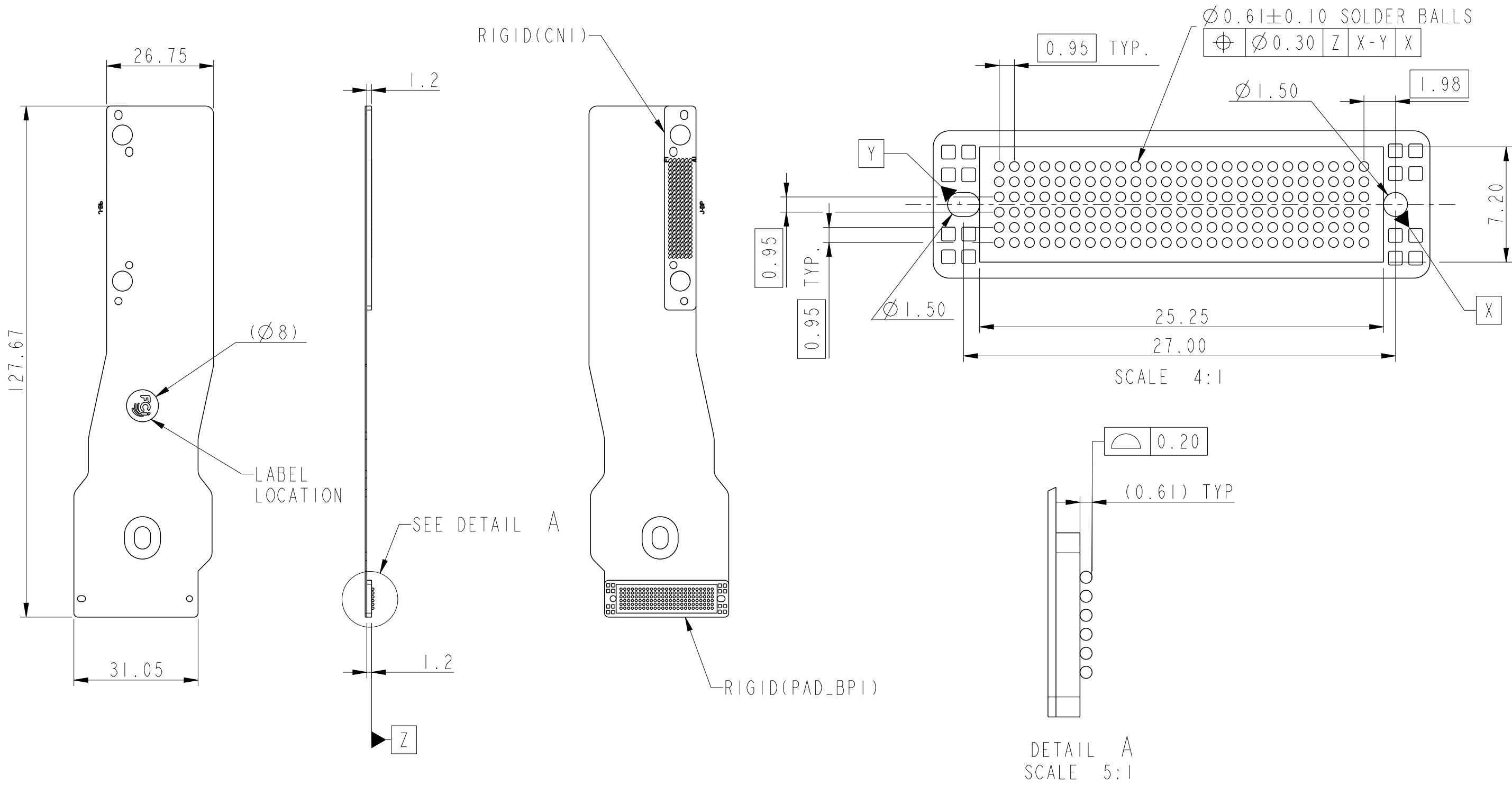
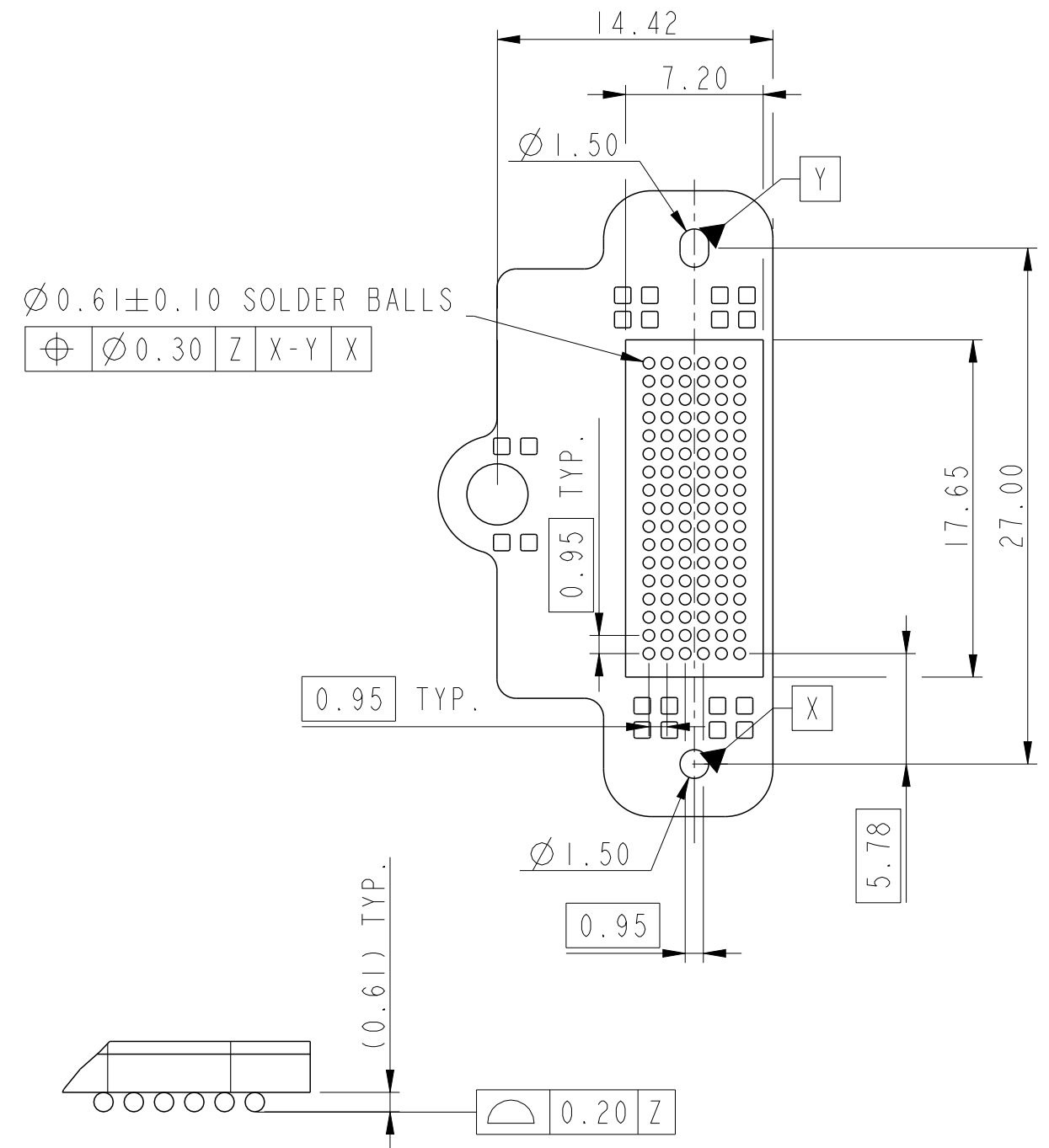
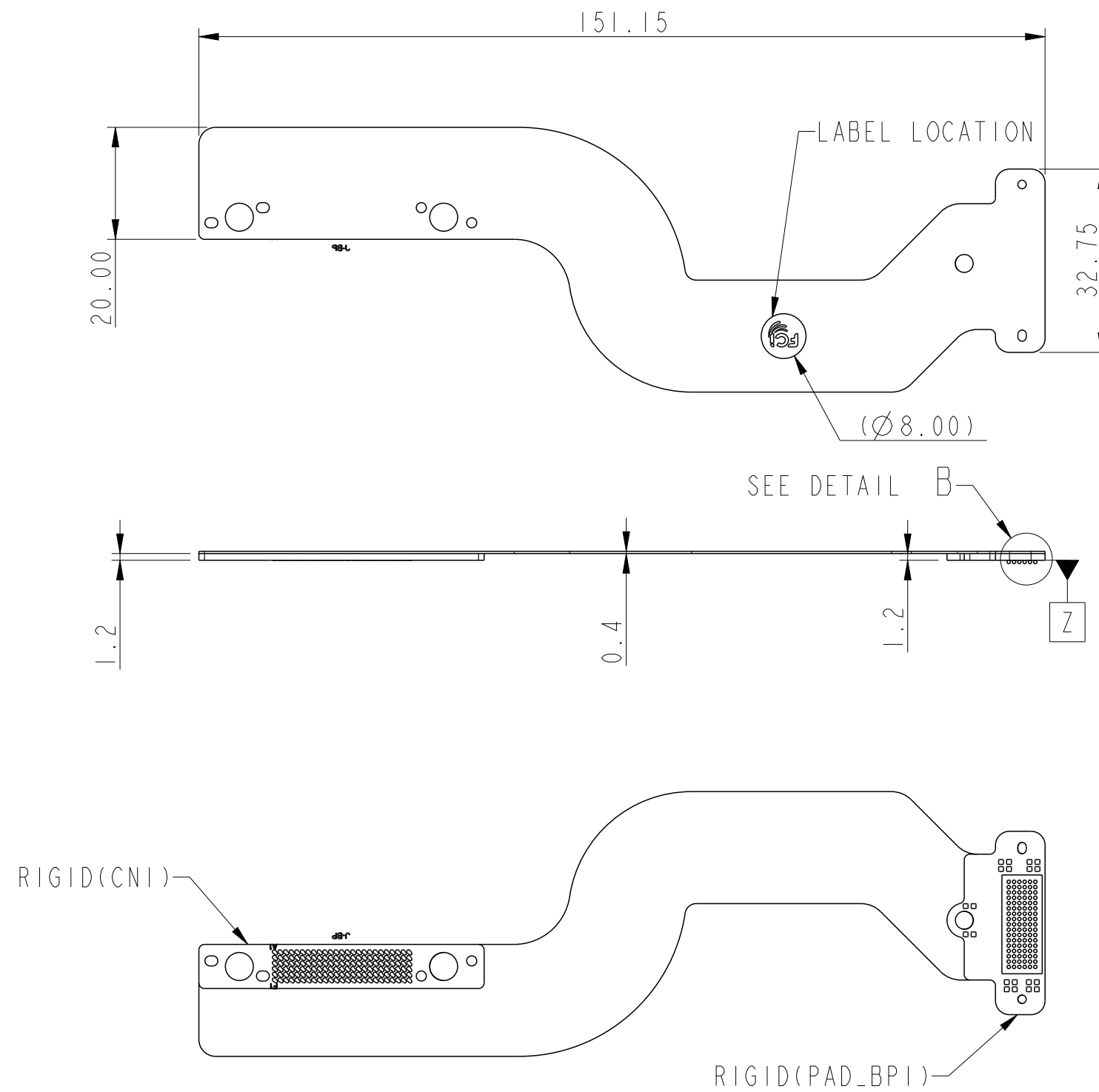


