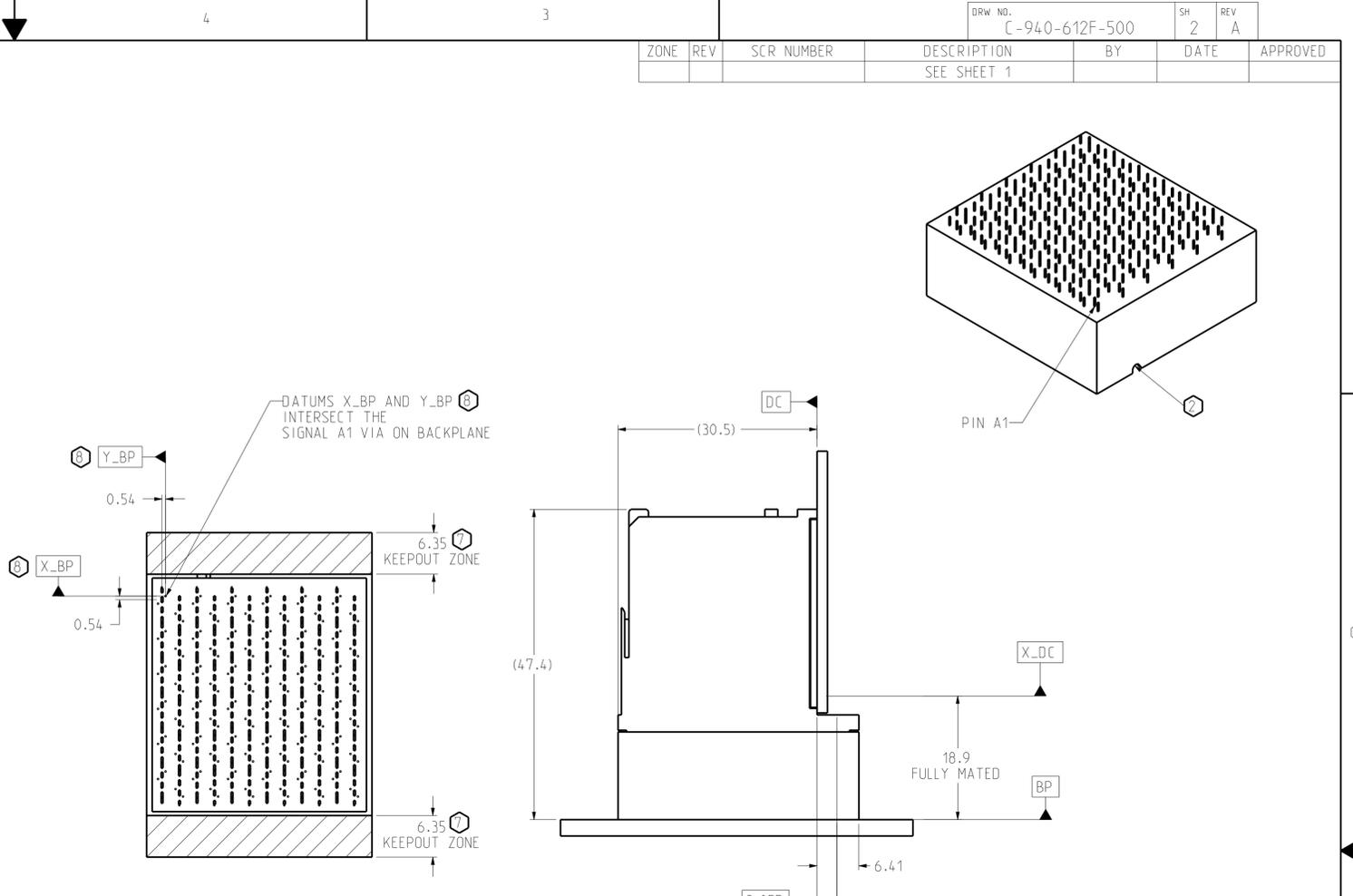
ZONE	REV	SCR NUMBER	DESCRIPTION	BY	DATE	APPROVED
			SEE SHEET 1			



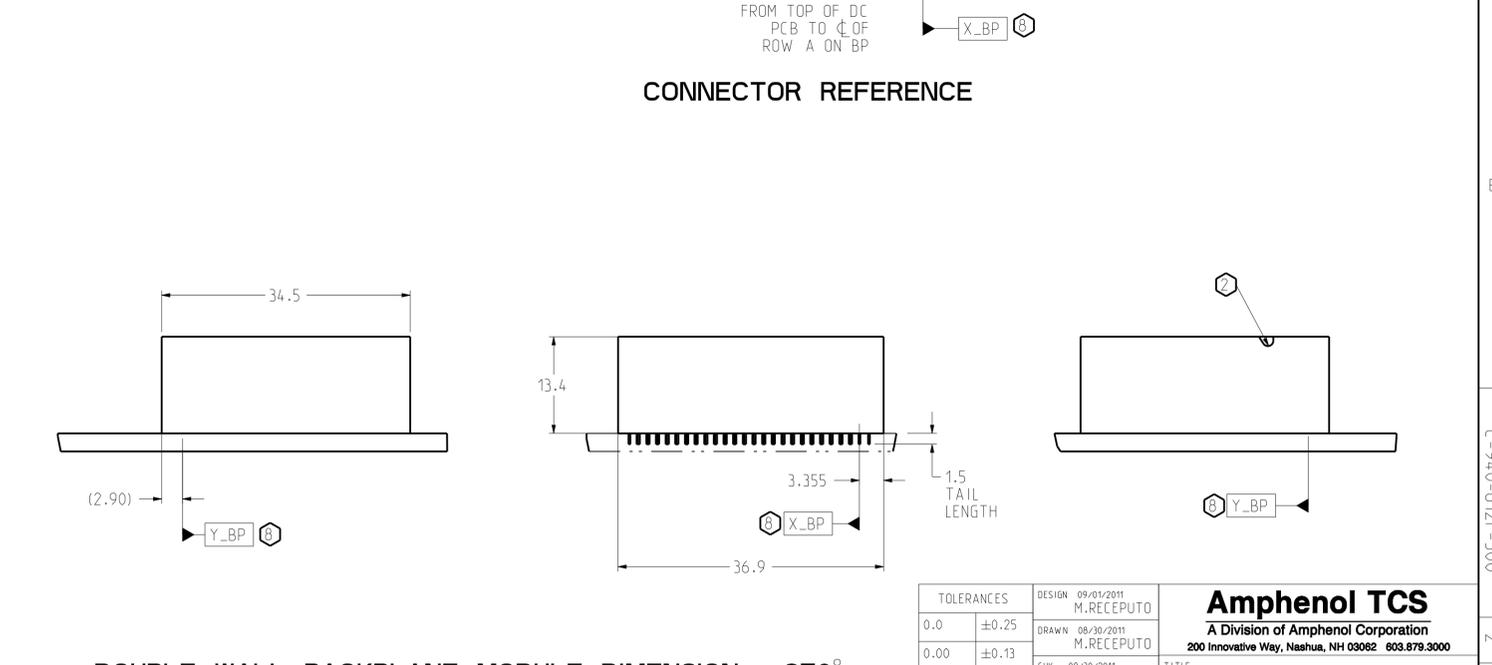
CONNECTOR REFERENCE



DOUBLE WALL BACKPLANE MODULE DIMENSION - 90°
90° MODULES USED ON BOTH PRIMARY AND SECONDARY SIDES



CONNECTOR REFERENCE



DOUBLE WALL BACKPLANE MODULE DIMENSION - 270°
270° MODULES USED ON SECONDARY SIDE ONLY

TOLERANCES	DESIGN 09/01/2011 M.RECEPUTO	Amphenol TCS A Division of Amphenol Corporation 200 Innovative Way, Nashua, NH 03082 603.879.3000	TITLE	DBL WALL BP MOD, VERT MALE HEADER XCede ORTHO, 6PAIR	PART NO.	SEE PN TREE SHEET 1	REV	N/A
0.0 ±0.25	DRAWN 08/30/2011 M.RECEPUTO		DRAWING NO.	C-940-612F-500	ASSEM C940-BP-SHRD-90-DBL-12	1.16	REV	A
0.00 ±0.13	CHK 08/30/2011 J.DUNHAM		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MM. DECIMAL MARKER IS A PERIOD.	ASSEM C940-612F-500	DRAWING C940-612F-500	1.20	SIZE	D
0.000 ± -	APVD 08/30/2011 J.DUNHAM		SCALE	2/1	SHEET	2 OF 6		
ANGLES ± 3°		INTERPRET PER ASME Y14.5M	CODE IDENT	31413				

