

revision history				
rev	ecn no	description	dr	date
10	CD----	UPDATE DRAWING TO ADD KEEP OUT ZONE	CZ	2021/06/30
11	CD----	UPDATE TABLE 3	CZ	2021/09/03
12	CD----	UPDATE PIN DEFINE	CZ	2023/03/23

PART NUMBER SYSTEM

C E X X X X X 0 0 1 1 0 1 1 X

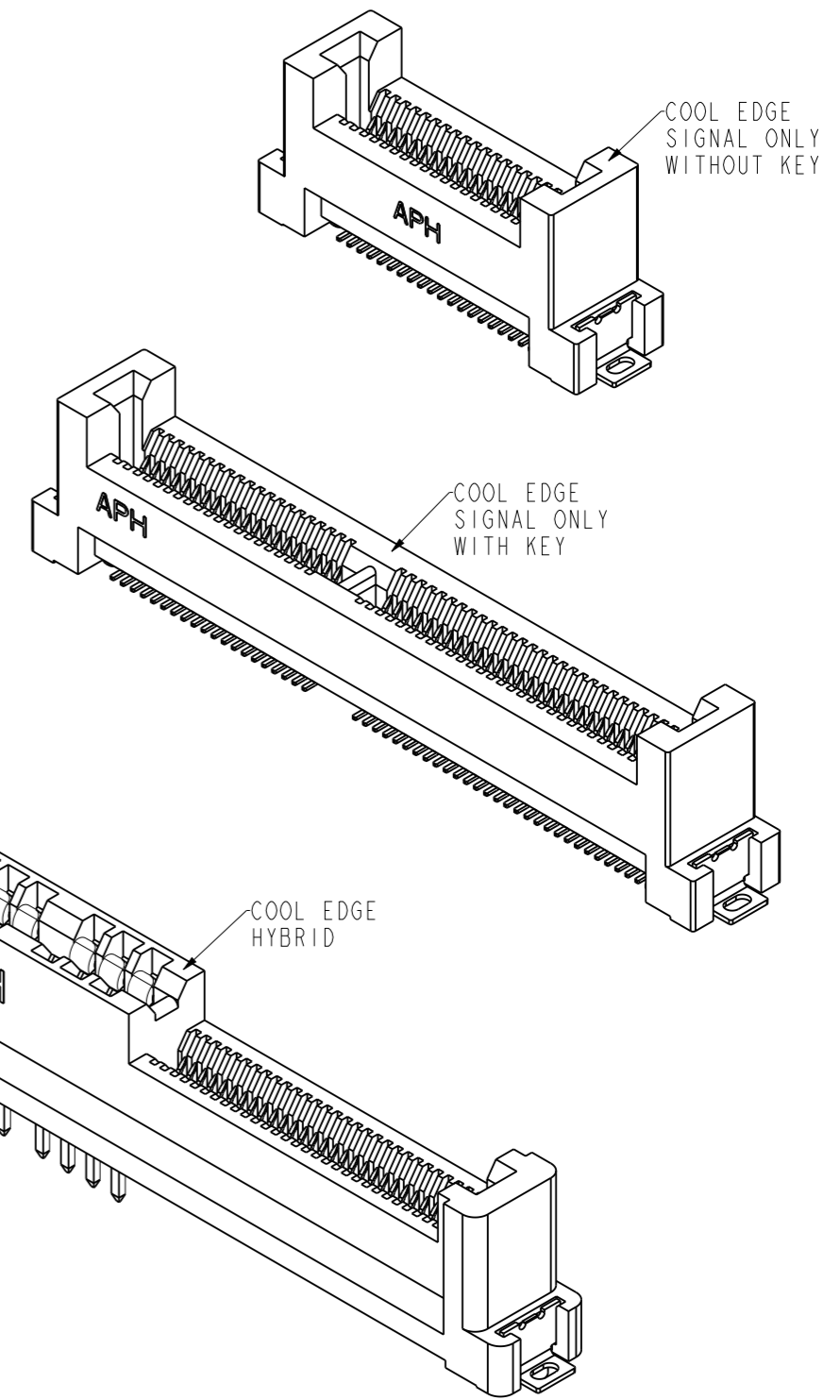
SIGNAL SPEED
 1: PCIe Gen4 16Gbps or BELOW
 2: PCIe Gen5 32Gbps
 (ADD ECB FOR HIGH SPEED
 DIFF PAIR SECTION)

POWER PIN COUNT
 0: WITHOUT POWER PIN
 2: 2 POWER PIN
 4: 4 POWER PIN
 6: 6 POWER PIN (MAX)