Product P/N	Wistron P/N	BGA Array Pattern
10129553-14430TxLF	550.00501.0011	6X25
10129553-14430MxLF	550.00501.0001	
10129553-14430WxLF	550.00501.0021	



spec ref	-	dr	Zhen Luo	2016/08/18	projection	MM	size	A3	scale	1:1
tolerance std	ASME Y14.5	eng	Michael Song	2016/12/07	chr	Heaven Cen	2016/12/07	ecn no	ELX-DG-25561-1	
		appr	Pei-Ming Zheng	2016/12/07	product family	-	rel level	Released		
surface	linear	0.X	±0.30	Amphenol FCi	title	Flex Cable BGA Assembly	dwg no	10129553	rev	B
		0.XX	±0.20							
		0.XXX	±0.10							
ASME Y14.5	angular	0°	±2°		cat. no.	-	Product - Customer Drw	sheet 1 of 11		

Product P/N	Wistron P/N	BGA Array Pattern
10129553-14426TxLF	550.00609.0001	6X17
10129553-14426MxLF	550.00609.0011	
10129553-14426WxLF	550.00609.0021	



DETAIL B
SCALE 5:1

spec ref -				dr Zhen Luo		2016/08/18		projection				MM		size A3		scale 1:1	
tolerance std				TOLERANCES UNLESS OTHERWISE SPECIFIED				eng Michael Song		2016/12/07							
ASME Y14.5								chr Heaven Cen		2016/12/07							
								appr Pei-Ming Zheng		2016/12/07		product family -					
										rel level Released							
surface			linear	0.X	±0.30	Amphenol FCI		title Flex Cable BGA Assembly Brawn				dwg no 10129553				rev B	
				0.XX	±0.20												
				0.XXX	±0.10												
ASME Y14.5			angular	0°	±2°			cat. no. -				Product - Customer Drw				sheet 2 of 11	

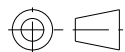
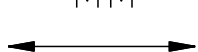
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RIGID(PAD_BPI)

