

Amphenol  
FCi

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F

A

B

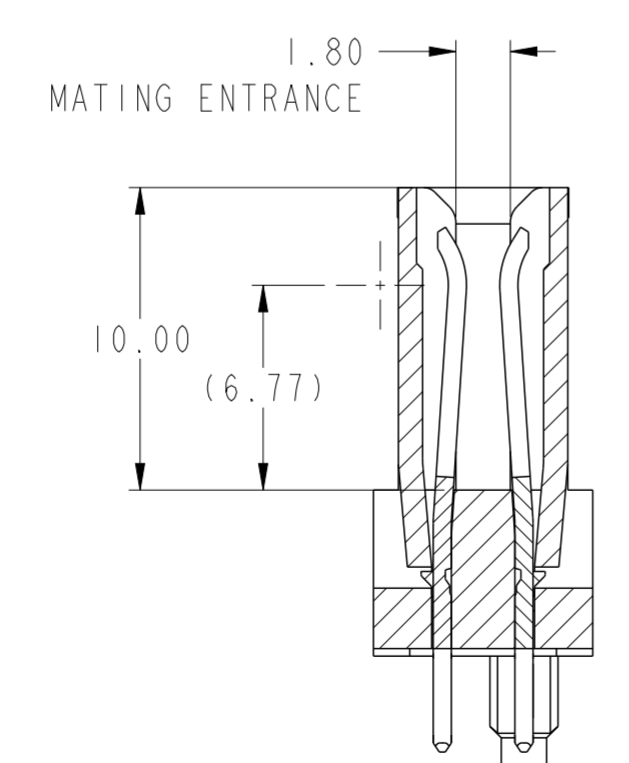