PLATING SPEC
 1: Au 0.76UM
 2: Au 0.38UM
 3: Gold Flash

AIC THICKNESS
 0: 1.60MM

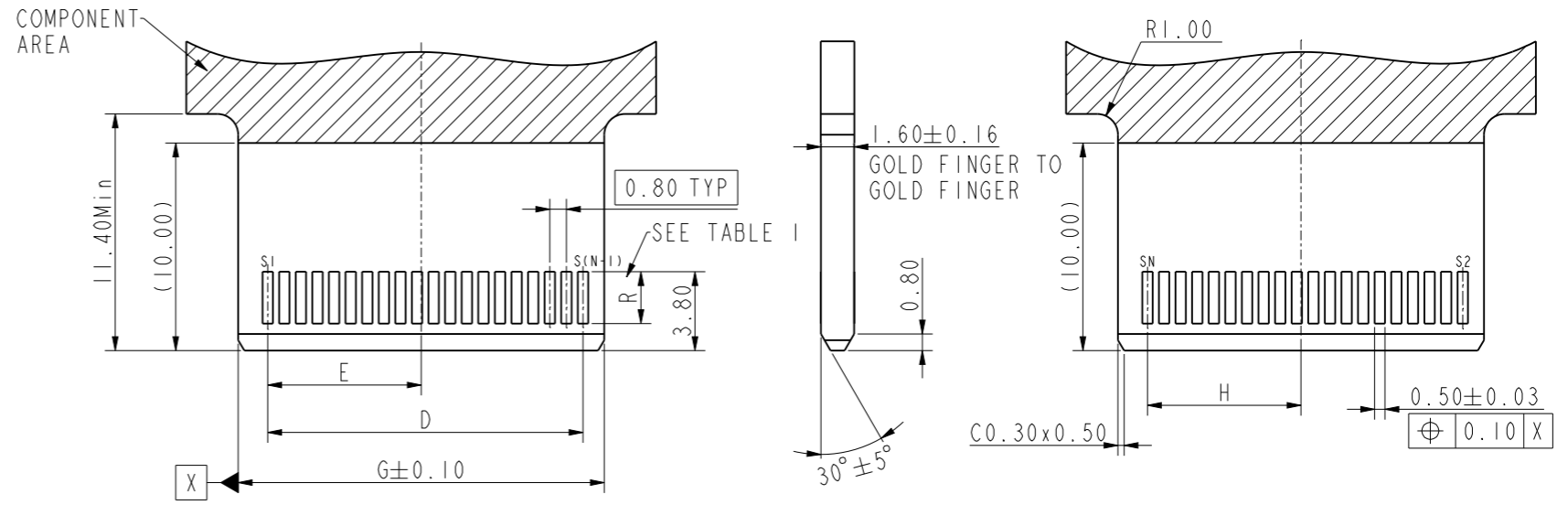
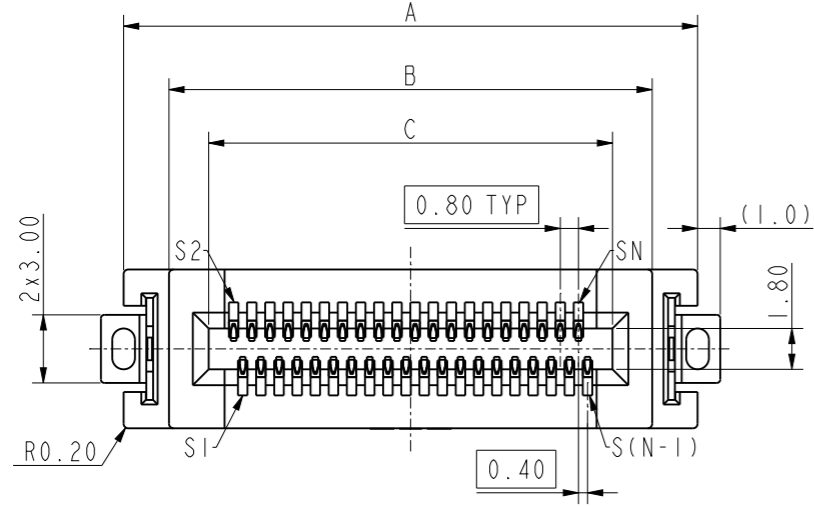
SIGNAL PIN COUNT
 000: 0 PIN; 080: 80 PIN
 020: 20 PIN; 100: 100 PIN
 026: 26 PIN; 120: 120 PIN
 040: 40 PIN; 140: 140 PIN
 050: 50 PIN; 160: 160 PIN
 060: 60 PIN; 180: 180 PIN
 200: 200 PIN



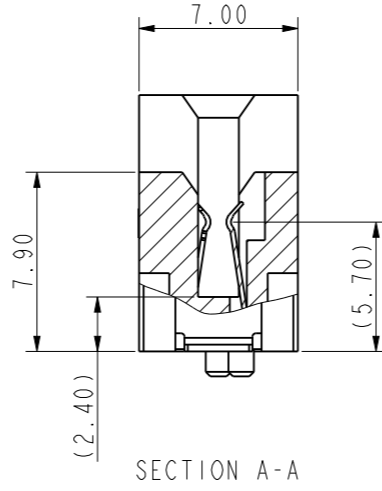
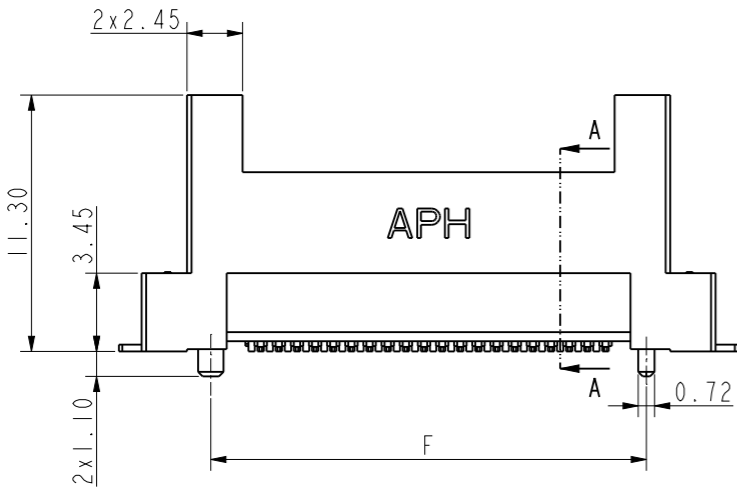
NOTES:

- MATERIAL:
 HOUSING: HIGH TEMPERATURE THERMOPLASTIC BLACK UL94V-0 HF
 CONTACT: COPPER ALLOY
 BOARD LOCK: SPCC
- PLATING:
 CONTACT: MATING AREA: SEE PN SYTEM OVER 1.27~2.54UM NICKEL UNDERPLATED
 SOLDER AREA: 2.54MIN TIN OVER 1.27~2.54UM NICKEL UNDERPLATED
 BOARD LOCK: 2.54MIN TIN OVER 1.27~2.54UM NICKEL UNDERPLATED
- ELECTRICAL PERFORMANCE:
 RATED CURRENT FOR POWER PIN: REFER PRODUCT APPLICATION SPEC
 RATED CURRENT FOR SIGNAL PIN: REFER PRODUCT APPLIATION SPEC
- MATERIAL IS FULFILLED AMPHENOL SPCE#SSN002
- MORE DETAIL OF GOLD FINGER AND KEEP OUT DESIGN, PLEASE REFER COOL EDGE SERIES ROUNTING GUIDELINE.
- ECB IS A CONDUCTIVE BAR TO LINK ALL HIGH SPEED DIFF PAIR GROUND TOGETHER
- ORDERING PART NUMBER: REFER TO THE PART NUMBER SYSTEM