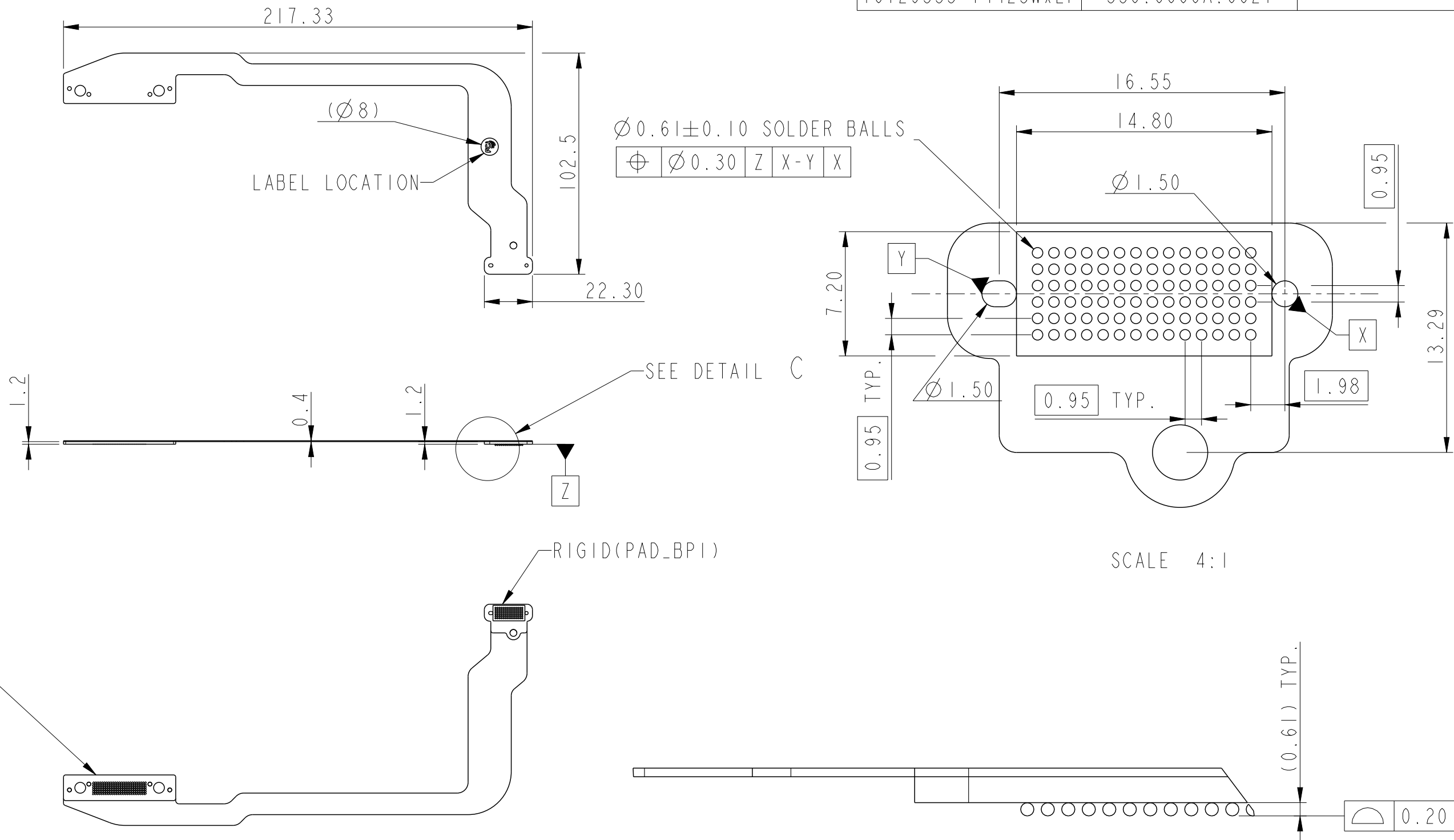
SEE DETAIL C

SCALE 4:1

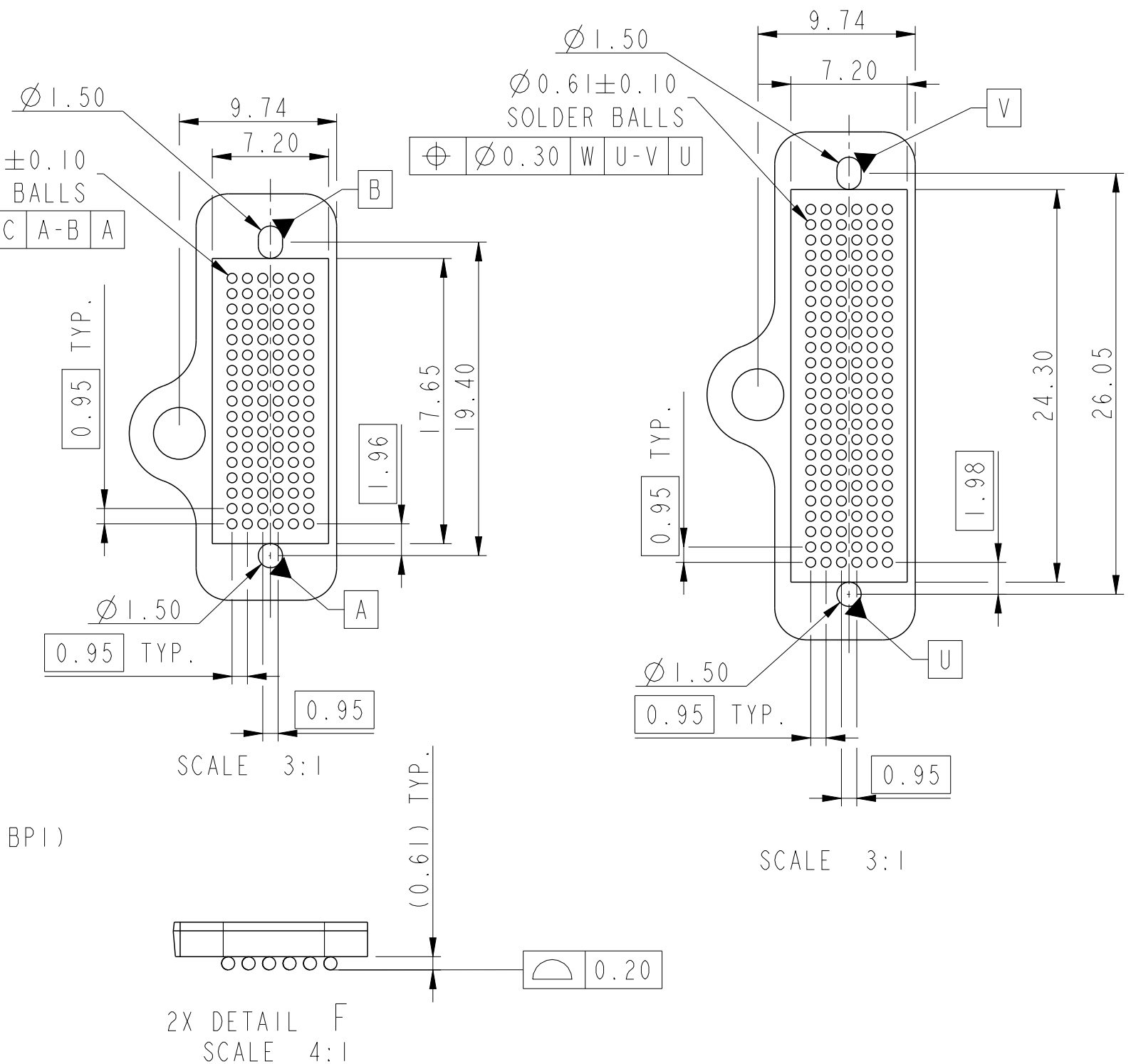
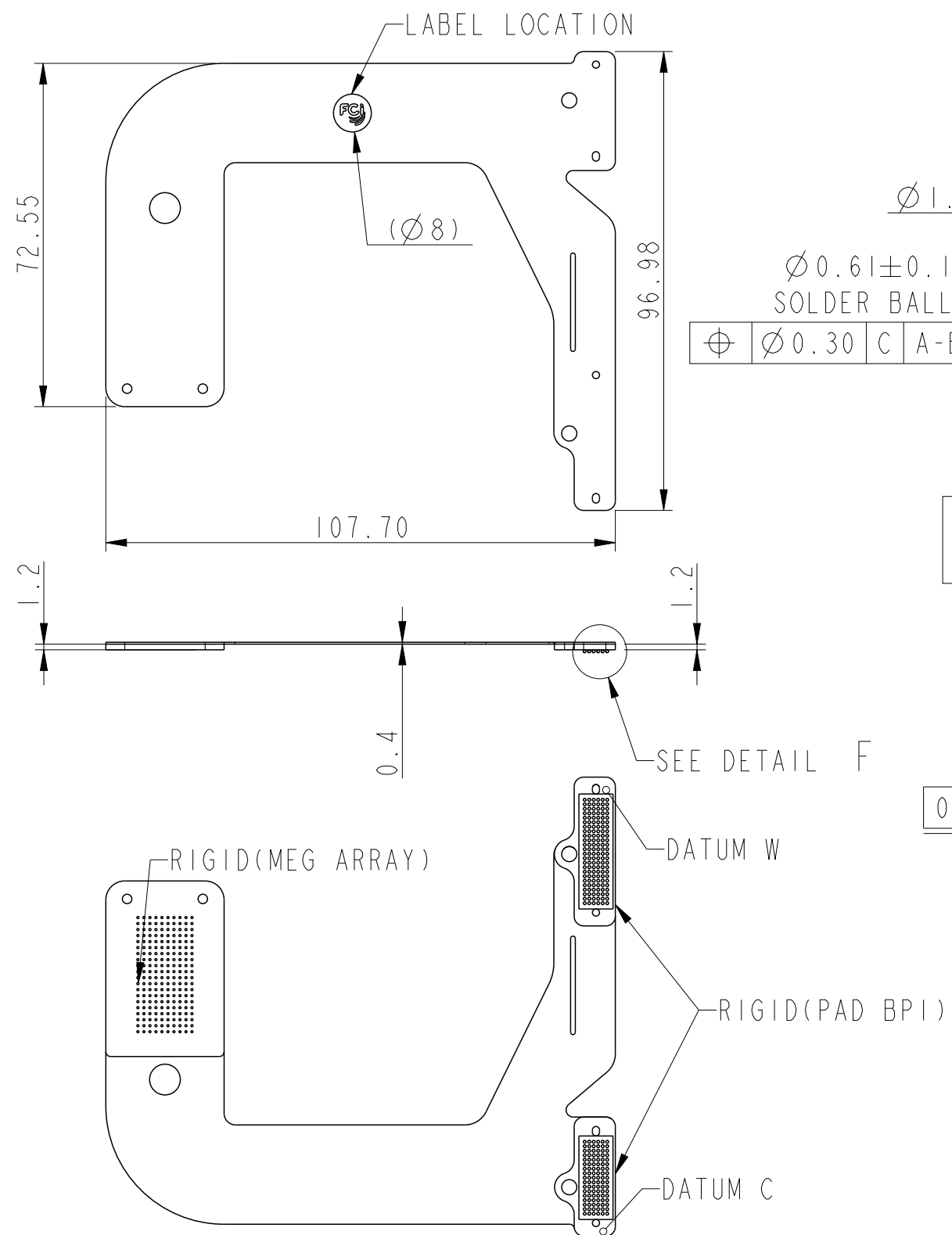
DETAIL C
SCALE 5:1

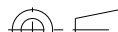
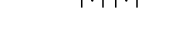
spec ref -				dr	Zhen Luo	2016/08/18	projection 		size	A3	scale	1:2
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Michael Song	2016/12/07			ecn no	ELX-DG-25561-1		
ASME Y14.5				chr	Heaven Cen	2016/12/07						
				appr	Pei-Ming Zheng	2016/12/07	product family -				rel level	Released
surface 	linear	0.X	±0.30	Amphenol FCI	title Flex Cable BGA Assembly Brawn				dwg no	10129553		rev B
		0.XX	±0.20									
		0.XXX	±0.10									
ASME Y14.5	angular	0°	±2°		cat. no. -		Product - Customer Drw				sheet 3 of 11	

Product P/N	Wistron P/N	BGA Array Pattern
10129553-14425TxLF	550.0060A.0001	6X14
10129553-14425MxLF	550.0060A.0011	
10129553-14425WxLF	550.0060A.0021	



Product P/N	Wistron P/N	BGA Array Pattern
10129553-14423TxLF	550.0060C.0001	6X17, 6X24
10129553-14423MxLF	550.0060C.0011	
10129553-14423WxLF	550.0060C.0021	