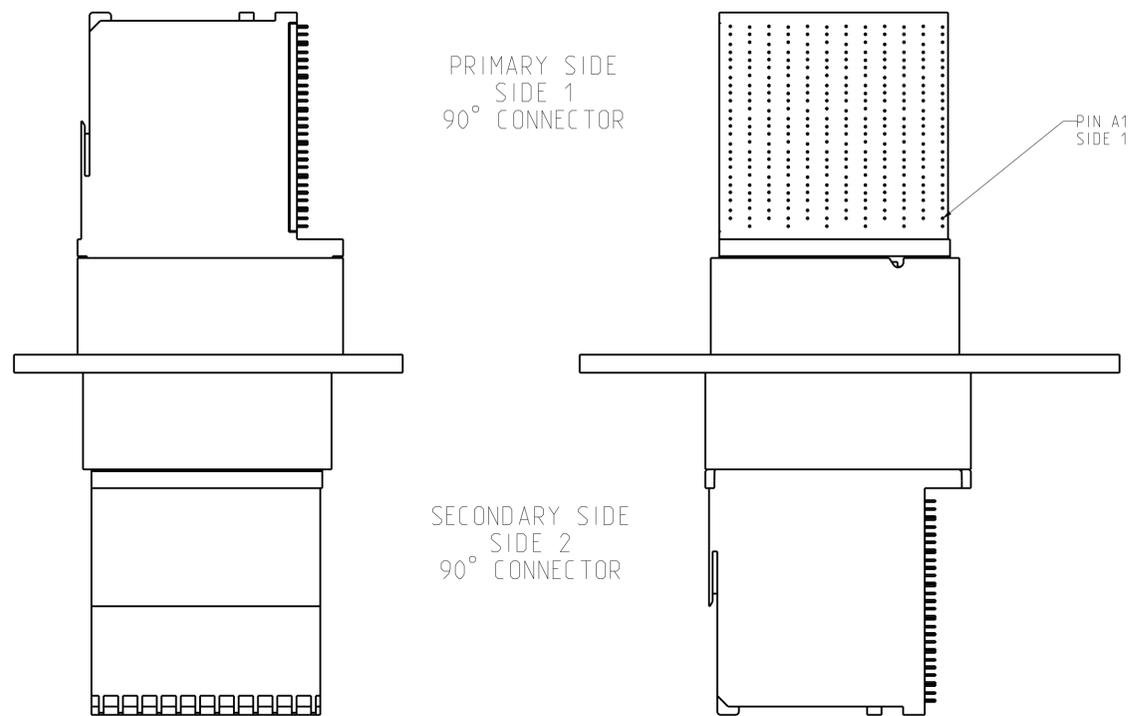
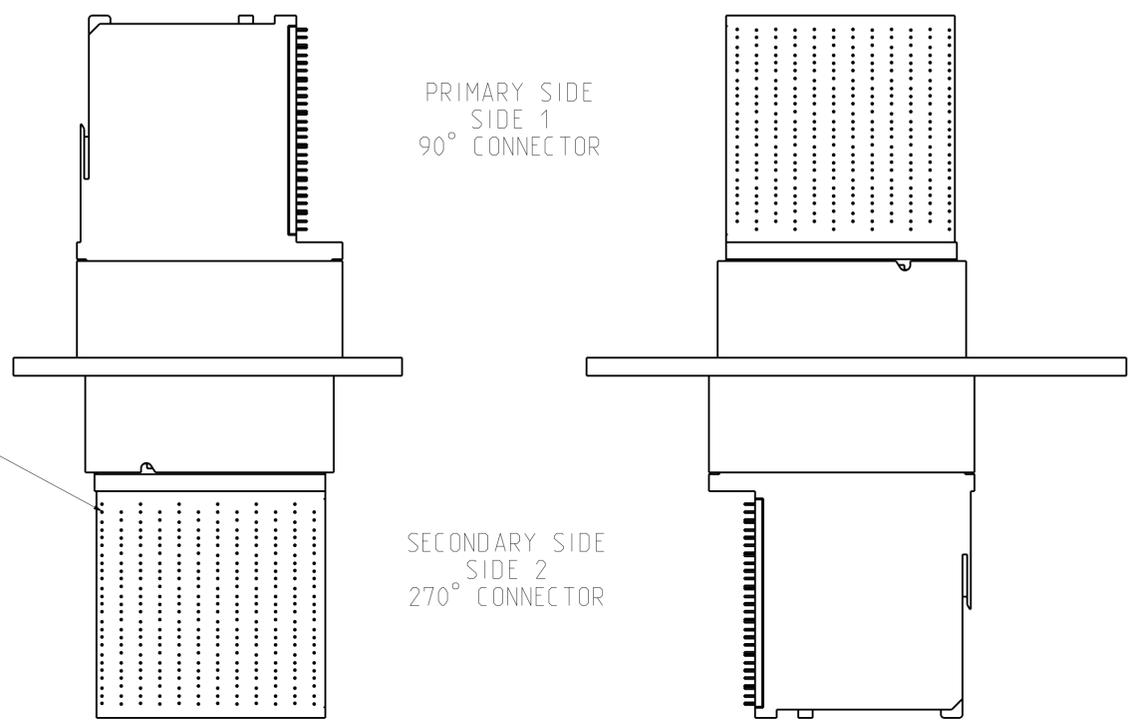
CUSTOMER USE
DRAWING

DRW NO. C-940-612F-500

SH 2 REV A

ORTHOGONAL ++ OPTION #1 - 270° ORIENTATION
PREFERRED METHOD
DOUBLE WALL

SUPERCEDE ++ ORTHOGONAL OPTION #2 - 90° ORIENTATION
DOUBLE WALL



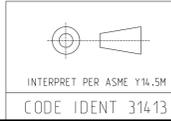
PASS THRU CONFIGURATION 270°

PASS THRU CONFIGURATION 90°

PIN MAPPING SIDE 1-SIDE 2	SIDE 1-SIDE 2											
	A1-M12	A2-L11	A3-K12	A4-J11	A5-H12	A6-G11	A7-F12	A8-E11	A9-D12	A10-C11	A11-B12	A12-A11
B1-L12	B2-M11	B3-J12	B4-K11	B5-G12	B6-H11	B7-E12	B8-F11	B9-C12	B10-D11	B11-A12	B12-B11	
C1-M10	C2-L9	C3-K10	C4-J9	C5-H10	C6-G9	C7-F10	C8-E9	C9-D10	C10-C9	C11-B10	C12-A9	
D1-L10	D2-M9	D3-J10	D4-K9	D5-G10	D6-H9	D7-E10	D8-F9	D9-C10	D10-D9	D11-A10	D12-B9	
E1-M8	E2-L7	E3-K8	E4-J7	E5-H8	E6-G7	E7-F8	E8-E7	E9-D8	E10-C7	E11-B8	E12-A7	
F1-L8	F2-M7	F3-J8	F4-K7	F5-G8	F6-H7	F7-E8	F8-F7	F9-C8	F10-D7	F11-A8	F12-B7	
G1-M6	G2-L5	G3-K6	G4-J5	G5-H6	G6-G5	G7-F6	G8-E5	G9-D6	G10-C5	G11-B6	G12-A5	
H1-L6	H2-M5	H3-J6	H4-K5	H5-G6	H6-H5	H7-E6	H8-F5	H9-C6	H10-D5	H11-A6	H12-B5	
J1-M4	J2-L3	J3-K4	J4-J3	J5-H4	J6-G3	J7-F4	J8-E3	J9-D4	J10-C3	J11-B4	J12-A3	
K1-L4	K2-M3	K3-J4	K4-K3	K5-G4	K6-H3	K7-E4	K8-F3	K9-C4	K10-D3	K11-A4	K12-B3	
L1-M2	L2-L1	L3-K2	L4-J1	L5-H2	L6-G1	L7-F2	L8-E1	L9-D2	L10-C1	L11-B2	L12-A1	
M1-L2	M2-M1	M3-J2	M4-K1	M5-G2	M6-H1	M7-E2	M8-F1	M9-C2	M10-D1	M11-A2	M12-B1	

