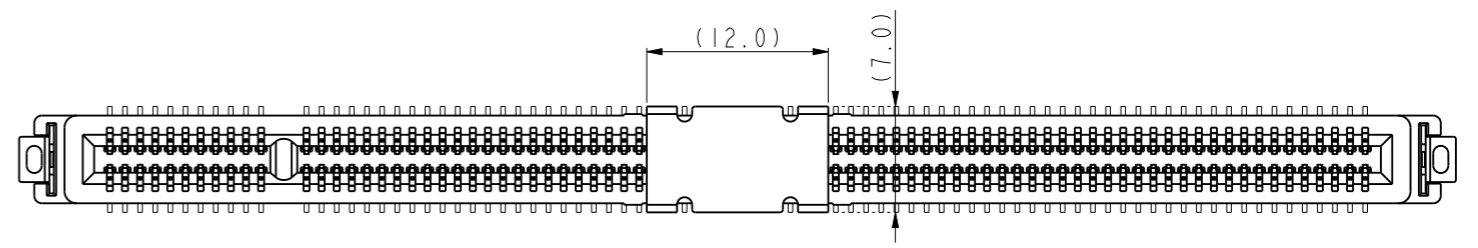


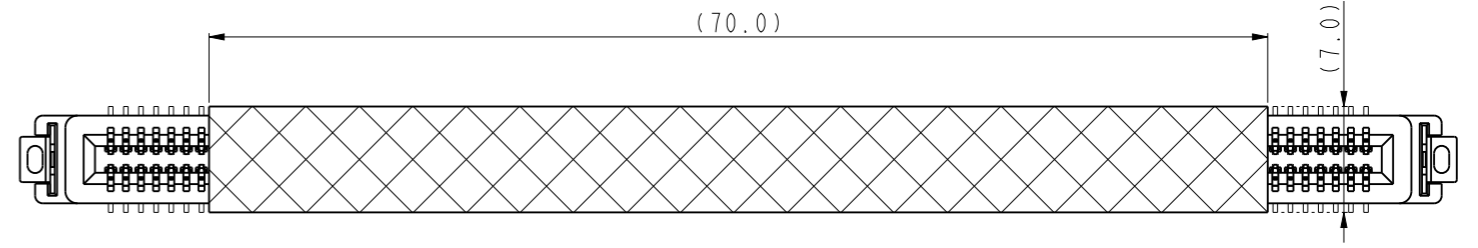
revision history				
rev	ecn no	description	dr	date
4	CD2021	UPDATE PLATING SPEC	JF	2020/05/30
5	CD2387	DETAILED THE PN SYSTEM	JF	2020/12/22
6	CD2675	UPDATE GOLD FINGER	JQ	2021/06/04

NOTE:

- MATERIAL:  
HOUSING: HIGH TEMPERATURE THERMOPLASTIC; BLACK UL94V-0; HALOGEN FREE  
CONTACT: COPPER ALLOY  
BOARD LOCK: SPCC
- PLATING:  
CONTACT: MATING AREA: SEE PN SYSTEM OVER 1.27-2.54UM NICKEL UNDERPLATED  
SOLDER AREA: 2.54UM MIN TIN OVER 1.27-2.54UM NICKEL UNDERPLATED  
BOARD LOCK: 2.54UM MIN TIN OVER 1.27-2.54UM NICKEL UNDERPLATED
- ELECTRICAL PERFORMANCE:  
RATED CURRENT FOR SIGNAL PIN: 0.7A/PIN  
RATED CURRENT FOR POWER PIN: 1.1A/PIN(A2/A3/A9/A10/B1/B2/B3/B8/, TOTAL 8PIN)
- MATERIAL IS COMPLIANT TO RoHS
- TRANSMISSION SPEED:  
PCIe Gen4/16Gbps: OPEN PIN FIELD DESIGN  
PCIe Gen5/32Gbps: CONFORM TO PCIe CEM SPECIFICATION
- ORDERING PART NUMBER: REFER TO THE PART NUMBER SYSTEM



TOP VIEW WITH PICK CAP  
(T=0.25mm)