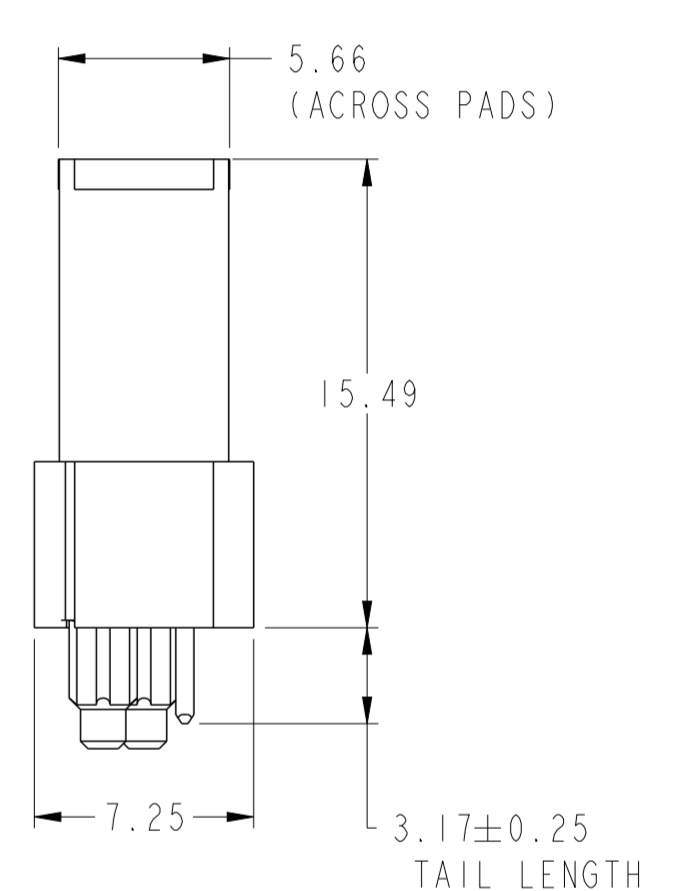
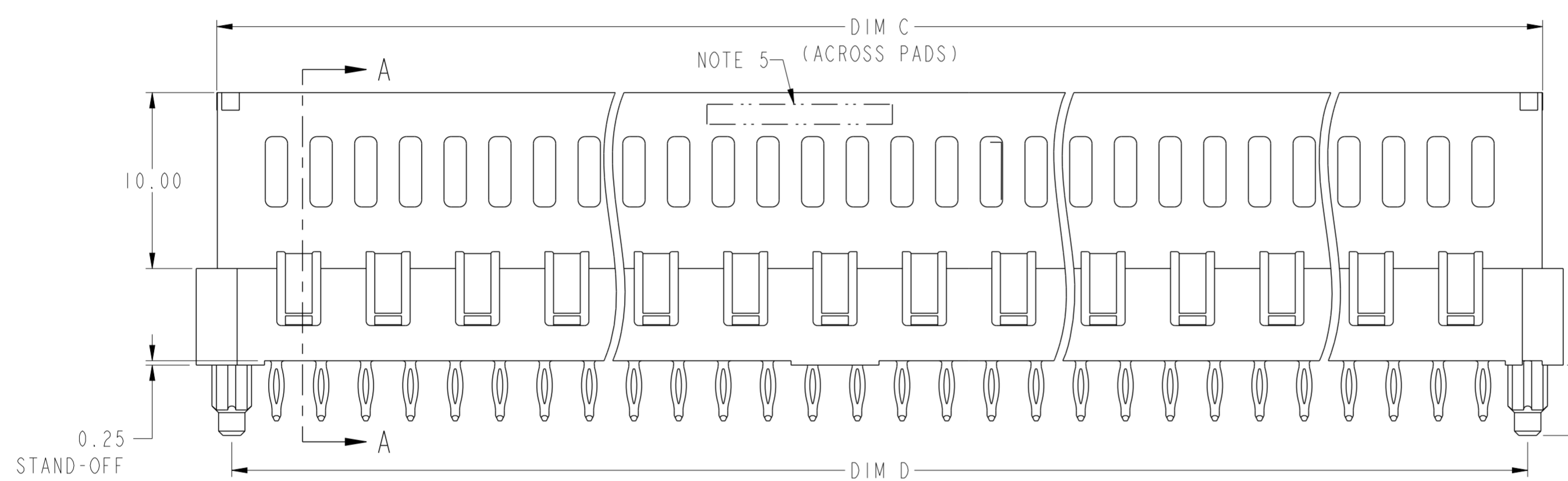
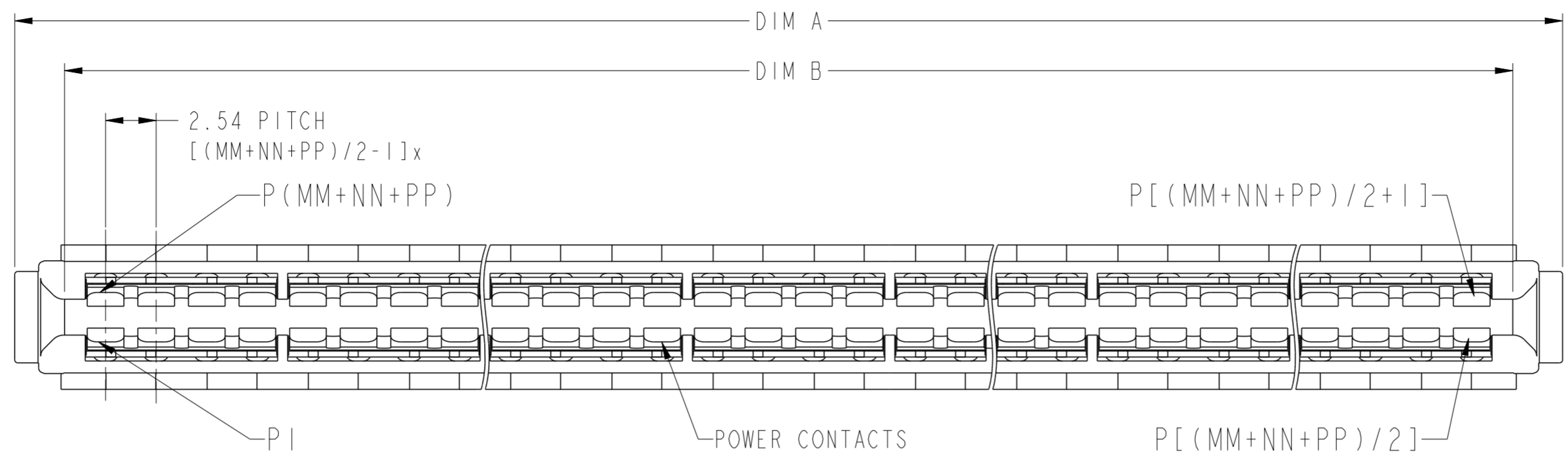
C