PIN MAPPING SIDE 1-SIDE 2	SIDE 1-SIDE 2											
	A1-A1	A2-B2	A3-C1	A4-D2	A5-E1	A6-F2	A7-G1	A8-H2	A9-J1	A10-K2	A11-L1	A12-M2
B1-B1	B2-A2	B3-D1	B4-C2	B5-F1	B6-E2	B7-H1	B8-G2	B9-K1	B10-J2	B11-M1	B12-L2	
C1-A3	C2-B4	C3-C3	C4-D4	C5-E3	C6-F4	C7-G3	C8-H4	C9-J3	C10-K4	C11-L3	C12-M4	
D1-B3	D2-A4	D3-D3	D4-C4	D5-F3	D6-E4	D7-H3	D8-G4	D9-K3	D10-J4	D11-M3	D12-L4	
E1-A5	E2-B6	E3-C5	E4-D6	E5-E5	E6-F6	E7-G5	E8-H6	E9-J5	E10-K6	E11-L5	E12-M6	
F1-B5	F2-A6	F3-D5	F4-C6	F5-F5	F6-E6	F7-H5	F8-G6	F9-K5	F10-J6	F11-M5	F12-L6	
G1-A7	G2-B8	G3-C7	G4-D8	G5-E7	G6-F8	G7-G7	G8-H8	G9-J7	G10-K8	G11-L7	G12-M8	
H1-B7	H2-A8	H3-D7	H4-C8	H5-F7	H6-E8	H7-H7	H8-G8	H9-K7	H10-J8	H11-M7	H12-L8	
J1-A9	J2-B10	J3-C9	J4-D10	J5-E9	J6-F10	J7-G9	J8-H10	J9-J9	J10-K10	J11-L9	J12-M10	
K1-B9	K2-A10	K3-D9	K4-C10	K5-F9	K6-E10	K7-H9	K8-G10	K9-K9	K10-J10	K11-M9	K12-L10	
L1-A11	L2-B12	L3-C11	L4-D12	L5-E11	L6-F12	L7-G11	L8-H12	L9-J11	L10-K12	L11-L11	L12-M12	
M1-B11	M2-A12	M3-D11	M4-C12	M5-F11	M6-E12	M7-H11	M8-G12	M9-K11	M10-J12	M11-M11	M12-L12	

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0.0 ±0.25	DRAWN 08/30/2011 M.RECEPUTO		PART NO.	SEE PN TREE SHEET 1
0.00 ±0.13	CHK 08/30/2011 J.DUNHAM		DRAWING NO.	C-940-612F-500
0.000 ± -	APVD 08/30/2011 J.DUNHAM		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MM. DECIMAL MARKER IS A PERIOD	ASSEM C940-BP-SHRD-90-DBL-12 DRAWING C940-612F-500
ANGLES ± 3°		SCALE	1/1	SHEET 3 OF 6