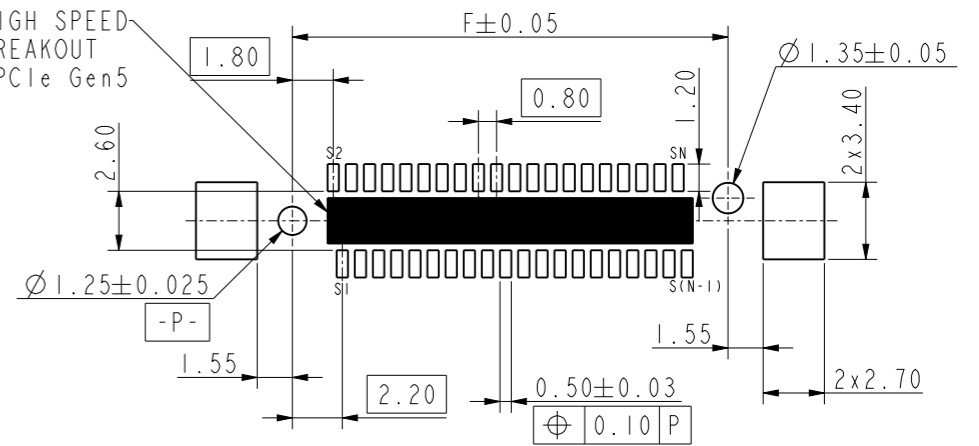
spec ref	dr	Cat. zeng	Jun. 30, 2021	Amphenol	mm	scale	size
tolerance std	eng	Cat. zeng	Jun. 30, 2021		←	1:1	A3
TOLERANCES UNLESS OTHERWISE SPECIFIED					amphenol-icc.com	ecn no	CD----
surface	linear	0.X	±0.25	projection	rel level	RELEASED	rev
		0.XX	±0.20	⊕	COOL EDGE SERIES CONNECTOR	12	12
		0.XXX	±0.15	⊕	HYBRID, SIGNAL ONLY, 0.80mmPT, VT, 1.60	cat. no.	
	angular	0°	±5°	⊕	product family	COOL EDGE	sheet 1 of 7



RECOMMEND MATING CARD, THICKNESS=1.60±0.16mm
GENERAL TOLERANCE ±0.05mm



KEEP OUT ZONE FOR HIGH SPEED
DIFFERENTIAL PAIR BREAKOUT
FROM FOOTPRINT FOR PCIe Gen5



RECOMMEND SOLDER PCB LAYOUT
GENERAL TOLERANCE ±0.05mm

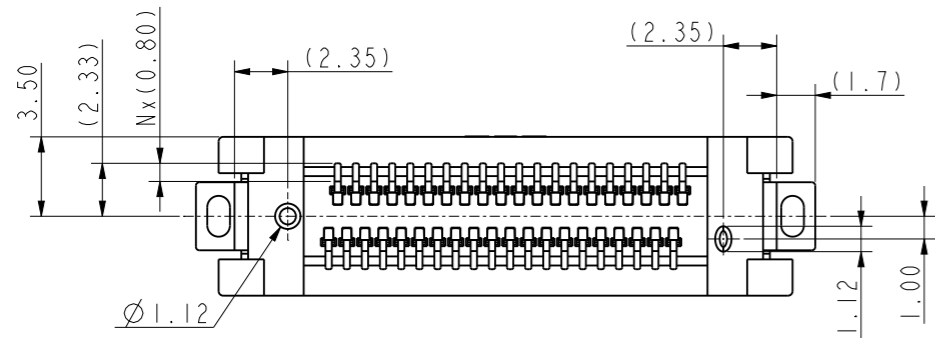


TABLE 2
(REFER PAGE 2)

PIN COUNT N(SIGNAL)	DIMENSION							
	A	B	C	D	E	F	G	H
20	17.30	13.30	9.80	7.20	3.40	11.20	9.65	3.40
26	19.70	15.70	12.20	9.60	4.60	13.60	12.05	4.60
40	25.30	21.30	17.80	15.20	7.40	19.20	17.65	7.40
50	29.30	25.30	21.80	19.20	9.40	23.20	21.65	9.40