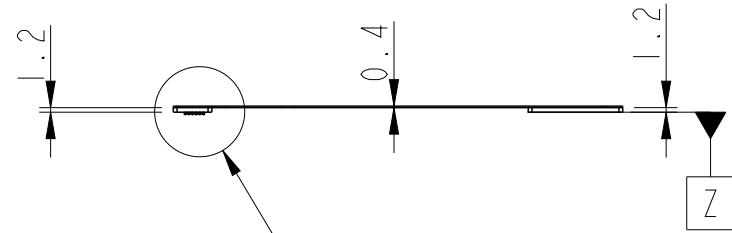
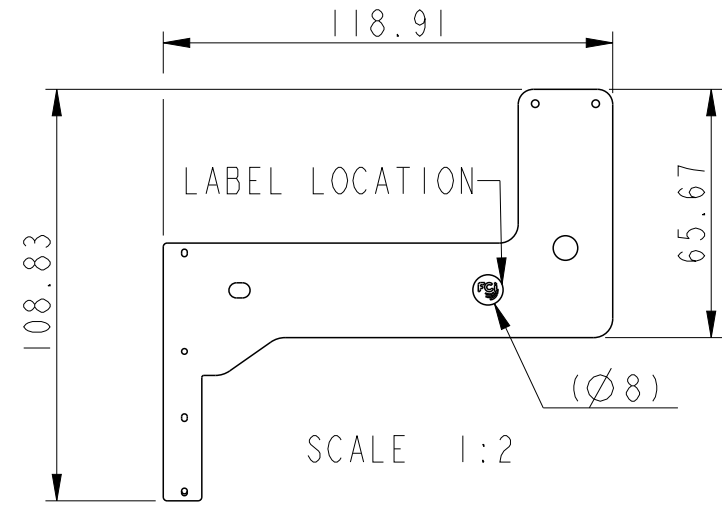


spec ref -				dr Zhen Luo 2016/08/18		projection 		MM 		size A3		scale 4:5			
tolerance std ASME Y14.5				eng Michael Song 2016/12/07						ecn no ELX-DG-25561-1					
TOLERANCES UNLESS OTHERWISE SPECIFIED				chr Heaven Cen 2016/12/07											
				appr Pei-Ming Zheng 2016/12/07		product family -				rel level Released					
surface  ASME Y14.5		linear	0.X	±0.30	Amphenol FCI	title Flex Cable BGA Assembly Brawn				dwg no 10129553				rev B	
			0.XX	±0.20											
			0.XXX	±0.10											
ASME Y14.5		angular	0°	±2°			cat. no. -		Product - Customer Drw				sheet 4 of 11		

DETAIL B
SCALE 5:1

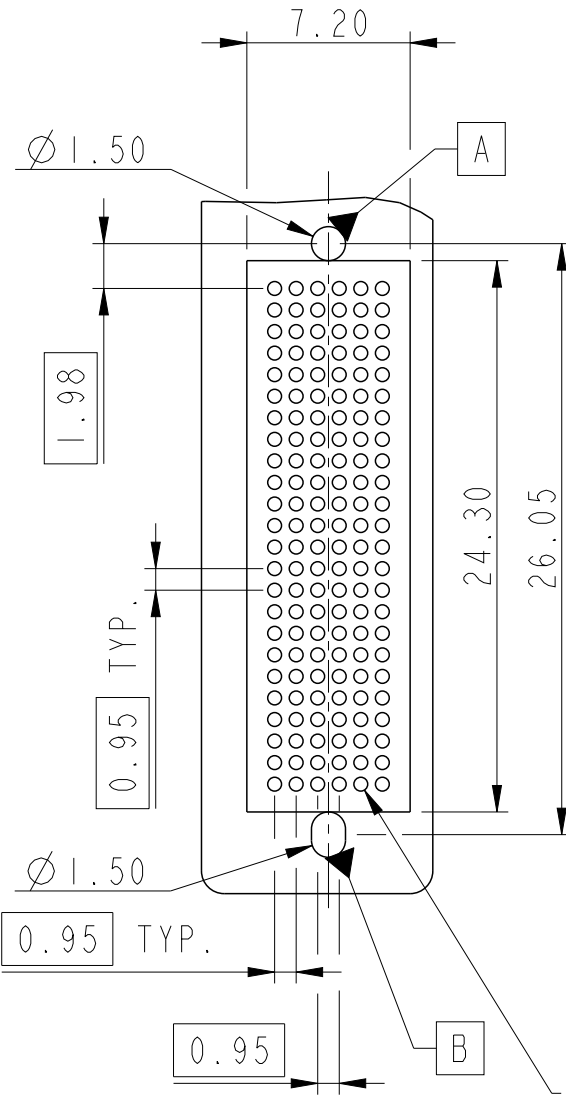
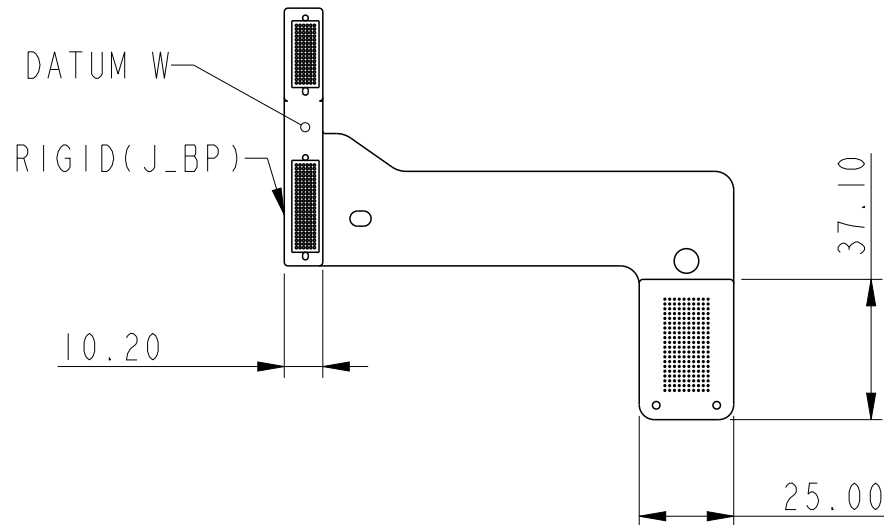
Printed: Dec 07, 2016

Product P/N	Wistron P/N	BGA Array Pattern
10129553-14428TxLF	550.00504.0011	6X24,6X17
10129553-14428MxLF	550.00504.0001	
10129553-14428WxLF	550.00504.0021	



