

spec ref	-	dr	NotFound DuWa	2010/04/28	projection	MM	size	A2	scale	3:1
tolerance std	ASME Y14.5	eng	De-Ming Lu	2014/12/28			ecn no	ELX-DG-19849-1		
TOLERANCES UNLESS OTHERWISE SPECIFIED		chr	-	rel level				Released		
surface	ASME Y14.5	appr	Pei-Ming Zheng	2014/12/29	product family	HCI	rel level	Blue		
linear	0.X ±0.5			<b>VERT RECPT ASSY 4P-12S-4P</b> HCI POWER CONNECTOR	cat. no. -	Product - Customer Drw	sheet 1 of 4	title VERT RECPT ASSY 4P-12S-4P	dwg no 10080657	rev B
	0.XX ±0.25									
	0.XXX ±0.10									
angular	0° ±2°	www.fci.com								

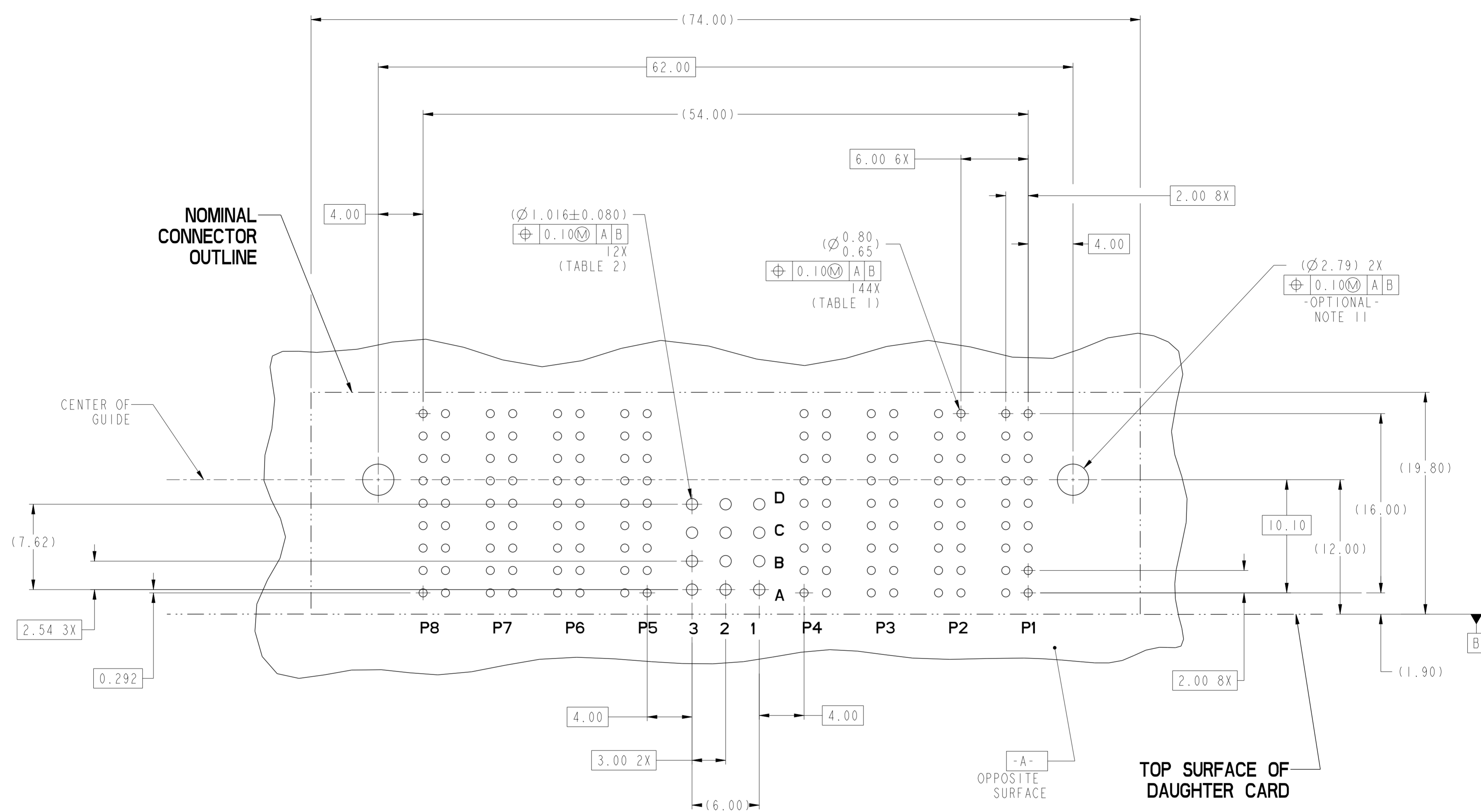
PDS: Rev :B

STATUS:Released

Printed: Dec 30, 2014

NOMINAL CONNECTOR OUTLINE

CENTER OF GUIDE



TOP SURFACE OF DAUGHTER CARD

RECOMMENDED PCB LAYOUT  
COMPONENT SIDE

NOTE 6

dr	NotFound DuWa	2010/04/28	projection	MM	size	A2	scale	3:1
eng	De-Ming Lu	2014/12/28			ecn no	ELX-DG-19849-1		
chr	-	-			rel level	Released		
appr	Pei-Ming Zheng	2014/12/29	product family	HCI				
		title VERT RECPT ASSY 4P-12S-4P HCI POWER CONNECTOR		dwg no 10080657	rev B			
www.fci.com		cat. no.	-		Product - Customer Drw		sheet 2 of 4	

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TOP LAYER DESCRIPTION

TABLE 1 (HCI POWER)  
PLATED THROUGH-HOLE REQUIREMENTS