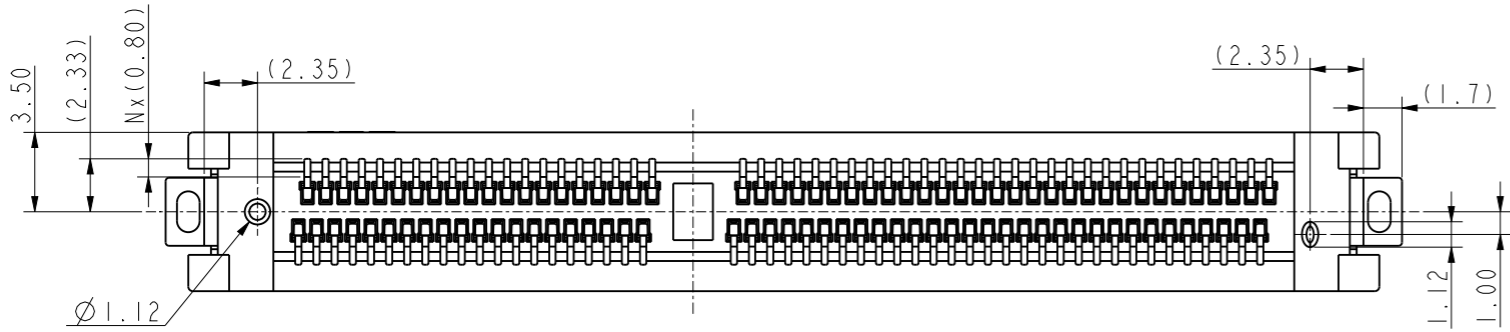
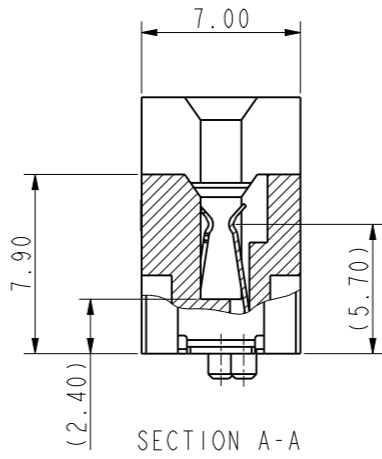
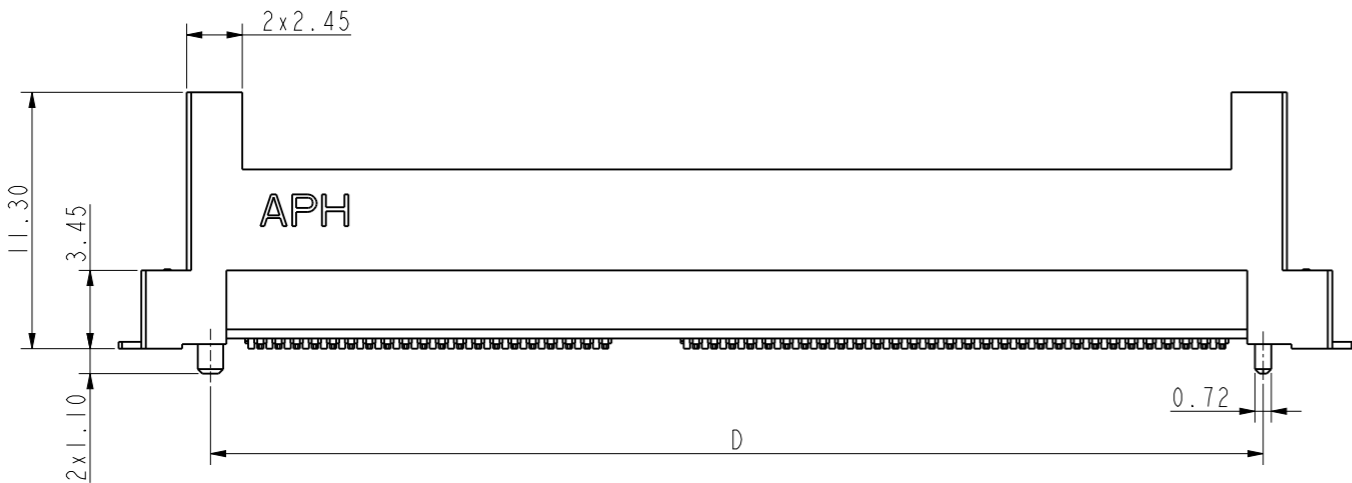
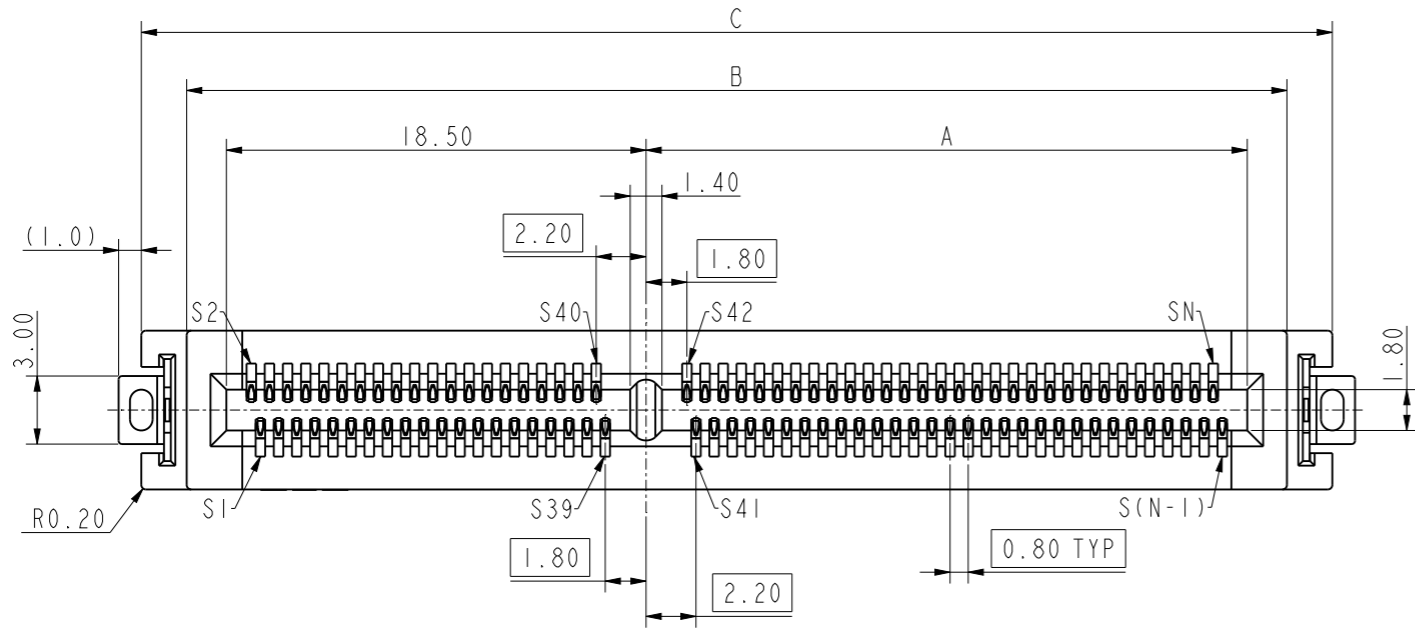
TABLE 1

SIGNAL SPEED	DIM R (GOLD FINGER LENGTH)
PCIe Gen4 16Gbps or BELOW	2.50
PCIe Gen5 32Gbps	2.00

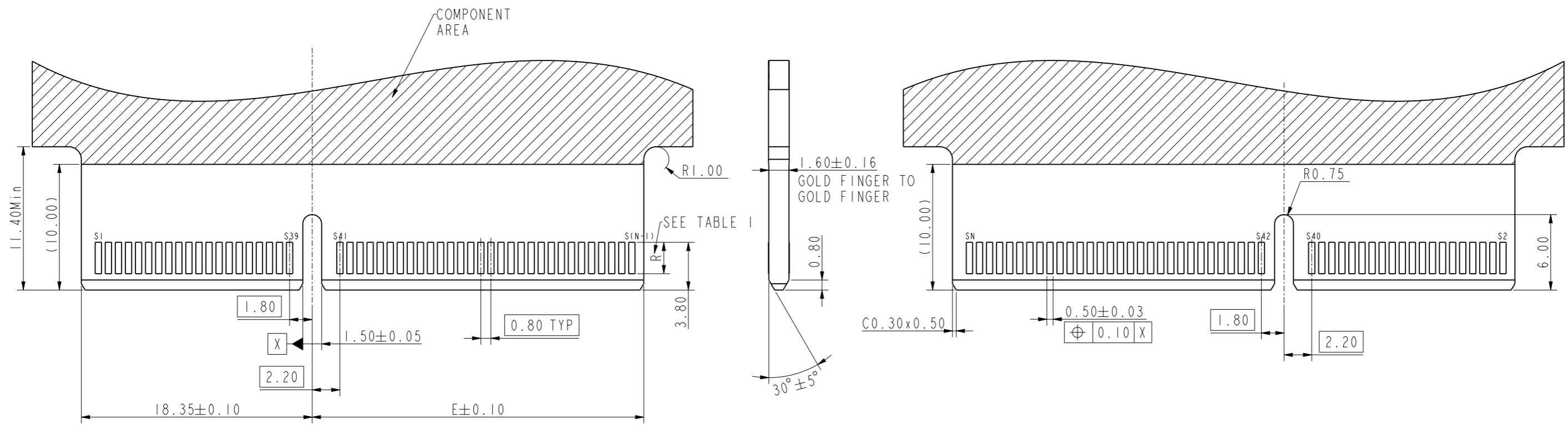
spec ref	dr	Cat. zeng	Jun. 30, 2021	<h1 style="margin: 0;">Amphenol</h1>	mm	scale	size	
tolerance std	eng	Cat. zeng	Jun. 30, 2021		←	1:1	A3	
TOLERANCES UNLESS OTHERWISE SPECIFIED					amphenol-icc.com			
					rel level			
surface	✓	linear	0.X	±0.25	projection	COOL EDGE SERIES CONNECTOR		
			0.XX	±0.20				
			0.XXX	±0.15				
		angular	0°	±5°	HYBRID, SIGNAL ONLY, 0.80mmPT, VT, 1.60		cat. no.	