D

E

F

I



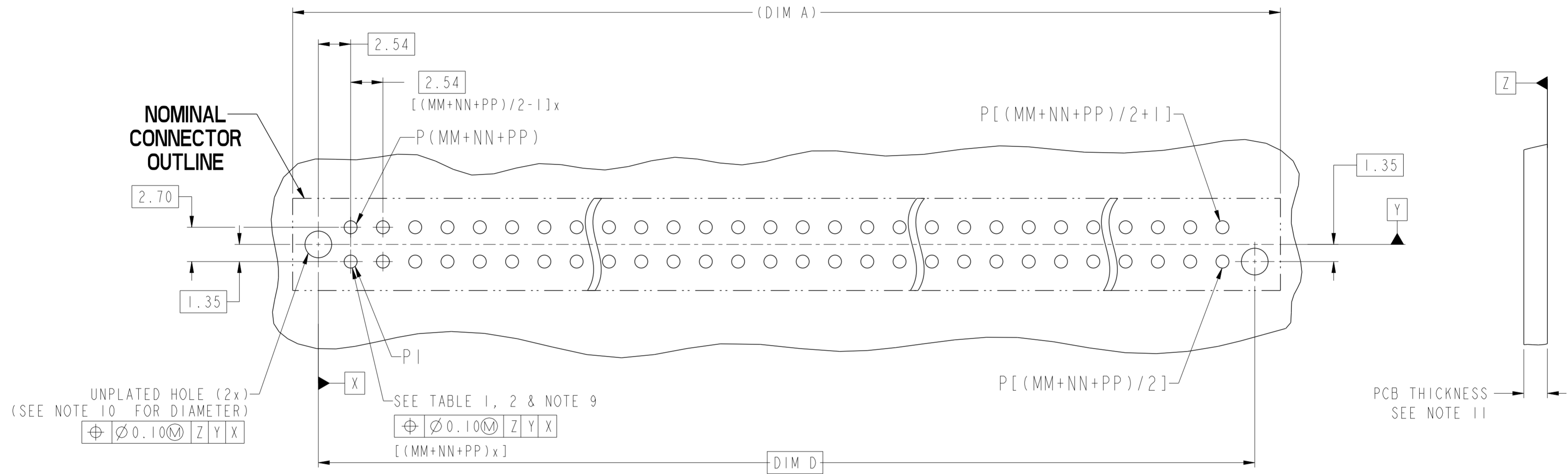
SECTION A-A  
SCALE 4:1

spec ref	-	dr	De-Ming Lu	2013/10/21	projection	MM	size	A2	scale	4:1
tolerance std	ASME Y14.5	eng	Sunny2 Liu	2016/05/06			ecn no	ELX-DG-24036-1	rel level <b>Released</b>	
TOLERANCES UNLESS OTHERWISE SPECIFIED		chr	Terris Liu	2016/05/20			product family	HPCE		
surface	ASME Y14.5	appr	Pai-Ming Zheng	2016/05/24			title	STD. VERT RECT P CONFIG. HIGH POWER CARD EDGE		dwg no
linear	0.X ±0.5 0.XX ±0.25 0.XXX ±0.10	angular	0° ±2°	Amphenol FCi	cat. no.	-	Product - Customer Drw	sheet 1 of 4		