SCALE 1:2

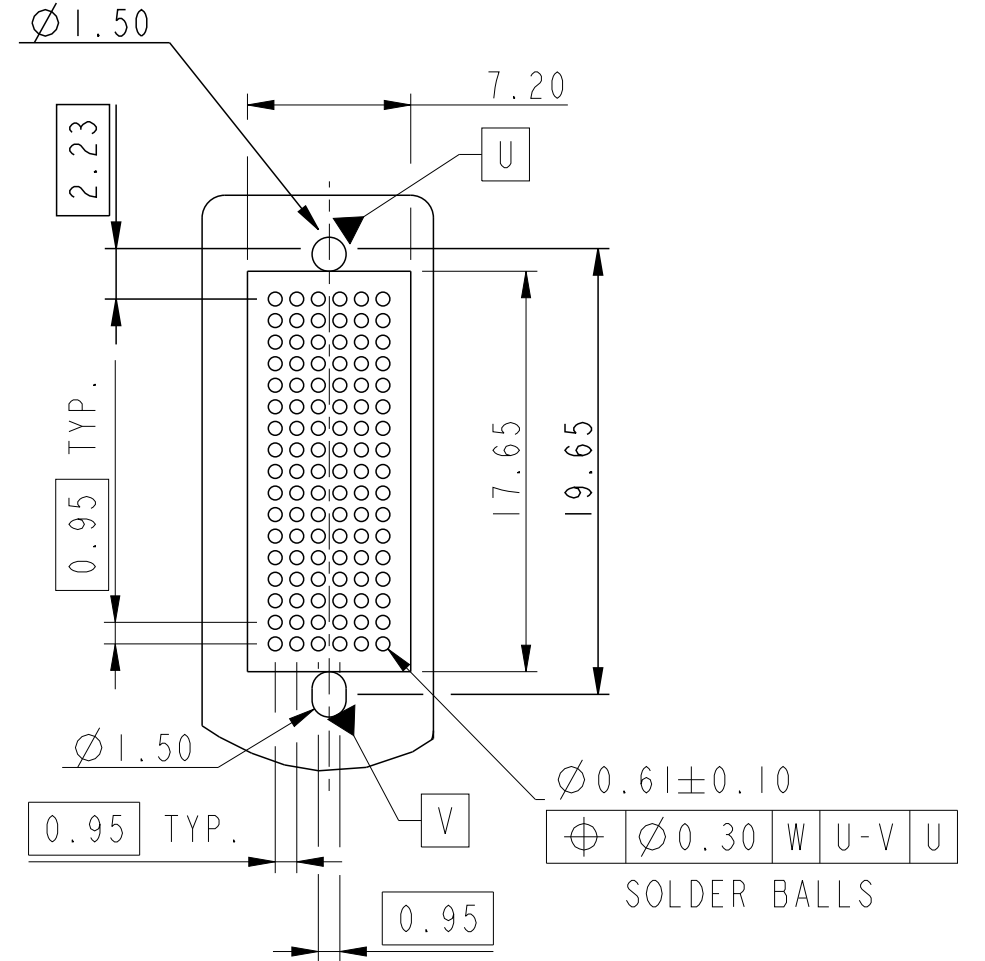
SEE DETAIL D



SCALE 3:1

Ø0.61±0.10	Ø0.30	C	A-B	A
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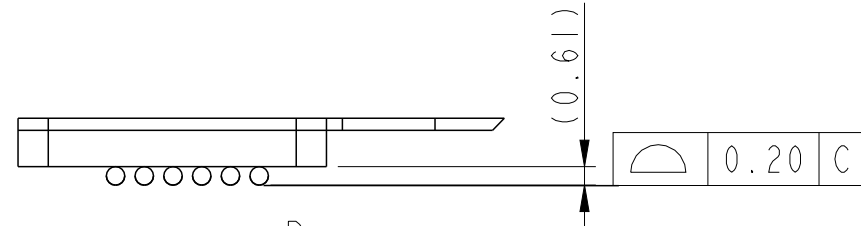
SOLDER BALLS



SCALE 3:1

Ø0.61±0.10	Ø0.30	W	U-V	U
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SOLDER BALLS



DETAIL D
SCALE 4:1

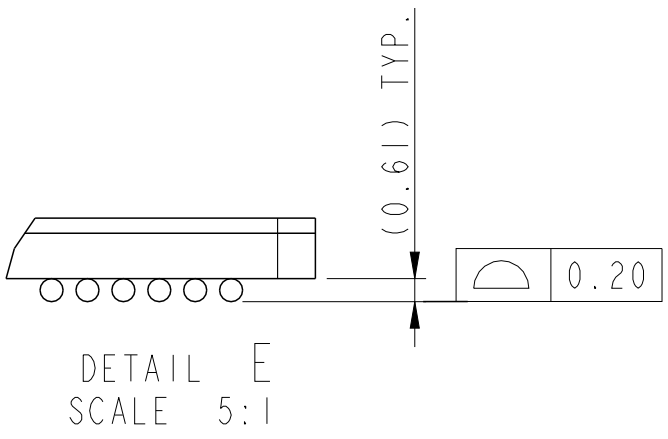
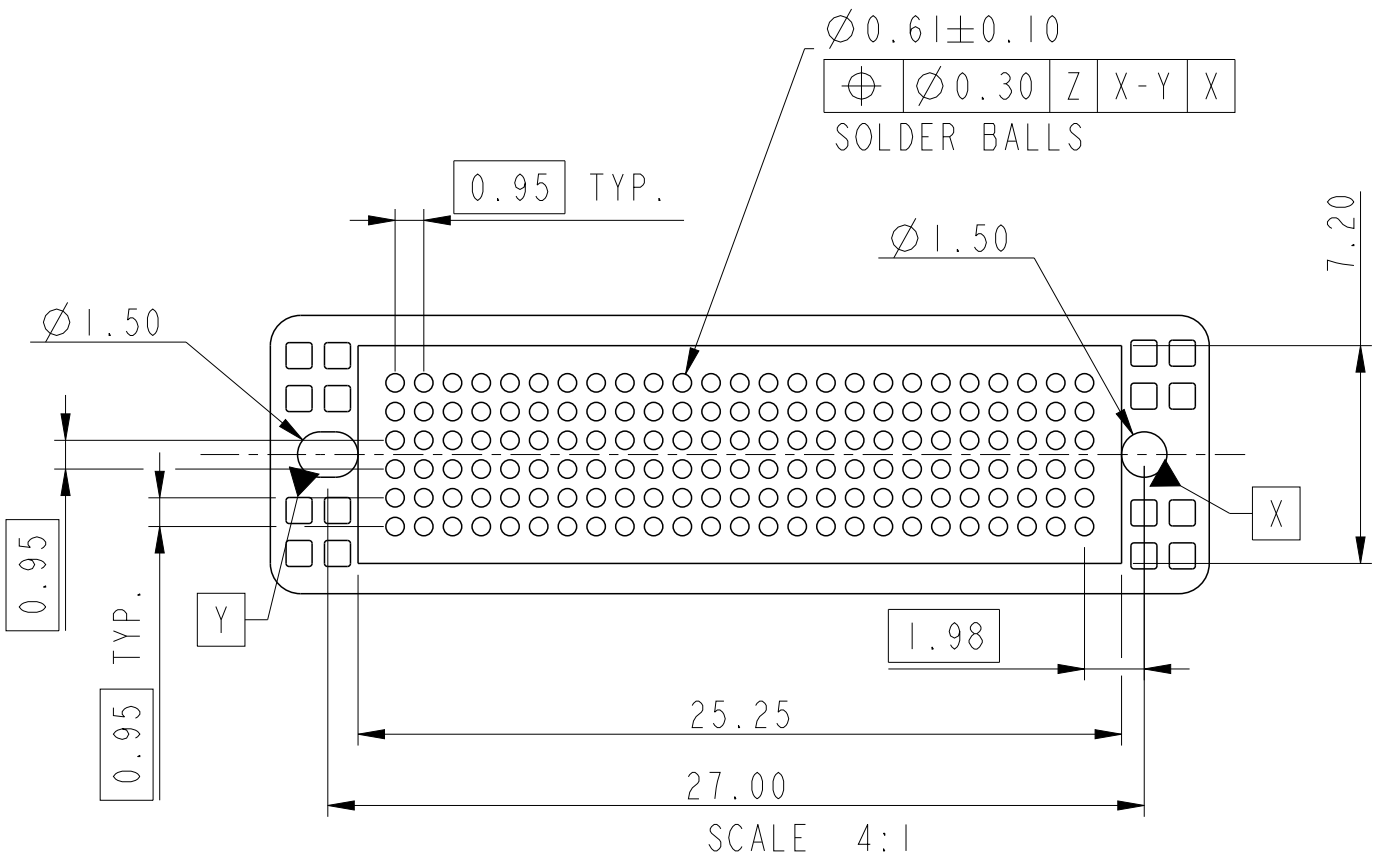
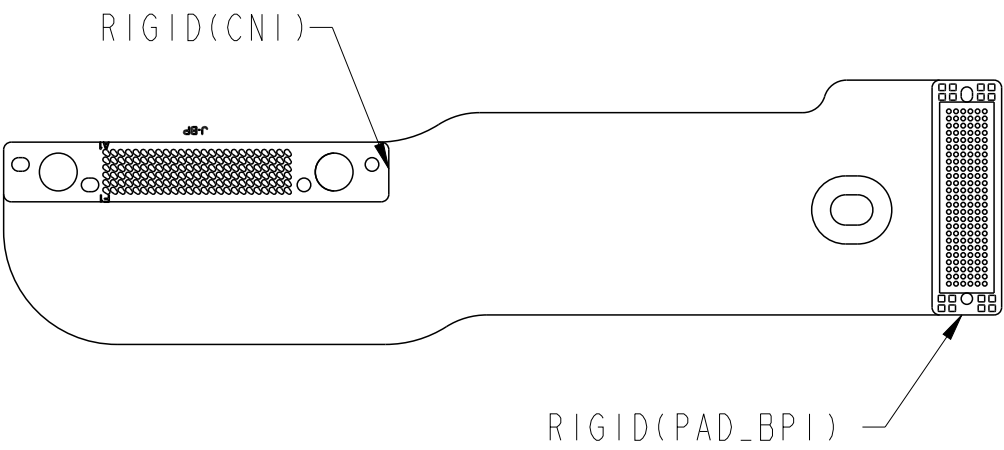
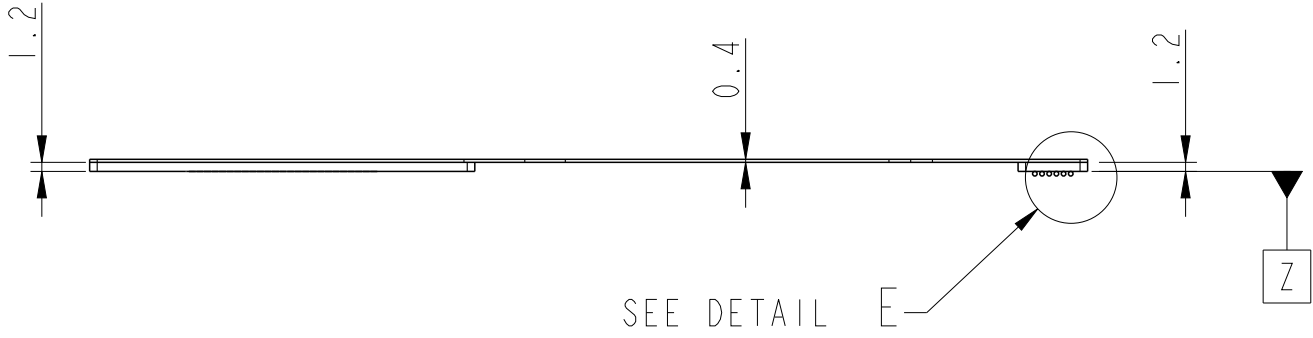
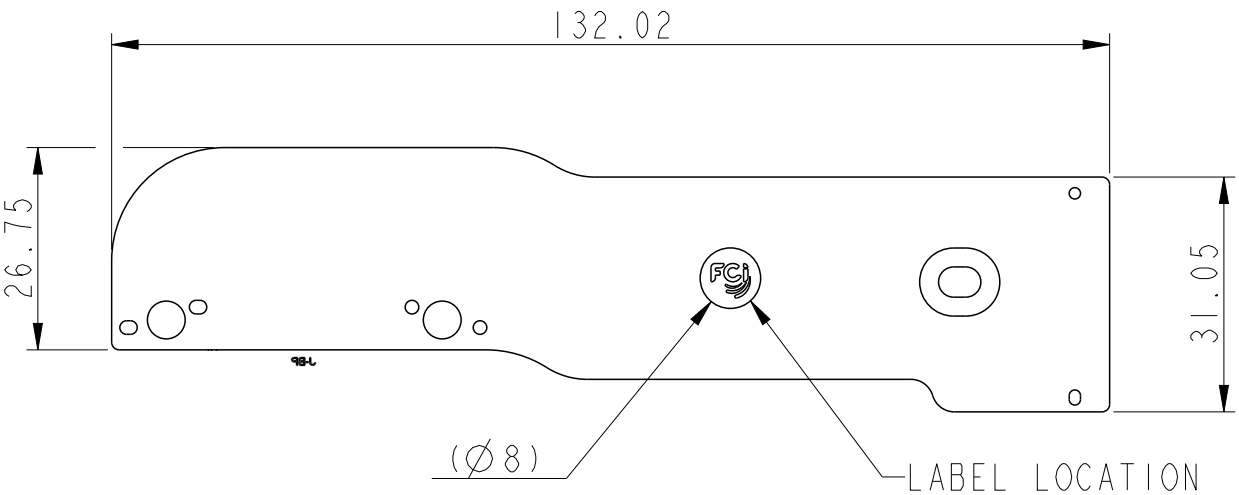
spec ref	-	dr	Zhen Luo	2016/08/18	projection	MM	size	A3	scale	1:1
tolerance std	ASME Y14.5	eng	Michael Song	2016/12/07	chr	Heaven Cen	2016/12/07	ecn no	ELX-DG-25561-1	
surface	linear	appr	Pei-Ming Zheng	2016/12/07	product family	-	rel level	Released		
ASME Y14.5	angular	0°	±2°		cat. no.	-	Product - Customer Drw	sheet 6 of 11		