TABLE 3
(REFER PAGE 3&4)

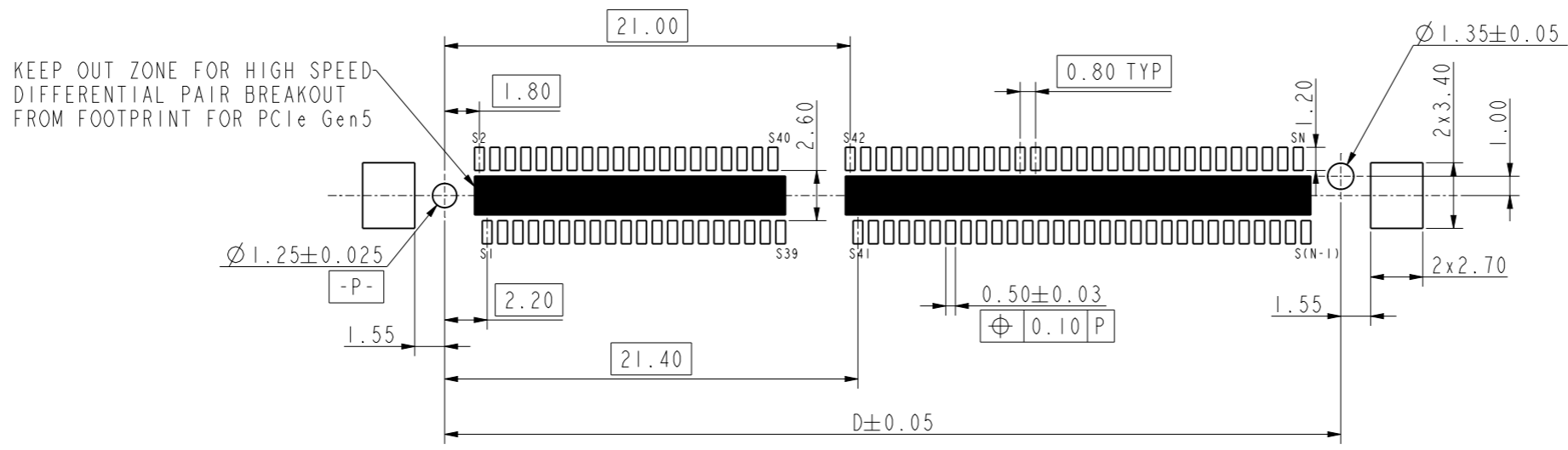
PIN COUNT N(SIGNAL)	DIMENSION				
	A	B	C	D	E
60	10.50	32.50	36.50	30.40	10.35
80	18.50	40.50	44.50	38.40	18.35
100	26.50	48.50	52.50	46.40	26.35
120	34.50	56.50	60.50	54.40	34.35
140	42.50	64.50	68.50	62.40	42.35
160	50.50	72.50	76.50	70.40	50.35
180	58.50	80.50	84.50	78.40	58.35
200	66.50	88.50	92.50	86.40	66.35



spec ref	dr	Cat. zeng	Jun. 30, 2021	Amphenol	mm	scale	size
tolerance std	eng	Cat. zeng	Jun. 30, 2021		←	1:1	A3
TOLERANCES UNLESS OTHERWISE SPECIFIED					amphenol-icc.com	ecn no	CD----
surface	projection	COOL EDGE SERIES CONNECTOR		rel level	RELEASED		rev
linear		0.X	±0.25	C CEXXXXX001101IX		cat. no.	12
angular		0°	±5°	HYBRID, SIGNAL ONLY, 0.80mmPT, VT, 1.60		product family	COOL EDGE
							sheet 3 of 7