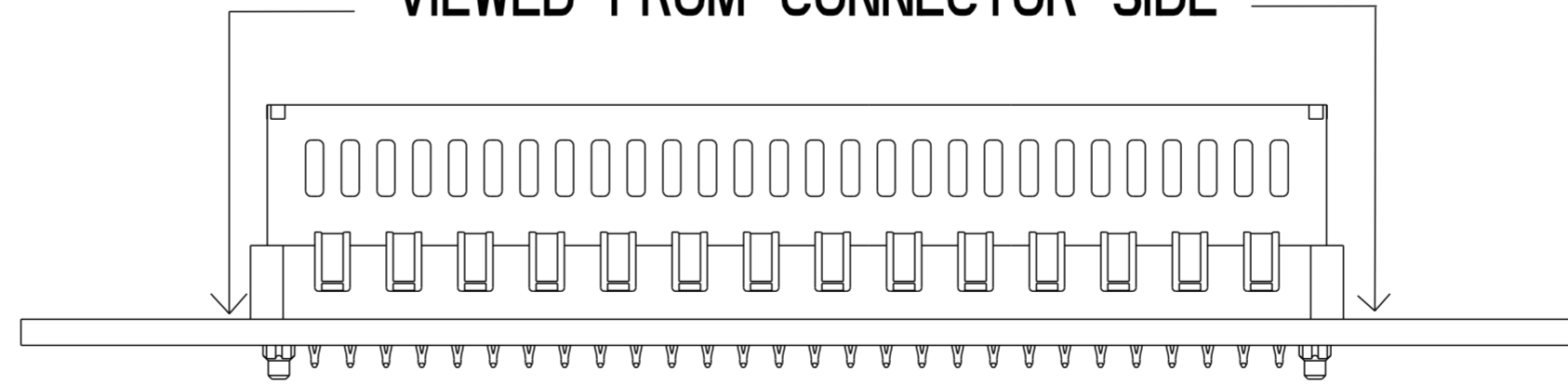
PDS: Rev :B

STATUS:Released

Printed: May 24, 2016



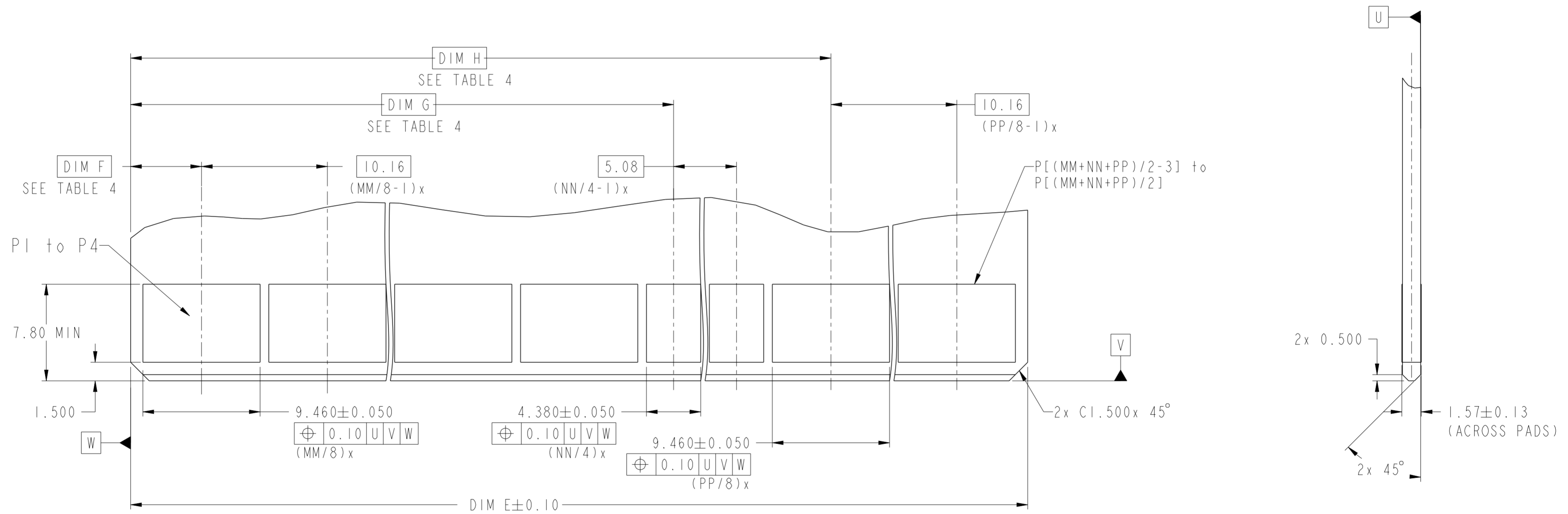
**RECOMMENDED PCB LAYOUT  
VIEWED FROM CONNECTOR SIDE**



spec ref	-	dr	De-Ming Lu	2013/10/21	projection	MM	size	A2	scale	1:1	
tolerance std	ASME Y14.5	eng	Sunny2 Liu	2016/05/06			ecn no	ELX-DG-24036-1			
TOLERANCES UNLESS OTHERWISE SPECIFIED		chr	Terris Liu	2016/05/20			rel level	Released			
surface	ASME Y14.5	appr	Pei-Ming Zheng	2016/05/24			product family	-			
linear	0.X ±0.5 0.XX ±0.25 0.XXX ±0.10	Amphenol FCI		title	STD. VERT RECT P CONFIG. HIGH POWER CARD EDGE		dwg no	10125138		rev	B
angular	0° ±2°	cat. no.	-		Product	Customer Drw		sheet 2 of 4			

CONTACT TYPE	TOP LAYER DESCRIPTION	TABLE 1 (HPCE / SOLDER TAILS) PLATED THROUGH-HOLE REQUIREMENTS				
		DRILLED HOLE DIAMETER	COPPER THICKNESS	TIN-LEAD THICKNESS	TIN THICKNESS	FINISHED HOLE DIAMETER
POWER & SIGNAL	TIN-LEAD	1.10-1.16 (1.15 DRILL)	0.025 - 0.050	0.005 - 0.015	--	0.94 - 1.10
	IMMERSION TIN	1.10-1.16 (1.15 DRILL)	0.025 - 0.050	--	0.9 - 1.5um	0.94 - 1.10
	COPPER (SEE NOTE 8)	1.10-1.16 (1.15 DRILL)	0.025 - 0.050	--	--	0.94 - 1.10