TOP VIEW WITH MYLAR  
(T=0.15mm)

PART NUMBER SYSTEM  
CEE0164X014XXXX

PIN COUNT  
164: 164PIN

PICK CAP & MYLAR  
0: WITH CAP  
1: WITH MYLAR

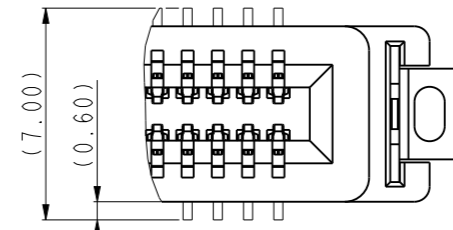
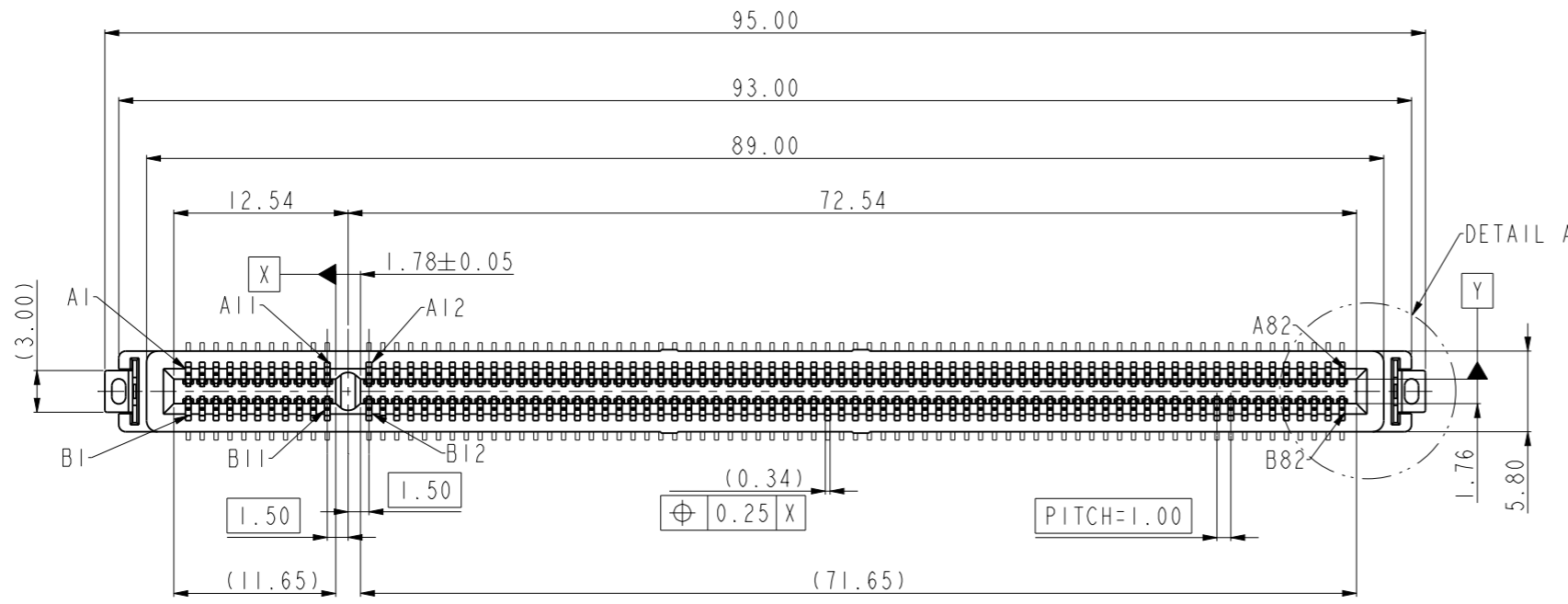
PACKING TRAY  
0: BLISTER TRAY (330x230mm T=2mm)  
1: BLISTER TRAY (330x120mm T=2mm)  
2: BLISTER TRAY (260x165mm T=2mm)  
3: INJECTION TRAY (320x136mm)