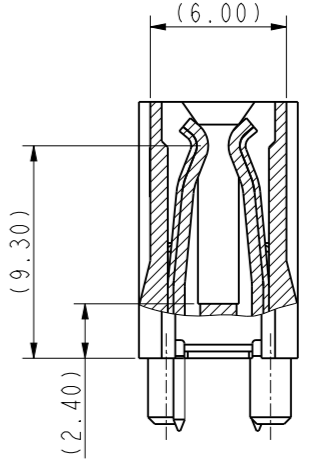
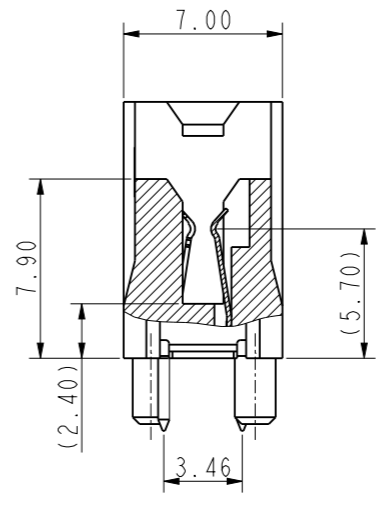
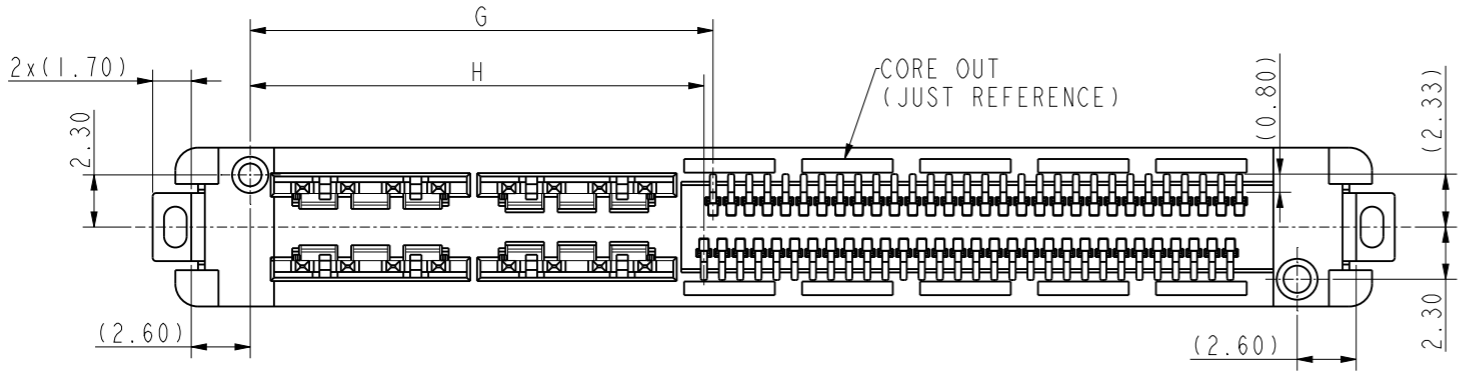
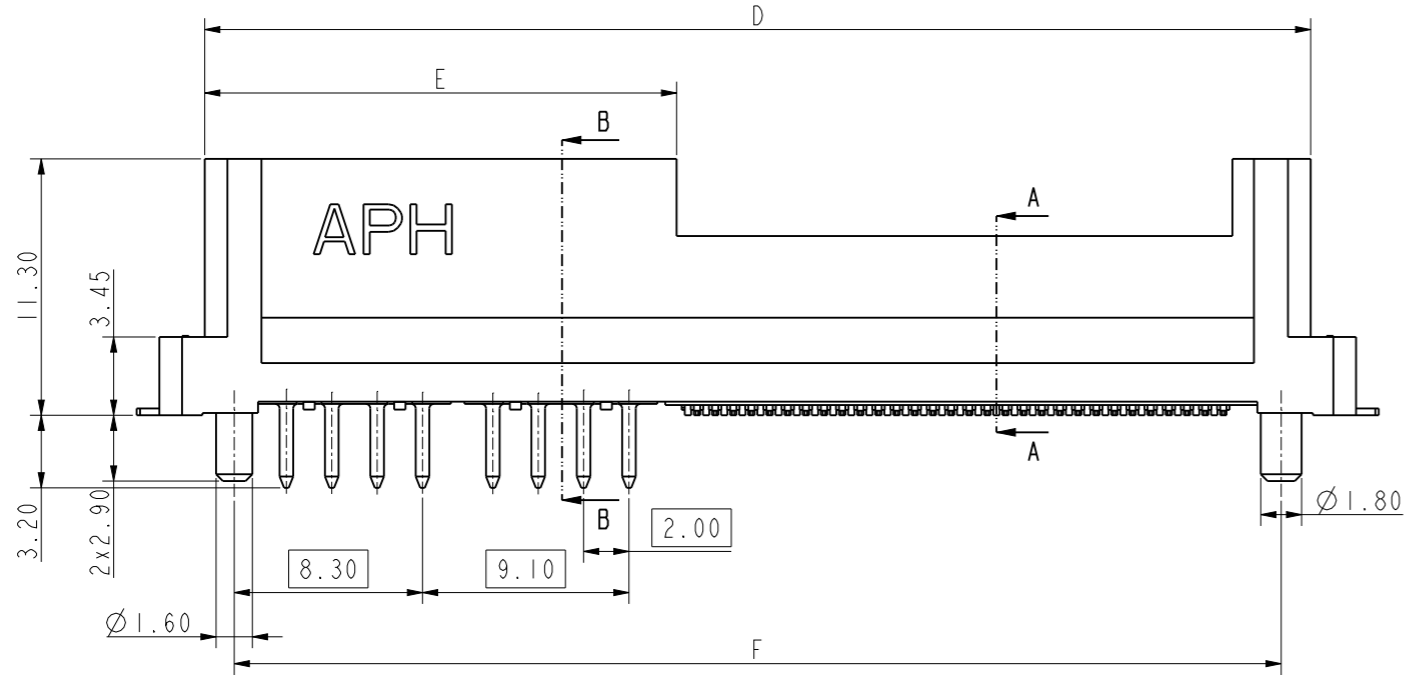
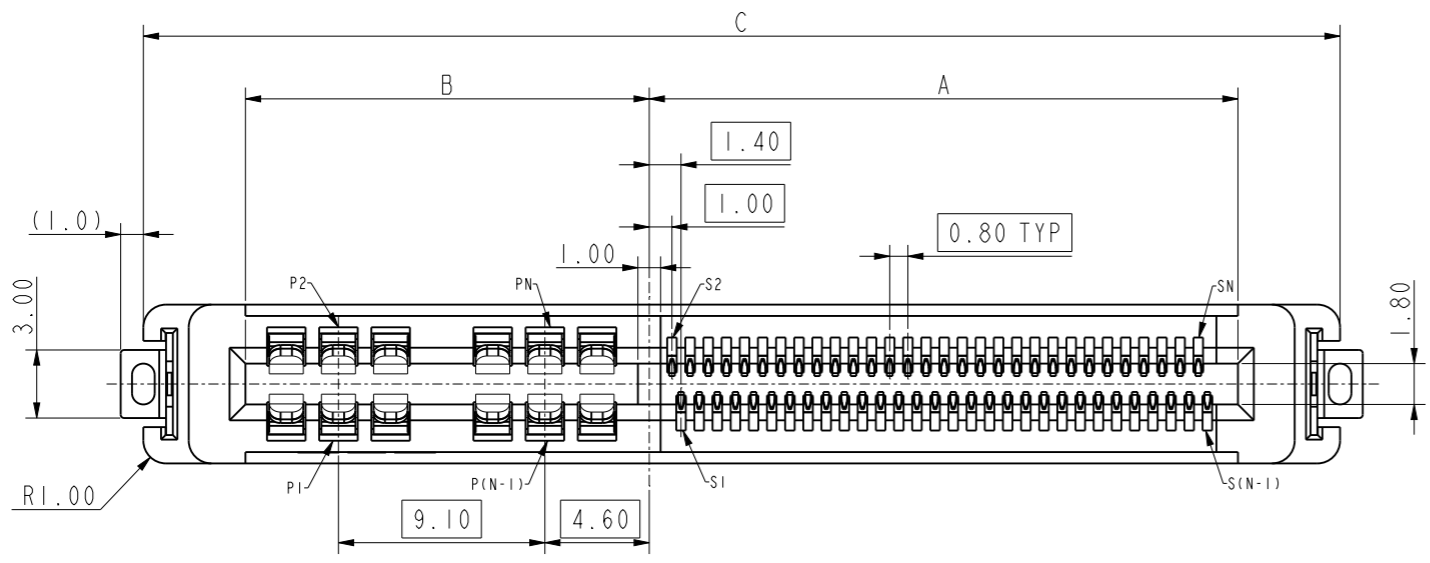