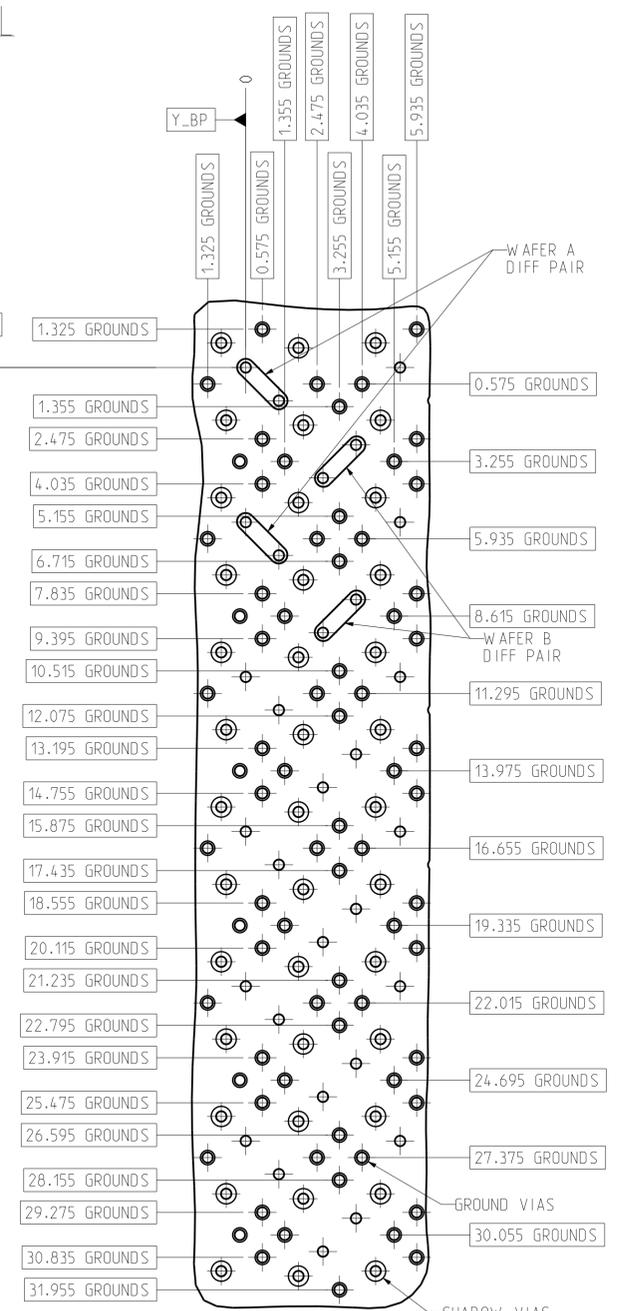
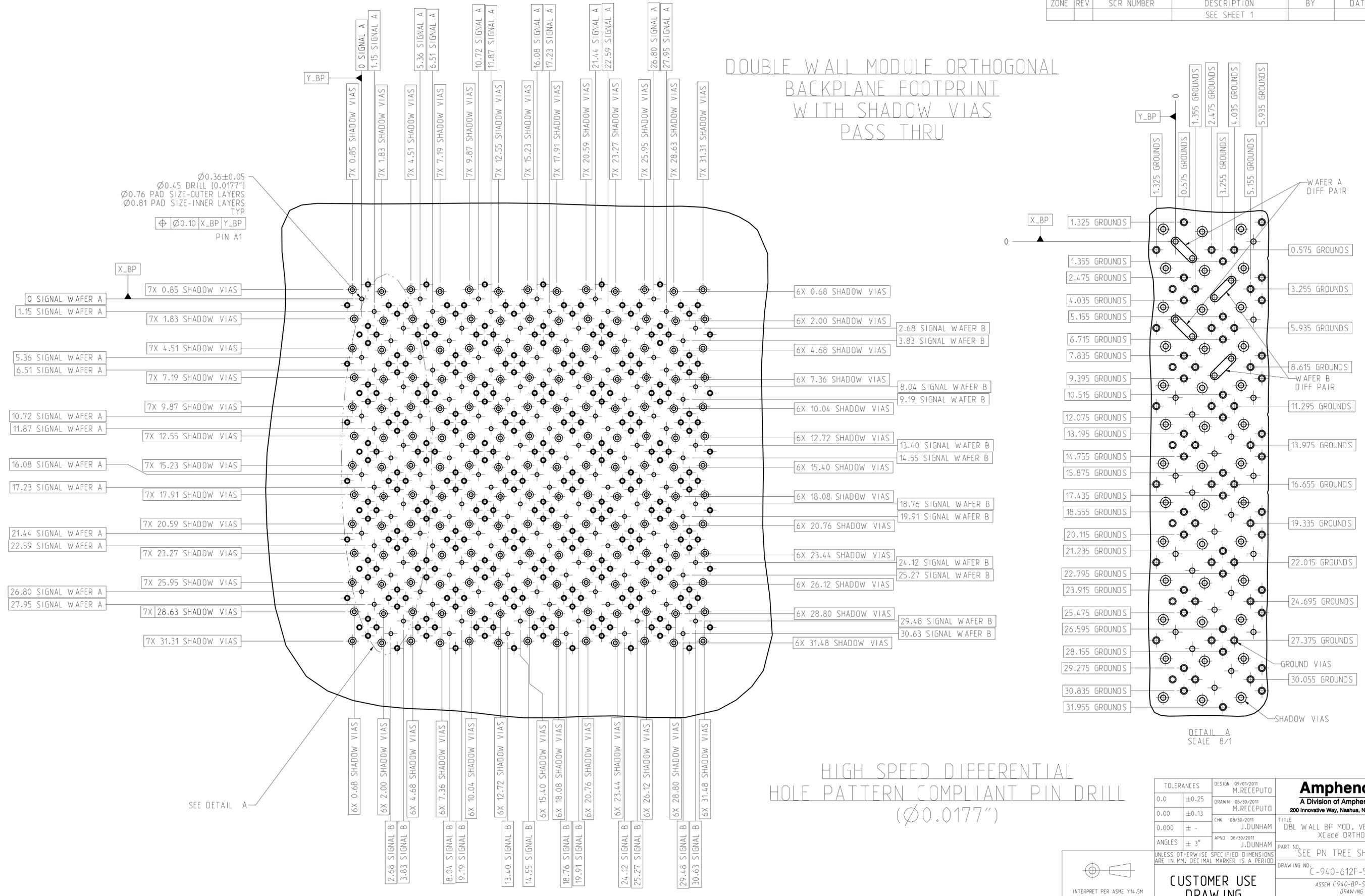
DRW NO. C-940-612F-500