PLATING SPEC  
1: Au 0.76UM(30u")  
2: Au 0.38UM(15u")  
3: Gold Flash  
4: GXT

TRANSMISSION SPEED  
0: PCIe Gen5/32Gbps  
1: PCIe Gen4/16Gbps

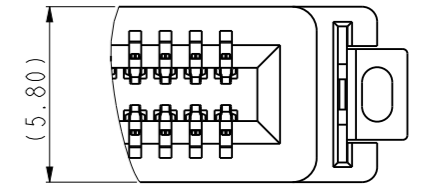
SOLDER TAIL OPTION  
2: STANDARD TAIL  
3: SHORTER TAIL

spec ref		dr	JERRY.OU	Jun. 04, 2021	<b>Amphenol</b>	mm	scale	1:1	size	A3	
tolerance std		eng	JERRY.OU	Jun. 04, 2021		ecn no	CD2675				
TOLERANCES UNLESS OTHERWISE SPECIFIED		r vwr				rel level	RELEASED				
surface	linear	0.X	±0.25	projection	PCIe COOL EDGE CONNECTOR	cat. no.	C CEE0164X014XXXX				
		0.XX	±0.20				product family	PCIe COOL EDGE	sheet 1 of 5		
		0.XXX	±0.15								
	angular	0°	±5°		1.0mm PITCH, X16, Gen4 & Gen5					rev	6



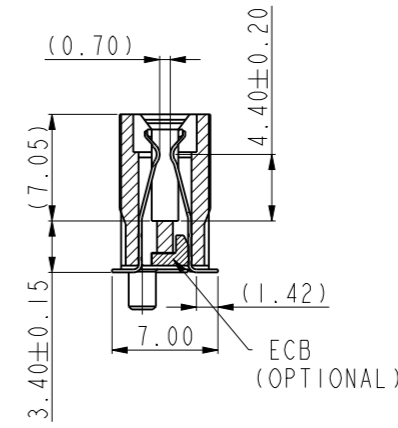
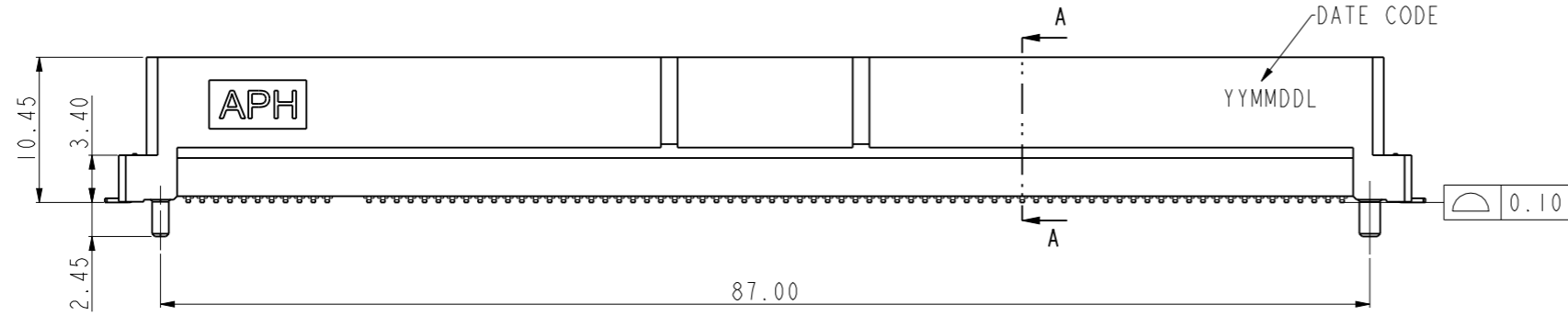
STANDARD TAIL