RECOMMEND LAY OUT FOR MATING CARD, THICKNESS=1.60±0.16mm
GENERAL TOLERANCE ±0.05mm

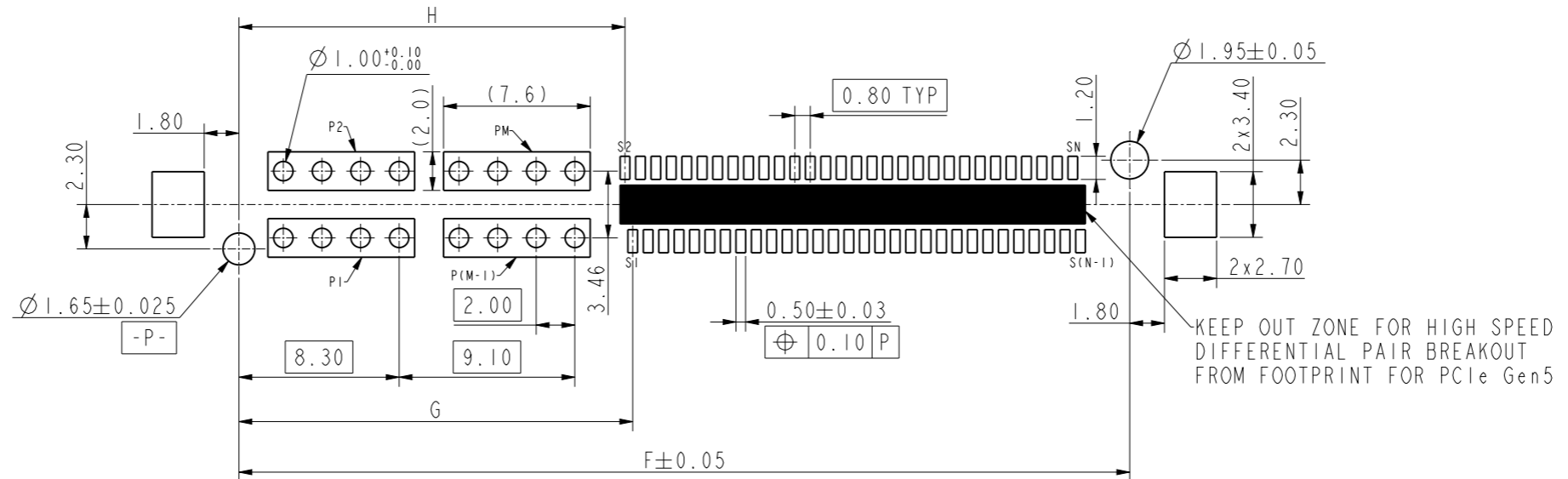
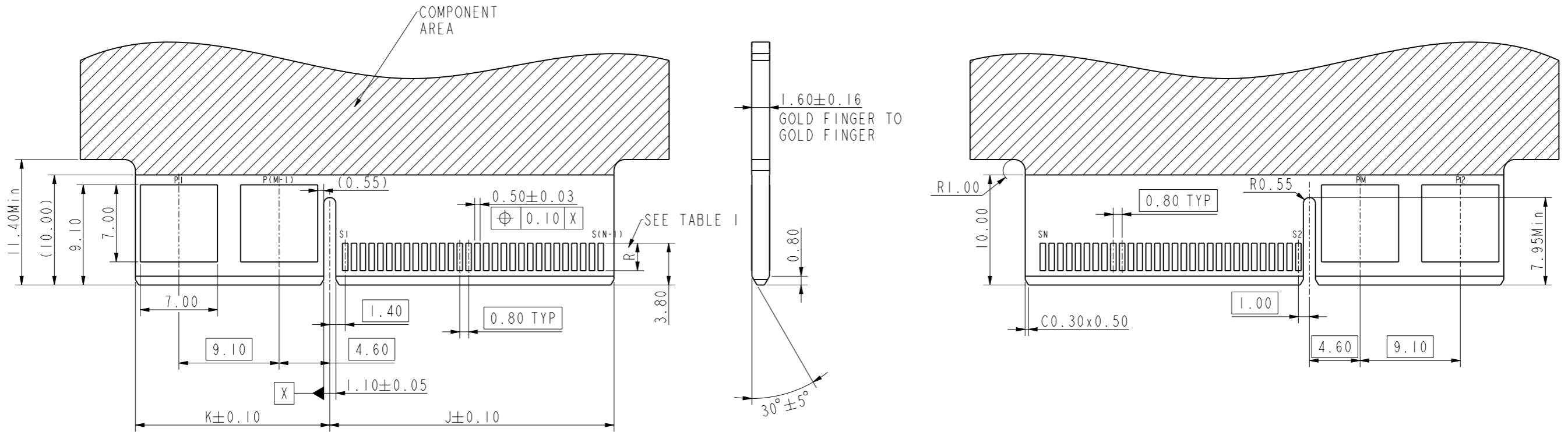