TOP LAYER DESCRIPTION	DRILLED HOLE DIAMETER	COPPER THICKNESS	TIN-LEAD THICKNESS	NICKEL THICKNESS	GOLD THICKNESS	TIN THICKNESS	SILVER THICKNESS	FINISHED HOLE DIAMETER
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
IMMERSION SILVER	0.81-0.86 (0.85 DRILL)	0.025 - 0.050	--	--	--	--	0.15 - 0.65um	0.70 - 0.80
COPPER (SEE NOTE 9)	0.81-0.86 (0.85 DRILL)	0.025 - 0.050	--	--	--	--	--	0.70 - 0.80
GOLD	0.81-0.86 (0.85 DRILL)	0.025 - 0.050	--	0.003 - 0.007	FLASH UP TO 0.0002	--	--	0.69 - 0.80

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TOP LAYER DESCRIPTION

TABLE 2 (HPC SIGNALS)  
PLATED THROUGH-HOLE REQUIREMENTS

TOP LAYER DESCRIPTION	DRILLED HOLE DIAMETER	COPPER THICKNESS	TIN-LEAD THICKNESS	FINISHED HOLE DIAMETER
TIN-LEAD	1.125-1.175 ( $\varnothing .0453 \pm .0010$ )	0.025-0.050	0.005-0.015	0.94 - 1.10 ( $\varnothing .040 \pm .003$ )

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dr	NotFound DuWa	2010/04/28	projection	MM	size	A2	scale	3:1		
eng	De-Ming Lu	2014/12/28		MM	ecn no	ELX-DG-19849-1	rel level	Released		
chr	-	-								
appr	Pei-Ming Zheng	2014/12/29	product family	HCI	rel level	Released				
		title			VERT RECPT ASSY 4P-12S-4P		dwg no	10080657	rev	B
www.fci.com		cat. no.			-		Product - Customer Drw		sheet 3 of 4	