DETAIL A  
SCALE 2:1

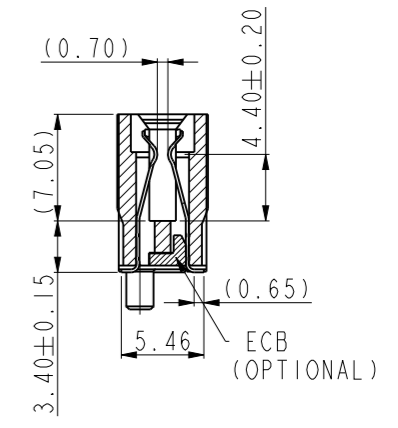


SHORTER TAIL

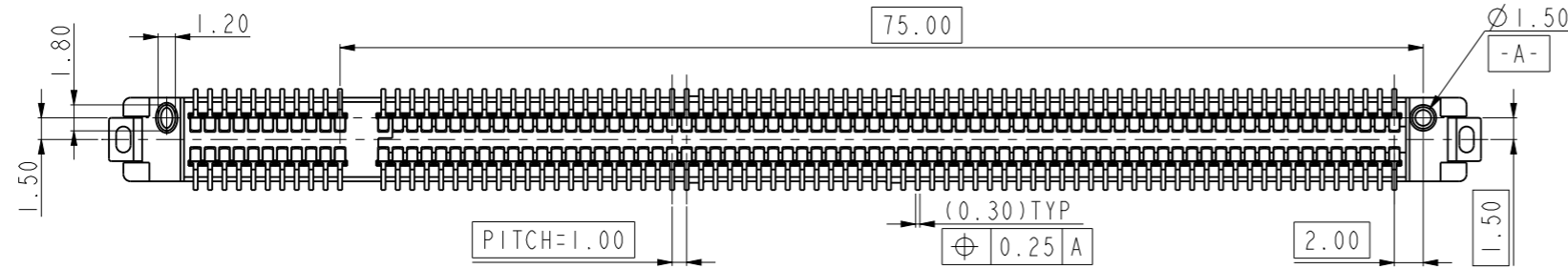
DETAIL A  
SCALE 2:1



STANDARD TAIL  
SECTION A-A



SHORTER TAIL  
SECTION A-A



GND PIN DEFINITION  
(REFER TO PCIe CEM SPEC)

SIDE A GND PIN	A12, A15, A18, A20, A23, A24, A27, A28, A31, A34, A37, A38, A41, A42, A45, A46, A49, A51, A54, A55, A58, A59, A62, A63, A66, A67, A70, A71, A74, A75, A78, A79, A82
SIDE B GND PIN	B13, B16, B18, B21, B22, B25, B26, B29, B32, B35, B36, B39, B40, B43, B44, B47, B49, B52, B53, B56, B57, B60, B61, B64, B65, B68, B69, B72, B73, B76, B77, B80

spec ref	dr	JERRY.OU	Jun. 04, 2021	<b>Amphenol</b>	mm	scale	1:1	size	A3	
tolerance std	eng	JERRY.OU	Jun. 04, 2021		ecn no	CD2675				
TOLERANCES UNLESS OTHERWISE SPECIFIED	r vwr				amphenol-icc.com	rel level	RELEASED			
	appr				product family	PCIe COOL EDGE		sheet 2 of 5		
surface	linear	0.X	±0.25	projection	PCIe COOL EDGE CONNECTOR		1.0mm PITCH, X16, Gen4 & Gen5	cat. no.	C CEE0164X014XXXX	
		0.XX	±0.20		rev	6				
		0.XXX	±0.15		product family	PCIe COOL EDGE		sheet 2 of 5		
	angular	0°	±5°							