RECOMMEND SOLDER PCB LAYOUT
GENERAL TOLERANCE ±0.05mm

spec ref	dr	Cat. zeng	Jun. 30, 2021	Amphenol	mm	scale	size
tolerance std	eng	Cat. zeng	Jun. 30, 2021		←	1:1	A3
TOLERANCES UNLESS OTHERWISE SPECIFIED	rvwr				ecn no	CD----	
	appr				rel level	RELEASED	
surface	linear	0.X	±0.25	projection	COOL EDGE SERIES CONNECTOR		
		0.XX	±0.20	HYBRID, SIGNAL ONLY, 0.80mmPT, VT, 1.60	cat. no.	C CEXXXXX001101IX	
		0.XXX	±0.15	product family	COOL EDGE	rev	
	angular	0°	±5°			12	
						sheet 4 of 7	



spec ref	dr	Cat. zeng	Jun. 30, 2021	Amphenol	mm	scale	1:1	size	A3
tolerance std	eng	Cat. zeng	Jun. 30, 2021		ecn no	CD----			
TOLERANCES UNLESS OTHERWISE SPECIFIED	rvmr				rel level	RELEASED			
	appr				amphenol-icc.com				
surface	linear	0.X	±0.25	projection	COOL EDGE SERIES CONNECTOR	cat. no.	C CEXXXXX001101IX	rev	12
		0.XX	±0.20		HYBRID, SIGNAL ONLY, 0.80mmPT, VT, 1.60				
		0.XXX	±0.15						
	angular	0°	±5°		product family	COOL EDGE		sheet 5 of 7	




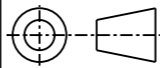
spec ref	dr	Cat. zeng	Jun. 30, 2021	Amphenol mm scale 1:1 size A3 ecn no CD-... rel level RELEASED amphenol-icc.com
tolerance std	eng	Cat. zeng	Jun. 30, 2021	
	rvwr			
	appr			
surface	linear	0.X	±0.25	projection COOL EDGE SERIES CONNECTOR HYBRID, SIGNAL ONLY, 0.80mmPT, VT, 1.60 product family COOL EDGE sheet 6 of 7
		0.XX	±0.20	
		0.XXX	±0.15	
	angular	0°	±5°	
	projection			
	title	COOL EDGE SERIES CONNECTOR HYBRID, SIGNAL ONLY, 0.80mmPT, VT, 1.60 cat. no. C CEXXXXX001101IX rev 12		

TABLE 4
(REFER PAGE 5&6)

PIN COUNT		DIMENSION									
M (POWER)	N (SIGNAL)	A	B	C	D	E	F	G	H	J	K
2	18	9.15	8.70	26.85	22.85	11.70	20.25	11.30	10.90	9.00	8.55
	20	9.95	8.70	27.65	23.65	11.70	21.05	11.30	10.90	9.80	8.55
	40	17.95	8.70	35.65	31.65	11.70	29.05	11.30	10.90	17.80	8.55
	60	25.95	8.70	43.65	39.65	11.70	37.05	11.30	10.90	25.80	8.55
	80	33.95	8.70	51.65	47.65	11.70	45.05	11.30	10.90	33.80	8.55
	100	41.95	8.70	59.65	55.65	11.70	53.05	11.30	10.90	41.80	8.55
	120	49.95	8.70	67.65	63.65	11.70	61.05	11.30	10.90	49.80	8.55
	140	57.95	8.70	75.65	71.65	11.70	69.05	11.30	10.90	57.80	8.55
	160	65.95	8.70	83.65	79.65	11.70	77.05	11.30	10.90	65.80	8.55
	180	73.95	8.70	91.65	87.65	11.70	85.05	11.30	10.90	73.80	8.55
200	81.95	8.70	99.65	95.65	11.70	93.05	11.30	10.90	81.80	8.55	

PIN COUNT		DIMENSION									
M (POWER)	N (SIGNAL)	A	B	C	D	E	F	G	H	J	K
4	20	9.95	17.80	36.75	32.75	20.80	30.15	20.40	20.00	9.80	17.65
	40	17.95	17.80	44.75	40.75	20.80	38.15	20.40	20.00	17.80	17.65
	60	25.95	17.80	52.75	48.75	20.80	46.15	20.40	20.00	25.80	17.65
	80	33.95	17.80	60.75	56.75	20.80	54.15	20.40	20.00	33.80	17.65
	100	41.95	17.80	68.75	64.75	20.80	62.15	20.40	20.00	41.80	17.65
	120	49.95	17.80	76.75	72.75	20.80	70.15	20.40	20.00	49.80	17.65
	140	57.95	17.80	84.75	80.75	20.80	78.15	20.40	20.00	57.80	17.65
	160	65.95	17.80	92.75	88.75	20.80	86.15	20.40	20.00	65.80	17.65
	180	73.95	17.80	100.75	96.75	20.80	94.15	20.40	20.00	73.80	17.65
	200	81.95	17.80	108.75	104.75	20.80	102.15	20.40	20.00	81.80	17.65

PIN COUNT		DIMENSION									
M (POWER)	N (SIGNAL)	A	B	C	D	E	F	G	H	J	K
6	20	9.95	26.90	45.85	41.85	29.90	39.25	29.50	29.10	9.80	26.75
	40	17.95	26.90	53.85	49.85	29.90	47.25	29.50	29.10	17.80	26.75
	60	25.95	26.90	61.85	57.85	29.90	55.25	29.50	29.10	25.80	26.75
	80	33.95	26.90	69.85	65.85	29.90	63.25	29.50	29.10	33.80	26.75
	100	41.95	26.90	77.85	73.85	29.90	71.25	29.50	29.10	41.80	26.75
	120	49.95	26.90	85.85	81.85	29.90	79.25	29.50	29.10	49.80	26.75
	140	57.95	26.90	93.85	89.85	29.90	87.25	29.50	29.10	57.80	26.75
	160	65.95	26.90	101.85	97.85	29.90	95.25	29.50	29.10	65.80	26.75
	170	69.95	26.90	105.85	101.85	29.90	99.25	29.50	29.10	69.80	26.75

spec ref	dr	Cat. zeng	Jun. 30, 2021		mm	scale	size		
tolerance std	eng	Cat. zeng	Jun. 30, 2021		1:1	A3			
TOLERANCES UNLESS OTHERWISE SPECIFIED					ecn no	CD----			
					rel level	RELEASED			
surface	linear	0.X	±0.25		amphenol-icc.com		COOL EDGE SERIES CONNECTOR HYBRID, SIGNAL ONLY, 0.80mmPT, VT, 1.60	C CEXXXXX001101IX	rev
		0.XX	±0.20		product family	COOL EDGE		sheet 7 of 7	
	angular	0°	±5°		cat. no.				