SH 3 REV A

ZONE	REV	SCR NUMBER	DESCRIPTION	BY	DATE	APPROVED
			SEE SHEET 1			

DOUBLE WALL MODULE ORTHOGONAL BACKPLANE FOOTPRINT WITH SHADOW VIAS PASS THRU

$\varnothing 0.36 \pm 0.05$
 $\varnothing 0.45$ DRILL [0.0177"]
 $\varnothing 0.76$ PAD SIZE-OUTER LAYERS
 $\varnothing 0.81$ PAD SIZE-INNER LAYERS
 TYP
 $\varnothing 0.10$ X_BP | Y_BP
 PIN A1



DETAIL A
SCALE 8/1

HIGH SPEED DIFFERENTIAL HOLE PATTERN COMPLIANT PIN DRILL ($\varnothing 0.0177$ ")

SCALE 6/1

TOLERANCES	DESIGN 09/01/2011 M.RECEPUTO	Amphenol TCS A Division of Amphenol Corporation 200 Innovative Way, Nashua, NH 03062 603.879.3000	TITLE	DBL WALL BP MOD., VERT MALE HEADER XCede ORTHO. 6PAIR
0.0 ±0.25	DRAWN 08/30/2011 M.RECEPUTO		PART NO.	SEE PN TREE SHEET 1
0.00 ±0.13	CHK 08/30/2011 J.DUNHAM		REV	N/A
0.000 ± -	APVD 08/30/2011 J.DUNHAM		DRAWING NO.	C-940-612F-500

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MM. DECIMAL MARKER IS A PERIOD		ASSEM C940-BP-SHRD-90-DBL-12	1.16
		DRAWING C940-612F-500	1.20
SIZE	D	SCALE	1/1
		SHEET	4 OF 6

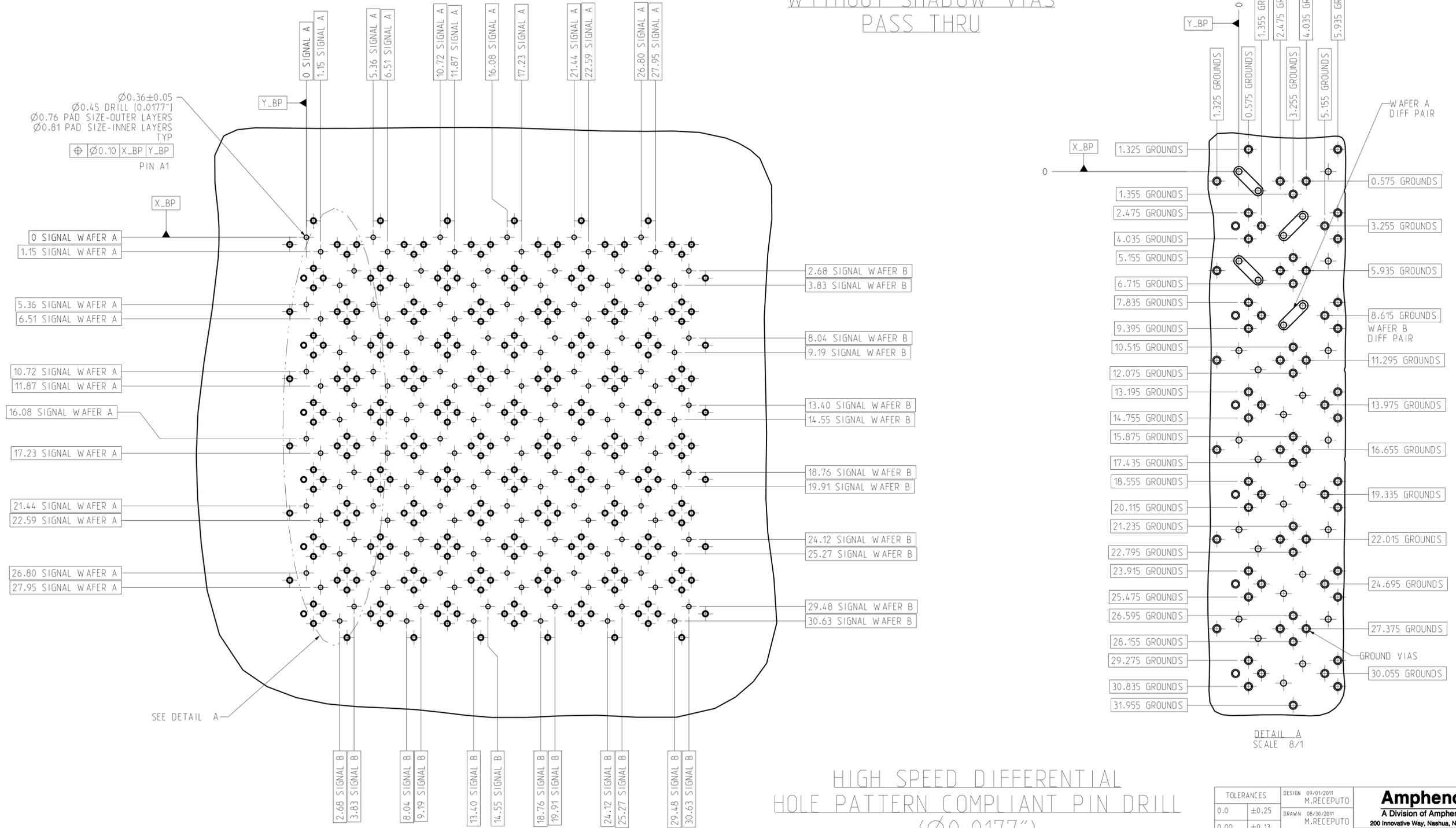
INTERPRET PER ASME Y14.5M
 CODE IDENT 31413