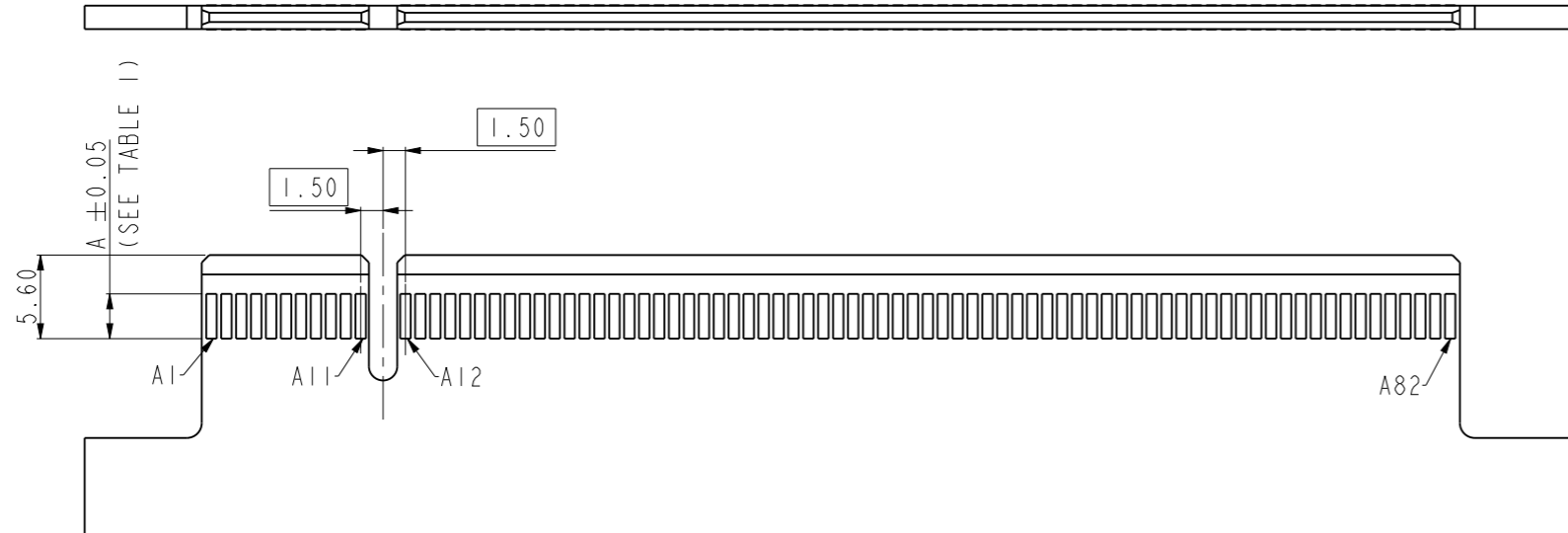
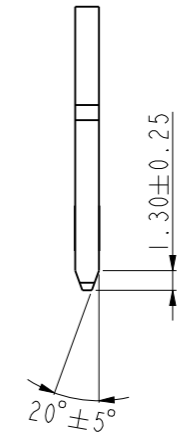