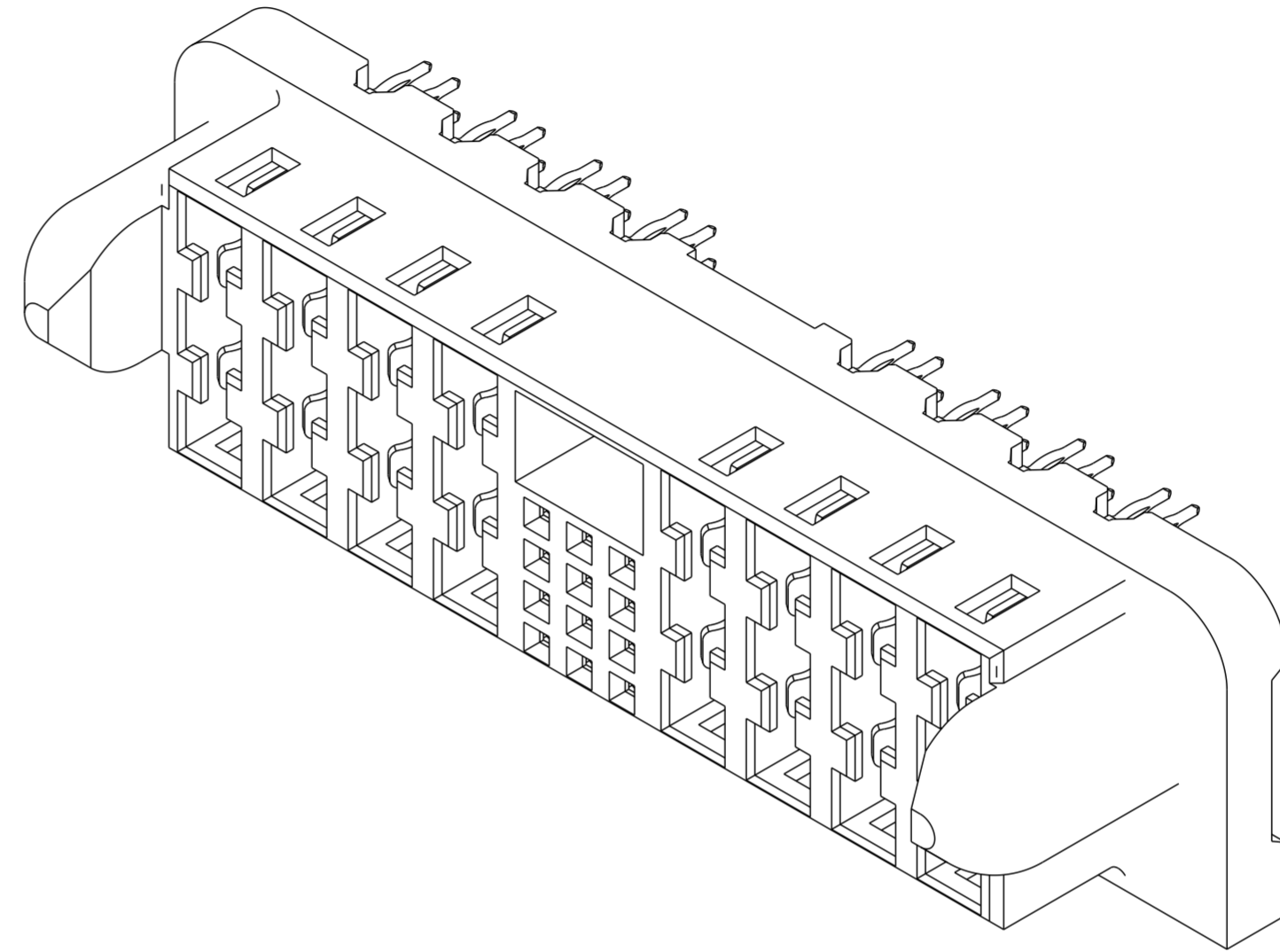
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PART NUMBER	M2.5 SCREW NOTE 11	TAIL PLATING	TAIL TYPE
10080657-001	OPTIONAL	SnPb	PRESS-FIT
10080657-001LF	OPTIONAL	Sn	PRESS-FIT

NOTES:

1. CONNECTOR MATERIALS:  
HOUSING: HIGH TEMPERATURE THERMOPLASTIC, BLACK  
UL 94V-0 COMPLIANT  
CONTACTS: HIGH PERFORMANCE COPPER ALLOY
2. CONTACT FINISH (refGS-12-380 SECTION 5.2)
3. PRODUCT SPECIFICATION: GS-12-380. (IN PROGRESS)
4. APPLICATION SPECIFICATION: GS-20-070. (IN PROGRESS)
5. PRODUCT MARKING (PRODUCT NUMBER & DATE CODE) ON HOUSING IN AREA SHOWN.
6. MINIMUM NOMINAL PCB THICKNESS: 1.6mm
7. PACKAGING MEETS FCI SPECIFICATION GS-14-1073.
8. HOUSING COMPONENT WILL WITHSTAND EXPOSURE TO 260°C  
PEAK TEMPERATURE FOR 60 SECONDS IN A CONVECTION, INFRA-RED,  
OR VAPOR PHASE REFLOW OVEN.
9. COPPER PLATING THICKNESS IN CENTER OF VIA-HOLE CAN BE  
NO MORE THAN 0.003 LESS THAN OTHER AREAS.
10. ALL HOLE SIZES ARE FINISHED HOLE SIZES.
11. RECOMMENDED RETENTION TO PCB:  
Ø0.110[2.79] THRU HOLE (UNPLATED) FOR M2.5 SELF THREADING SCREW, MAX  
HEAD Ø0.177[4.50].  
RECOMMENDED SCREW LENGTH 0.276[7.00] + PCB THICKNESS.  
RECOMMENDED SCREW SEATING TO PCB TORQUE: 2-5 lbf-in (2300-5760 gf-cm).



dr	Not Found DuWa	2010/04/28	projection	MM	size	A2	scale	3:1
eng	De-Ming Lu	2014/12/28			ecn no	ELX-DG-19849-1		
chr	-	-			rel level	Released		
appr	Pei-Ming Zheng	2014/12/29	product family	HCI	cat. no.	10080657		
		<b>VERT RECPT ASSY 4P-12S-4P</b>		dwg no	<b>B</b>			
<a href="http://www.fci.com">www.fci.com</a>		HCI POWER CONNECTOR		Product - Customer Drw		sheet 4 of 4		