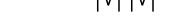
Amphenol
FCi

Flex Cable BGA Assembly
Brawn

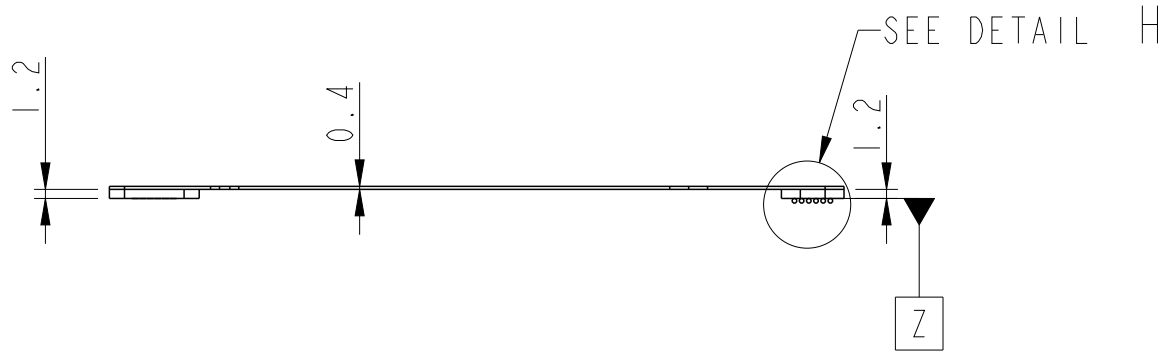
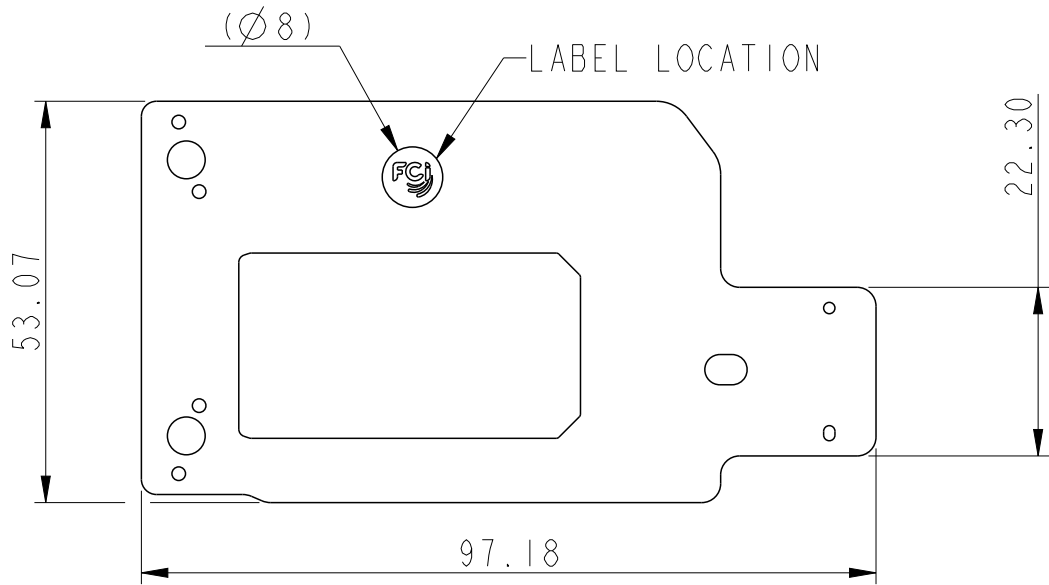
dwg no 10129553
rev B

Product P/N	Wistron P/N	BGA Array Pattern
10129553-14429TxLF	550.00503.0031	6X25
10129553-14429MxLF	550.00503.0001	
10129553-14429WxLF	550.00503.0021	