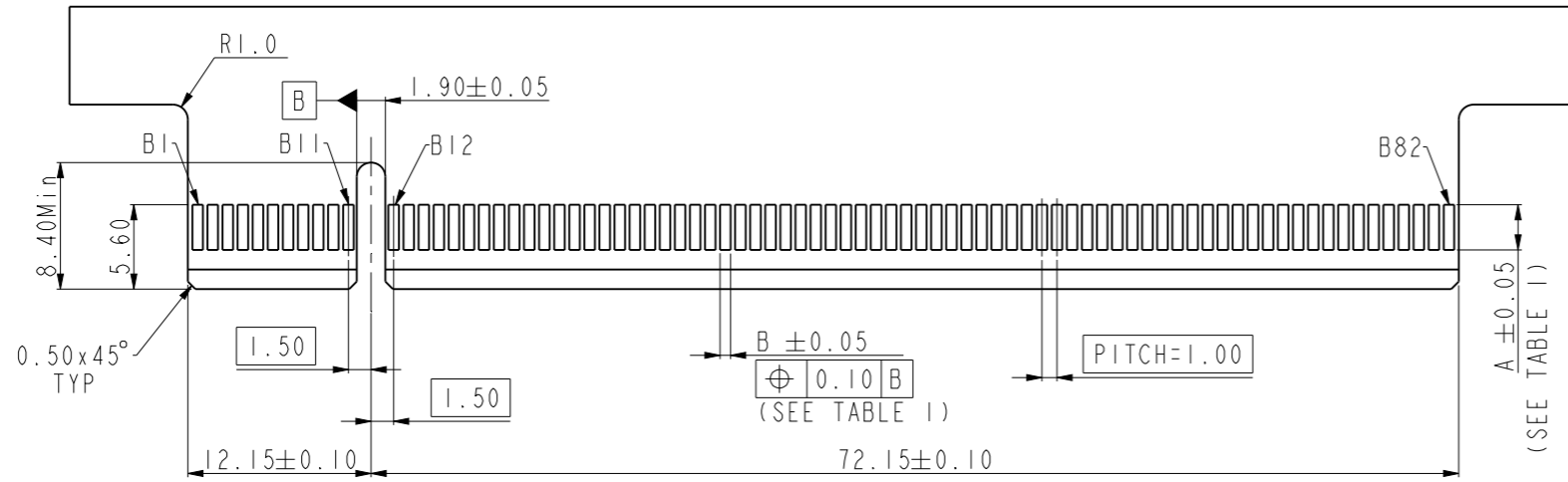
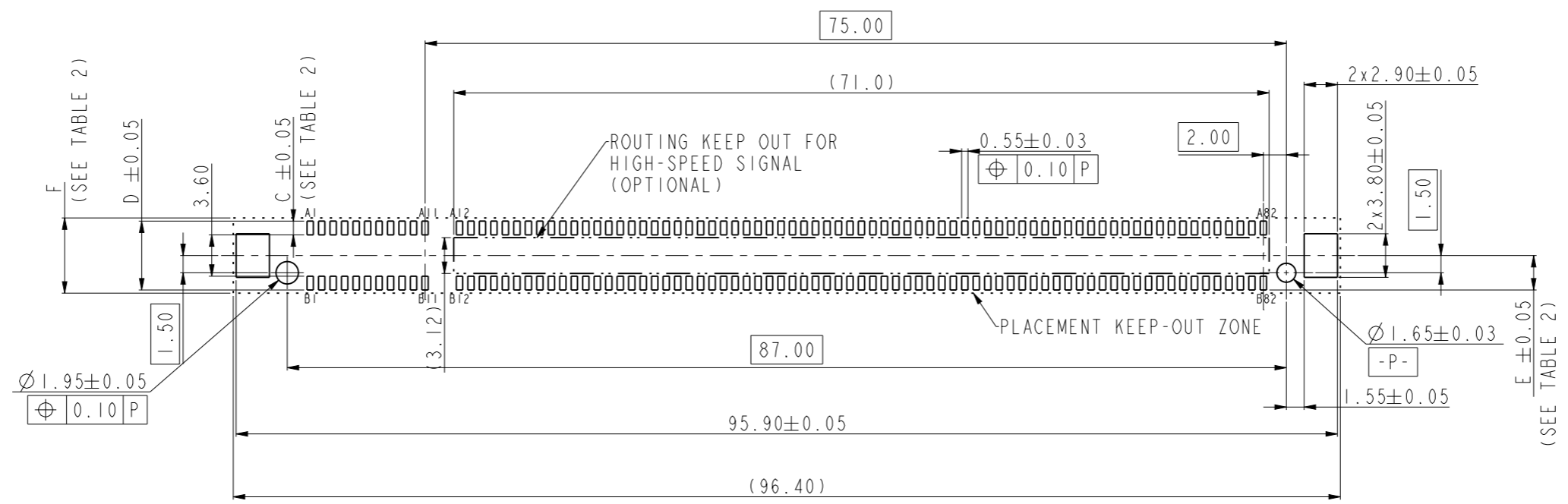