CUSTOMER USE
DRAWING

ZONE	REV	SCR NUMBER	DESCRIPTION	BY	DATE	APPROVED
			SEE SHEET 1			

DOUBLE WALL MODULE ORTHOGONAL
BACKPLANE FOOTPRINT
WITHOUT SHADOW VIAS
PASS THRU

Ø0.36±0.05
Ø0.45 DRILL [0.0177"]
Ø0.76 PAD SIZE-OUTER LAYERS
Ø0.81 PAD SIZE-INNER LAYERS
TYP
Ø0.10 | X_BP | Y_BP
PIN A1



SEE DETAIL A

DETAIL A
SCALE 8/1

HIGH SPEED DIFFERENTIAL
HOLE PATTERN COMPLIANT PIN DRILL
(Ø0.0177")

SCALE 6/1

TOLERANCES	DESIGN	09/01/2011	M.RECEPUTO
0.0	±0.25	08/30/2011	M.RECEPUTO
0.00	±0.13	08/30/2011	J.DUNHAM
0.000	±	08/30/2011	J.DUNHAM
ANGLES	± 3°	08/30/2011	J.DUNHAM

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

TITLE DBL WALL BP MOD., VERT MALE HEADER
XCede ORTHO. 6PAIR

PART NO. SEE PN TREE SHEET 1
DRAWING NO. C-940-612F-500

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MM. DECIMAL MARKER IS A PERIOD.