CONTACT TYPE	TOP LAYER DESCRIPTION	TABLE 2 (HPCE / PRESS-FIT TAILS) PLATED THROUGH-HOLE REQUIREMENTS				
		DRILLED HOLE DIAMETER	COPPER THICKNESS	TIN-LEAD THICKNESS	TIN THICKNESS	FINISHED HOLE DIAMETER
POWER & SIGNAL	TIN-LEAD	0.81-0.86 (0.85 DRILL)	0.025 - 0.050	0.005 - 0.015	--	0.65 - 0.80
	IMMERSION TIN	0.81-0.86 (0.85 DRILL)	0.025 - 0.050	--	0.9 - 1.5um	0.70 - 0.80
	COPPER (SEE NOTE 8)	0.81-0.86 (0.85 DRILL)	0.025 - 0.050	--	--	0.70 - 0.80



**RECOMMENDED MATING BOARD FOOTPRINT**

spec ref	-	dr	De-Ming Lu	2013/10/21	projection	MM	size	A2	scale	1:1			
tolerance std	ASME Y14.5	eng	Sunny2 Liu	2016/05/06			ecn no	ELX-DG-24036-1		rel level	Released		
TOLERANCES UNLESS OTHERWISE SPECIFIED		chr	Terris Liu	2016/05/20			product family	-		rel level	Released	title	STD. VERT RECT P CONFIG.
surface	ASME Y14.5	appr	Pai-Ming Zheng	2016/05/24			cat. no.	-		Product - Customer Drw	sheet 3 of 4	dwg no	10125138
										rev	B		

Amphenol FCI

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10125138 - MM NN PP

LF

LEAD FREE

LEFT 4 BEAM POWER CONTACT QTY  
 MIDDLE 2 BEAM POWER CONTACT QTY  
 RIGHT 4 BEAM POWER CONTACT QTY

	A	B
TAIL TYPE SEE NOTE 11	STB	PF

CONFIGURATION:

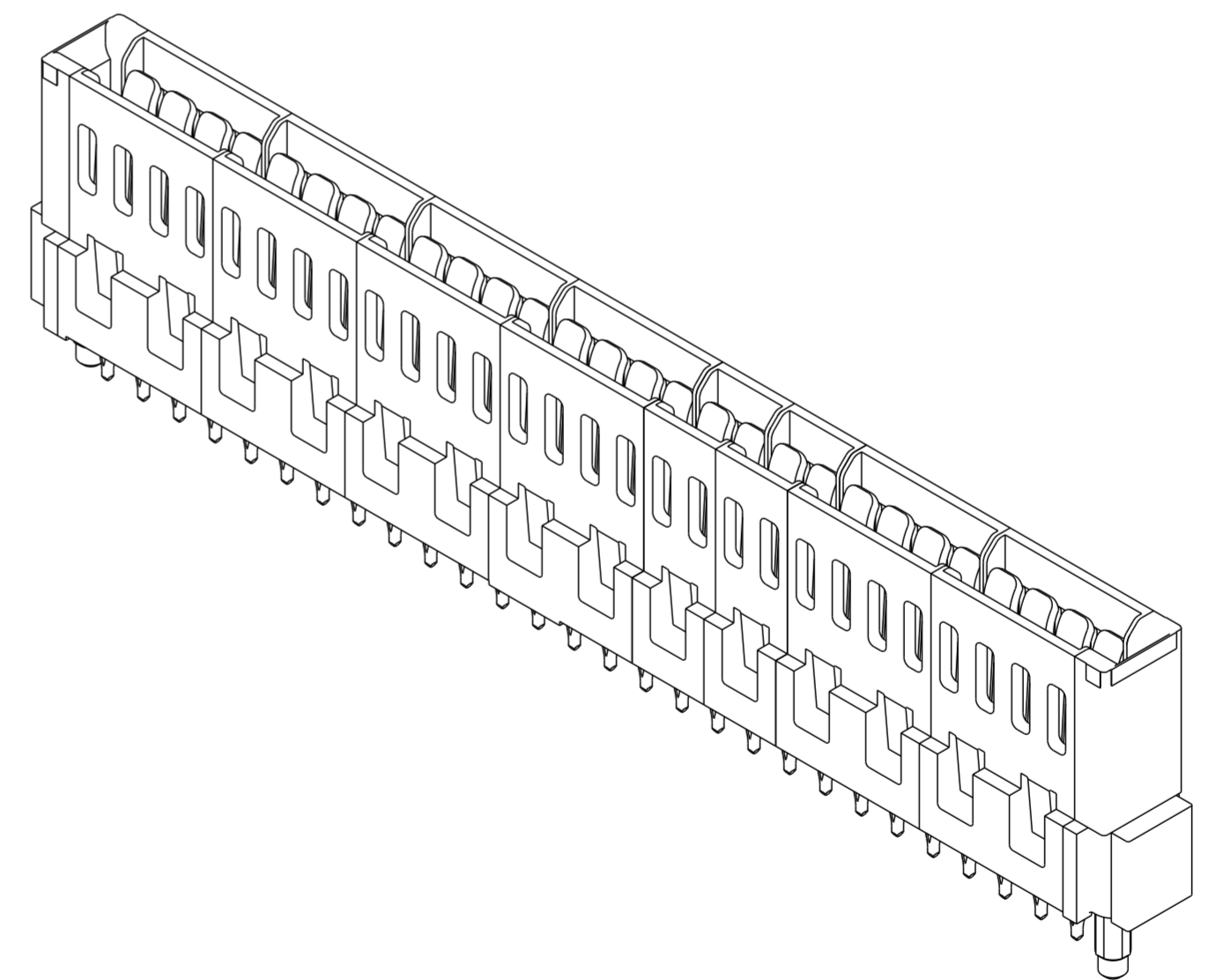
- I: 4 BEAM (NN = 00 AND PP = 00);
- II: 2 BEAM (MM = 00 AND PP = 00);
- III: 4 BEAM + 2 BEAM (PP = 00);
- IV: 2 BEAM + 4 BEAM (MM = 00);
- V: 4 BEAM + 2 BEAM + 4 BEAM.