TABLE 1

ITEM/DIM	A (Gold Finger Length)	B (Gold Finger Width)
PCIe Gen4	3.91 ± 0.05 3.20 ± 0.05 (A1 and B81)	0.70 ± 0.05
PCIe Gen5	3.00 ± 0.05	0.60 ± 0.05

RECOMMENDED LAY OUT FOR MATING CARD, THICKNESS=1.57 ± 0.15mm  
GENERAL TOLERANCE ± 0.05

spec ref		dr	JERRY.OU	Jun. 04, 2021	<b>Amphenol</b>	mm	scale	1:1	size	A3	
tolerance std		eng	JERRY.OU	Jun. 04, 2021		ecn no	CD2675				
TOLERANCES UNLESS OTHERWISE SPECIFIED		rivr				amphenol-icc.com		rel level			RELEASED
		appr									
surface	linear	0.X	±0.10	projection	title	PCIe COOL EDGE CONNECTOR		cat. no.	C CEE0164X014XXXX		
		0.XX	±0.05			1.0mm PITCH, X16, Gen4 & Gen5			rev	6	
	0.XXX	±0.03	product family			PCIe COOL EDGE			sheet 3 of 5		
angular	0°	±5°									

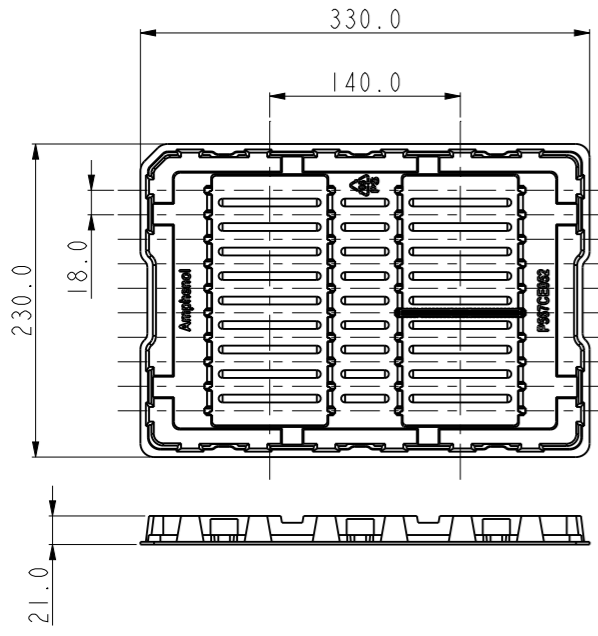


RECOMMENDED SOLDER PCB LAYOUT

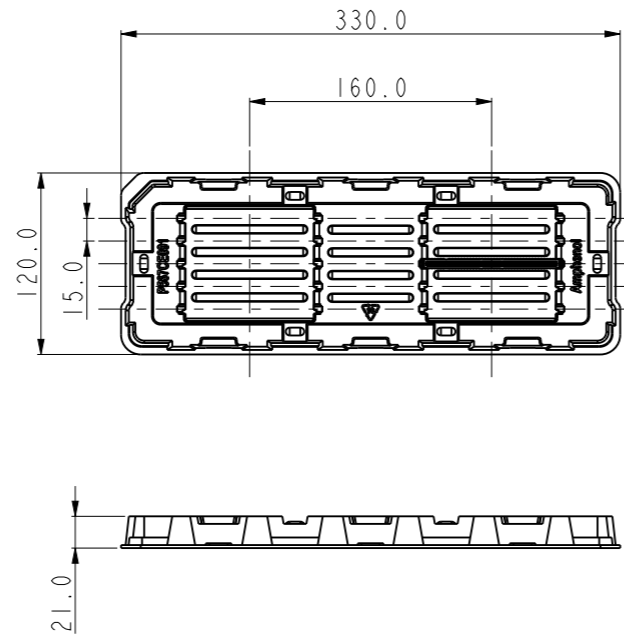
TABLE 2

ITEM/DIM	C (Pad Length)	D	E	F
SHORTER TAIL	1.20	6.00	3.00	6.55
STANDARD TAIL	1.90	7.40	3.70	7.95

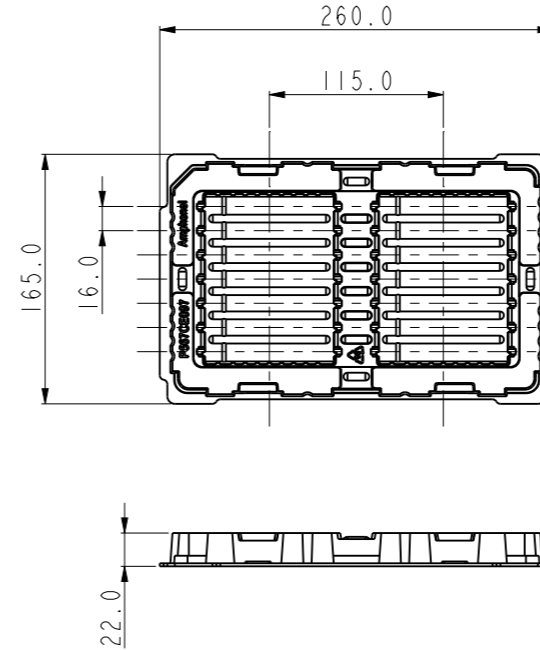
spec ref		dr	JERRY.OU	Jun. 04, 2021	<h1>Amphenol</h1>	mm	scale	1:1	size	A3	
tolerance std		eng	JERRY.OU	Jun. 04, 2021		ecn no	CD2675				
TOLERANCES UNLESS OTHERWISE SPECIFIED		rvwr				rel level	RELEASED				