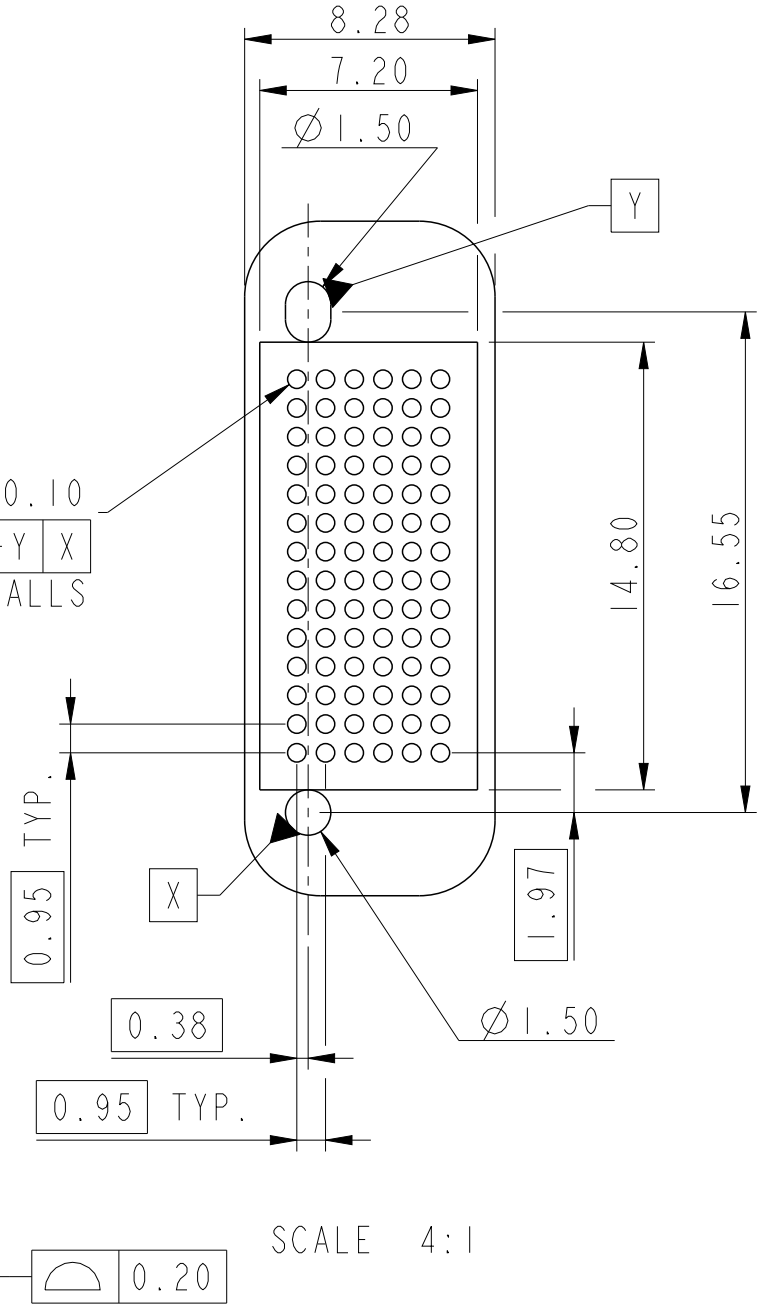
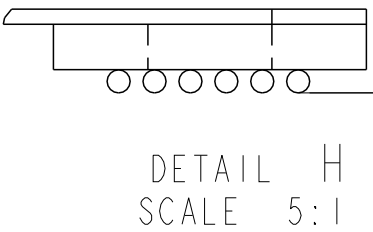
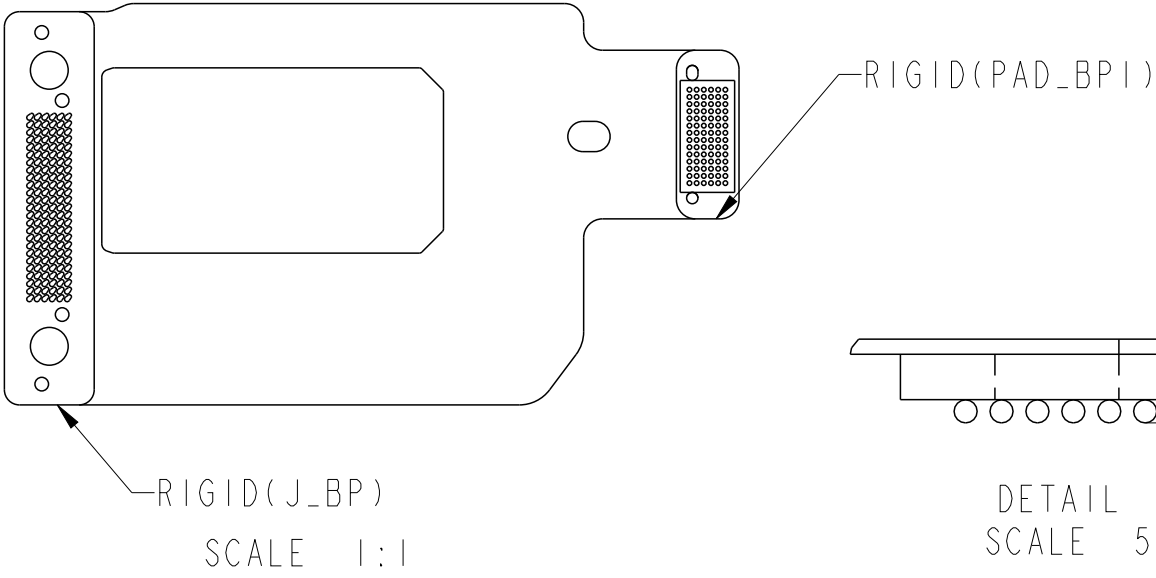


spec ref -				dr Zhen Luo		2016/08/18		projection		MM		size A3		scale 1:1							
tolerance std		TOLERANCES UNLESS OTHERWISE SPECIFIED				eng Michael Song		2016/12/07						ecn no ELX-DG-25561-1							
ASME Y14.5						chr Heaven Cen		2016/12/07						rel level Released							
						appr Pei-Ming Zheng		2016/12/07						product family -							
surface 		linear		0.X ±0.30		0.XX ±0.20		0.XXX ±0.10		Amphenol FCI		title Flex Cable BGA Assembly		dwg no 10129553		rev B					
																		ASME Y14.5		angular 0° ±2°	
cat. no. -						Product - Customer Drw						sheet 7 of 11									

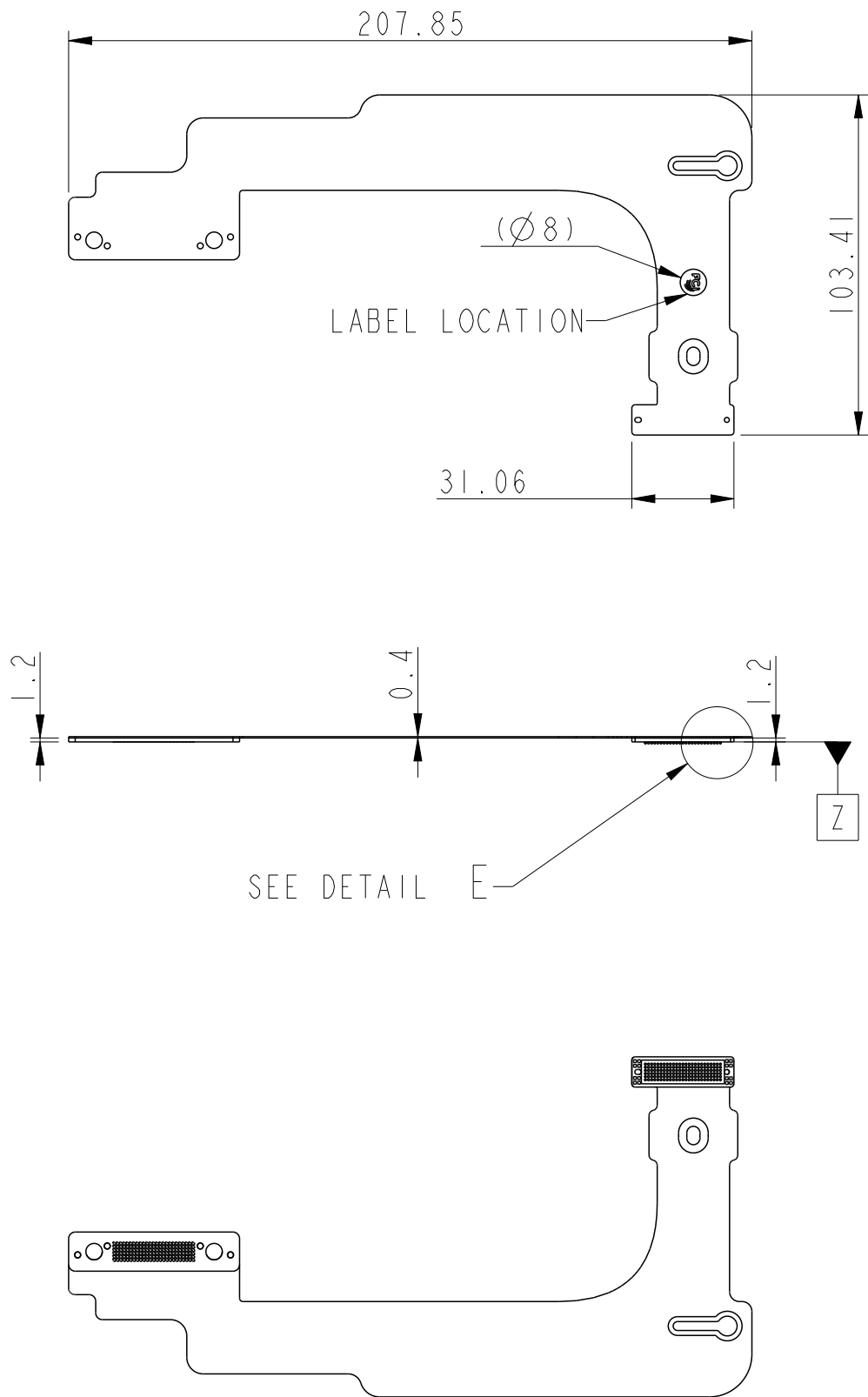
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10129553-14461TxLF	550.00505.0011	6X14
10129553-14461MxLF	550.00502.0001	
10129553-14461WxLF	550.00505.0021	