CUSTOMER USE
DRAWING

ASSEM C940-BP-SHRD-90-DBL-12	1.16
DRAWING C940-612F-500	1.20
SIZE D	SCALE 1/1
SHEET 5 OF 6	

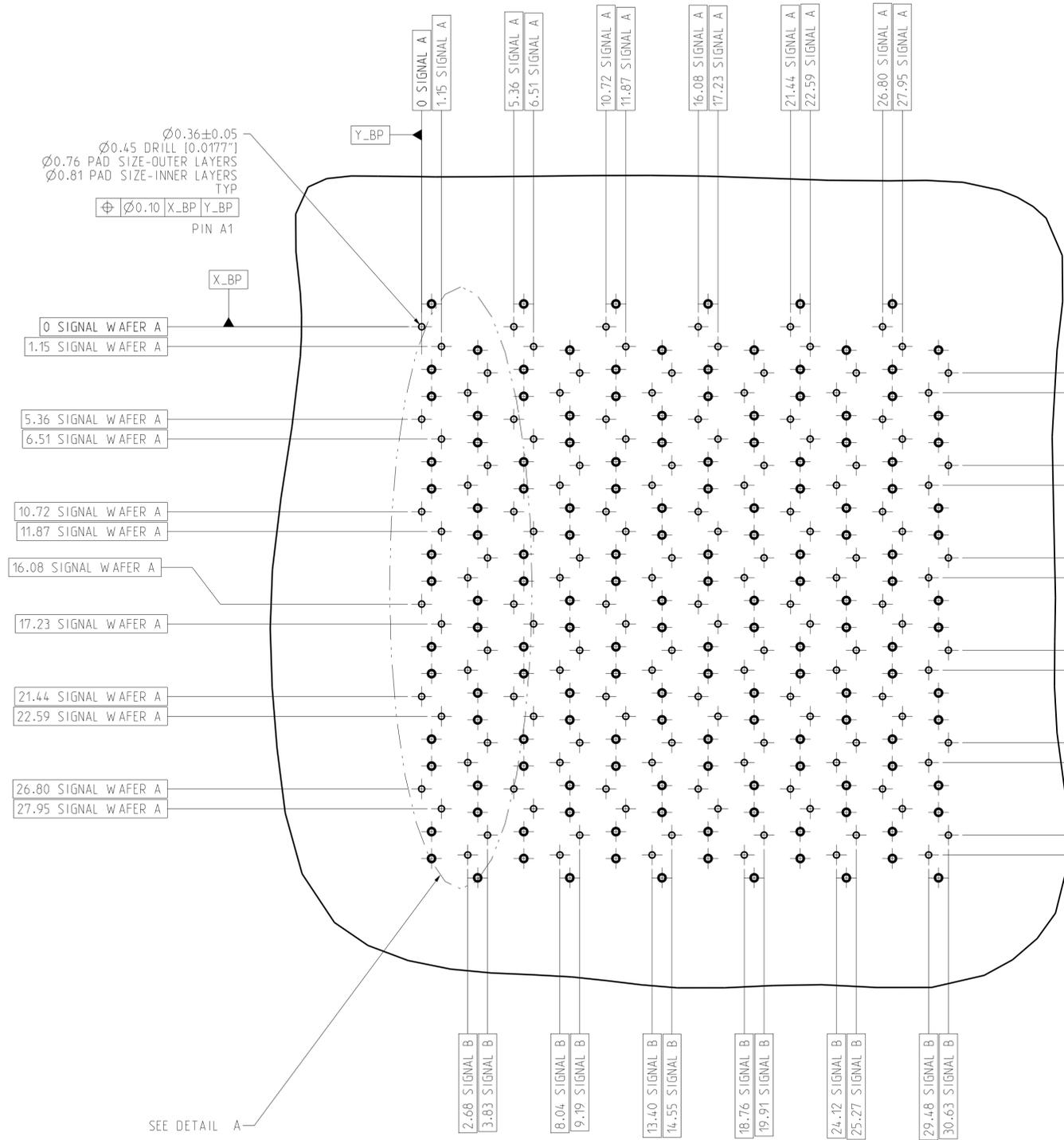
DRW NO. C-940-612F-500

SH 5
REV A

ZONE	REV	SCR NUMBER	DESCRIPTION	BY	DATE	APPROVED
			SEE SHEET 1			

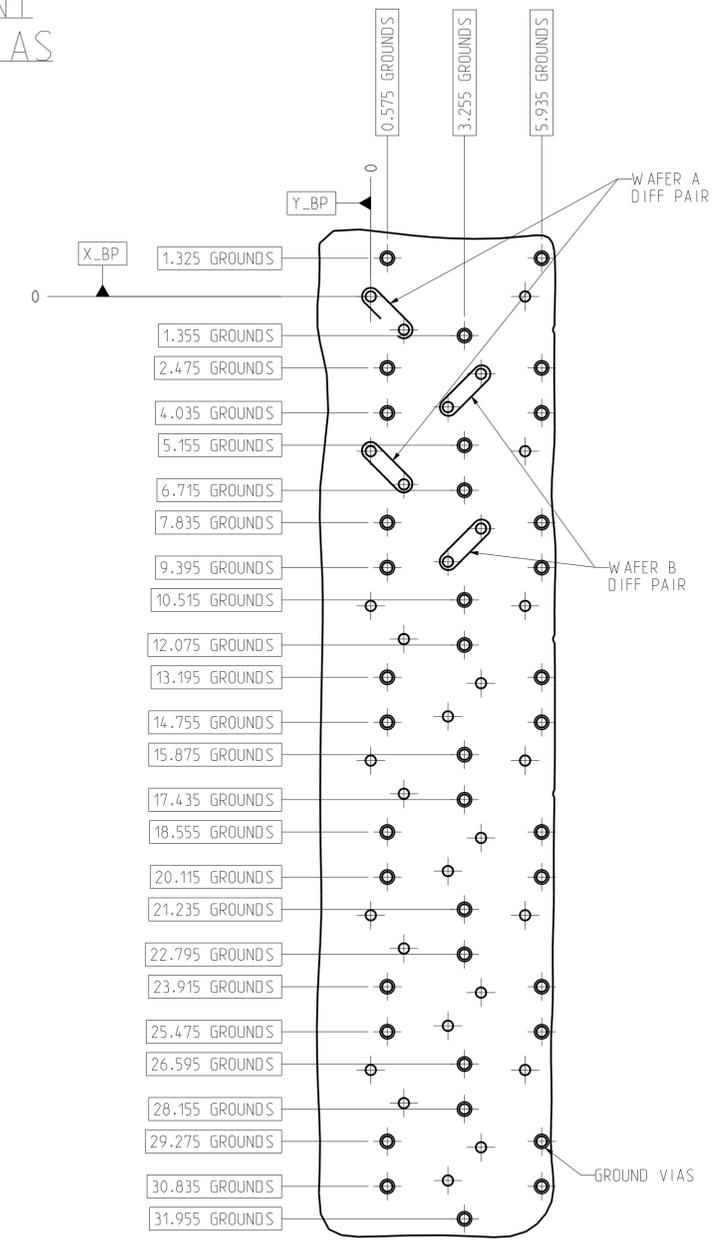
DOUBLE WALL MODULE ORTHOGONAL
BACKPLANE FOOTPRINT
WITHOUT SHADOW VIAS
NO PASS THRU

Ø0.36±0.05
Ø0.45 DRILL [0.0177"]
Ø0.76 PAD SIZE-OUTER LAYERS
Ø0.81 PAD SIZE-INNER LAYERS
TYP
⊕ Ø0.10 | X_BP | Y_BP
PIN A1



SCALE 6/1

HIGH SPEED DIFFERENTIAL
HOLE PATTERN COMPLIANT PIN DRILL
(Ø0.0177")



DETAIL A
SCALE 8/1

TOLERANCES	DESIGN	09/01/2011
0.0	±0.25	M.RECEPUTO
0.0	±0.13	
0.000	± -	J.DUNHAM
ANGLES	± 3°	
		J.DUNHAM

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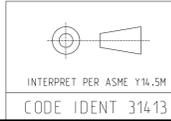
TITLE
DBL WALL BP MOD, VERT MALE HEADER
XCede ORTHO, 6PAIR

PART NO.
SEE PN TREE SHEET 1

DRAWING NO.
C-940-612F-500

ASSEM C940-BP-SHRD-GEN 1.15
DRAWING C940-612F-500 1.20

SIZE D SCALE 1/1 SHEET 6 OF 6



CUSTOMER USE
DRAWING