surface	linear	0.X	±0.10	projection		PCIe COOL EDGE CONNECTOR 1.0mm PITCH, X16, Gen4 & Gen5	product family	PCIe COOL EDGE	sheet 4 of 5	rev	
		0.XX	±0.05							C CEE0164X014XXXX	6
		0.XXX	±0.03							cat. no.	
	angular	0°	±5°								



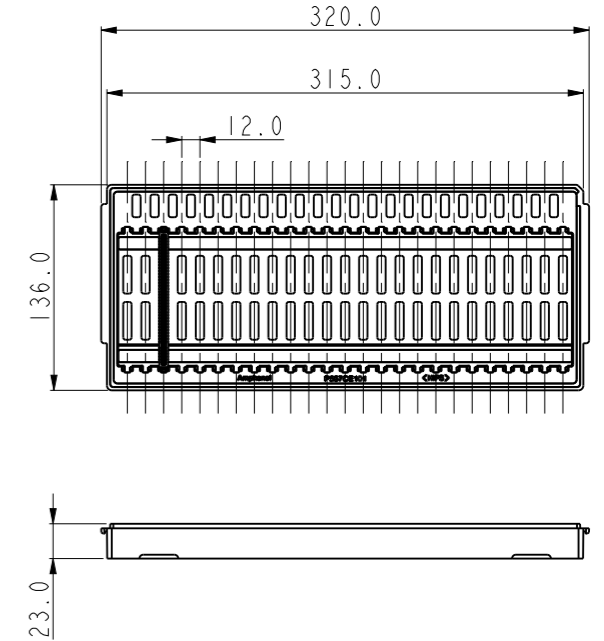
PART NUMBER SYSTEM  
PACKING TRAY CODE: 0



PART NUMBER SYSTEM  
PACKING TRAY CODE: 1



PART NUMBER SYSTEM  
PACKING TRAY CODE: 2



PART NUMBER SYSTEM  
PACKING TRAY CODE: 3

PART NUMBER SYSTEM PACKING CODE	TRAY SIZE (LxWxH)	QTY (PCS/TRAY)	QTY (PCS/CARTON)	NOTE
0	330x230x21	20	220	ANTI-STATIC PS,BLACK,T=2.00;BLISTER TRAY
1	330x120x21	10	160	ANTI-STATIC PS,BLACK,T=2.00;BLISTER TRAY
2	260x165x22	14	280	ANTI-STATIC PS,BLACK,T=2.00;BLISTER TRAY
3	320x136x23	25	400	HIPS,BLACK;INJECTION TRAY

spec ref	dr	JERRY.OU	Jun. 04, 2021	<h1>Amphenol</h1>	mm	scale	1:1	size	A3
tolerance std	eng	JERRY.OU	Jun. 04, 2021		ecn no	CD2675			
TOLERANCES UNLESS OTHERWISE SPECIFIED	r vwr				rel level	RELEASED			
	appr				amphenol-icc.com				
surface	linear	0.X	±3.0	projection	PCIe COOL EDGE CONNECTOR 1.0mm PITCH,X16,Gen4 & Gen5	product family	PCIe COOL EDGE	sheet 5 of 5	
	angular	0°	±5°			C CEE0164X014XXXX cat. no.	rev 6		