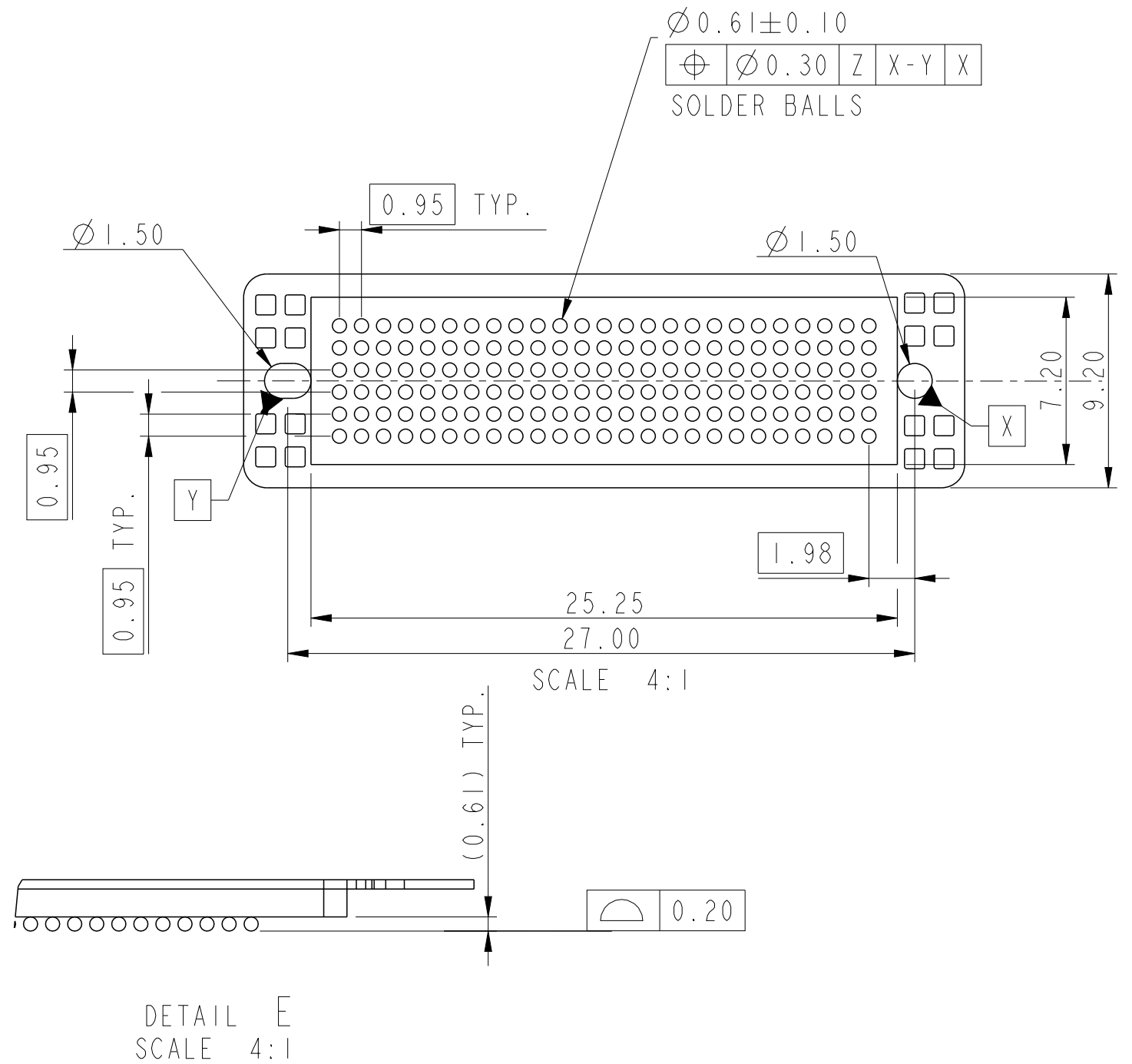
$\varnothing 0.61 \pm 0.10$
$\varnothing 0.30$ Z X-Y X
SOLDER BALLS



spec ref	-	dr	Zhen Luo	2016/08/18	projection	MM	size	A3	scale	1:1
tolerance std	ASME Y14.5	eng	Michael Song	2016/12/07	chr	Heaven Cen	2016/12/07	ecn no	ELX-DG-25561-1	
surface	linear	appr	Pei-Ming Zheng	2016/12/07	product family	-	rel level	Released		
ASME Y14.5	angular	0°	$\pm 2^\circ$	Amphenol FCI	title	Flex Cable BGA Assembly	dwg no	10129553	rev	B
					cat. no.	-	Product - Customer Drw	sheet 9 of 11		



Product P/N	Wistron P/N	BGA Array Pattern
10129553-1453ITxLF	550.00507.0011	6X25
10129553-1453IMxLF	550.00507.0001	
10129553-1453IWxLF	550.00507.0021	



spec ref	-	dr	Zhen Luo	2016/08/18	projection	MM	size	A3	scale	1:2
tolerance std	ASME Y14.5	eng	Michael Song	2016/12/07	chr	Heaven Cen	2016/12/07	ecn no	ELX-DG-25561-1	
	TOLERANCES UNLESS OTHERWISE SPECIFIED	appr	Pei-Ming Zheng	2016/12/07	product family	-	rel level	Released		
surface	linear	0.X	± 0.30	Amphenol FCi	title	Flex Cable BGA Assembly	dwg no	10129553	rev	B
		0.XX	± 0.20							
		0.XXX	± 0.10							
ASME Y14.5	angular	0°	$\pm 2^\circ$		cat. no.	-	Product - Customer Drw	sheet 10 of 11		

PRODUCT PART NUMBER

10129553-□□□□XXLF

BASE NUMBER

LEAD FREE

PCB DESIGN:
O: STANDARD
I TO N: NEW STACKUP

SUPPLIER:
M: Multex
T: TTM
W: WuZhu

CODE (SEE TABLE)

CODE	Flex Cable code In Wistron
14430	14430
14426	14426
14425	14425
14423	14423
14424	14424
14428	14428
14429	14429
14460	14460
14461	14461
14531	14531

NOTES:
1.MATERIAL:
FLEX CABLE
SOLDER BALL: LEAD FREE 96.5Sn/3Ag/0.5Cu
VENDOR: ALPHA

2.SOLDER BALLS WILL NOT BE PERFECT SHPERICAL SHAPE
DUE TO REFLOW ATTACHMENT.

3.PRODUCT SPECIFICATION: GS-12-1183.

4.APPLICATION SPECIFICATION: GS-20-0391.

5.PACKAGE SPECIFICATION: GS-14-2365.

6.PRODUCT MEET EUROPEAN UNION DIRECTIVES AND
OTHER COUNTRY REGULATIONS DESCRIBED IN GS-22-08.

7.RATED VOLTAGE L80V-LESS THAN 80V

8.SHEAR FORCE OF SOLDER BALL:800GF MIN.

9.APPEARANCE STANDARD FOLLOWS IPC 6013 CLASS2
CRITERIA AND DELL PCB 10207.

10.MSL LEVEL:MULTEK:5 TTM:5A.

11.CONTACT RESISTANCE:
MULTEK:10 OHM TTM:10 OHM

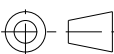
12.INSULATION RESISTANCE:
MULTEK:10 MEGAOHM TTM:10 MEGAOHM

13.PCB WARPAGE CRITERIA:
0.7% OF PCB LENGTH MAX.(BEFORE REFLOW)

14.IMPEDANCE REQUIREMENT.

100 +/-10 OHMS RISE TIME=70PS (20% TO 80%)	85 +/-10 OHMS RISE TIME=70PS (20% TO 80%)	50 +/-5 OHMS RISE TIME=100PS (10% TO 90%)
SAS AND PCIE PAD (DIFFERENTIAL PAIR)	SATA PAD (DIFFERENTIAL PAIR)	SIDE BAND PAD (POWER,GND,SIDE BAND SIGNALS)

15.DIMENSION WITH THE "()" SYMBOL IS THE
REFERENCE DIMENSION.

spec ref -				dr	Zhen Luo	2016/08/18	projection 	MM 	size	A3	scale	1:1	
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Michael Song	2016/12/07			ecn no ELX-DG-25561-1				
				chr	Heaven Cen	2016/12/07			rel level Released				
				appr	Pei-Ming Zheng	2016/12/07							
product family -													
surface	linear	0.X	±0.30	Amphenol FCi	title	Flex Cable BGA Assembly			dwg no	10129553		rev	B
		0.XX	±0.20										
		0.XXX	±0.10										
	ASME Y14.5	angular	0°	±2°		cat. no.	-	Product - Customer Drw				sheet 11 of 11	