TABLE 3: HPCE STANDARD VERT REC P CONFIG

DIM	TABLE 4: LENGTH FORMULAS	
DIM A (12)	$(MM + NN + PP) / 2 \times 2.54 + 6.58$	
DIM B	DIM A - 5.00	
DIM C	DIM A - 2.34	
DIM D	DIM A - 4.04	
DIM E	DIM A - 5.30	
DIM F	CONFIG. I	5.72
	CONFIG. II	-
	CONFIG. III	5.72
	CONFIG. IV	-
	CONFIG. V	5.72
DIM G	CONFIG. I	-
	CONFIG. II	3.18
	CONFIG. III	$(MM / 8 - 1) \times 10.16 + 13.34$
	CONFIG. IV	3.18
	CONFIG. V	$(MM / 8 - 1) \times 10.16 + 13.34$
DIM H	CONFIG. I	-
	CONFIG. II	-
	CONFIG. III	-
	CONFIG. IV	$(NN / 4 - 1) \times 5.08 + 10.80$
	CONFIG. V	$(MM / 8 - 1) \times 10.16 + (NN / 4 - 1) \times 5.08 + 20.96$

NOTES:

1. CONNECTOR MATERIALS:  
 HOUSING: HIGH TEMPERATURE THERMAL PLASTIC, BLACK  
 UL 94V-0 COMPLIANT  
 CONTACTS: HIGH PERFORMANCE COPPER ALLOY.
2. CONTACT FINISH REF. GS-12-604 SECTION 5.2.
3. PRODUCT SPECIFICATION: GS-12-604.
4. APPLICATION SPECIFICATION: GS-20-128.
5. PRODUCT MARKING ON HOUSING IN AREA SHOWN MEETS AFCI SPECIFICATION: GS-24-007.
6. PACKAGING MEETS FCI SPECIFICATION GS-14-937.
7. HOUSING COMPONENT WILL WITHSTAND EXPOSURE TO 260°C PEAK TEMPERATURE FOR 60 SECONDS IN A CONVECTION, INFRA-RED, OR VAPOR PHASE REFLOW OVEN.
8. COPPER PLATING THICKNESS IN CENTER OF VIA-HOLE CAN BE NO MORE THAN 0.003 LESS THAN OTHER AREAS.
9. ALL HOLE SIZES ARE FINISHED HOLE SIZES.
10. MOUNTING HOLES ARE UNPLATED  
 $\varnothing 2.40 \pm 0.1$  FOR PRESS-FIT TAILS  
 $\varnothing 2.18 \pm 0.03$  FOR SOLDER TAILS
11. STB= SOLDER TO BOARD, 1.57-2.38mm PCB THICKNESS  
 PF= PRESS FIT, 1.57mm MINIMUM PCB THICKNESS
12. MAXIMUM OVERALL LENGTH IS 100mm
13. A SYMBOL  $\triangle B$  WILL BE NEXT TO ANY DIMENSION, VIEW, OR NOTE WHICH HAS BEEN MODIFIED WITH THE CURRENT DRAWING REVISION.



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TOLERANCES UNLESS OTHERWISE SPECIFIED		chr	Terris Liu	2016/05/20			rel level	Released							
surface	linear	appr	Pai-Ming Zheng	2016/05/24	product family	HPCE	cat. no.	10125138	rev	B					
ASME Y14.5	angular	<table border="1"> <tr> <td>0.X</td> <td>±0.5</td> </tr> <tr> <td>0.XX</td> <td>±0.25</td> </tr> <tr> <td>0.XXX</td> <td>±0.10</td> </tr> <tr> <td>0°</td> <td>±2°</td> </tr> </table>		0.X	±0.5	0.XX	±0.25	0.XXX	±0.10	0°	±2°	title STD. VERT RECT P CONFIG. HIGH POWER CARD EDGE		Product - Customer Drw	sheet 4 of 4
0.X	±0.5														
0.XX	±0.25														
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