

# APPLICATION SPECIFICATION

## Extremepoint Z-Link Connector Receptacle, 0.6mm Pitch (G64/G67 Series)

<b>REVISION:</b>  <b>B</b>	<b>ECR/ECN INFORMATION:</b> EC No.: DATE: 2020/08/03	<b>TITLE:</b>  Extremepoint Z-Link Connectors, Receptacle , 0.6mm Pitch	<b>SHEET No.</b>  1 of 9	
<b>DOCUMENT NUMBER:</b> <b>AS-7716-001</b>		<b>CREATED/REVISED</b> Joan Lu	<b>CHECKED BY</b> Sondra Sang	<b>APPROVED BY</b> Hank Hsu

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## 1.0 PURPOSE:

This specification covers the processing guidelines and the requirements for the application of **Extremepoint Z-Link** connector receptacle.

## 2.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS:

Product Drawing  
PS-7716

## 3.0 SPECIMEN:

Product are illustrated in Figure 1.

Receptacle

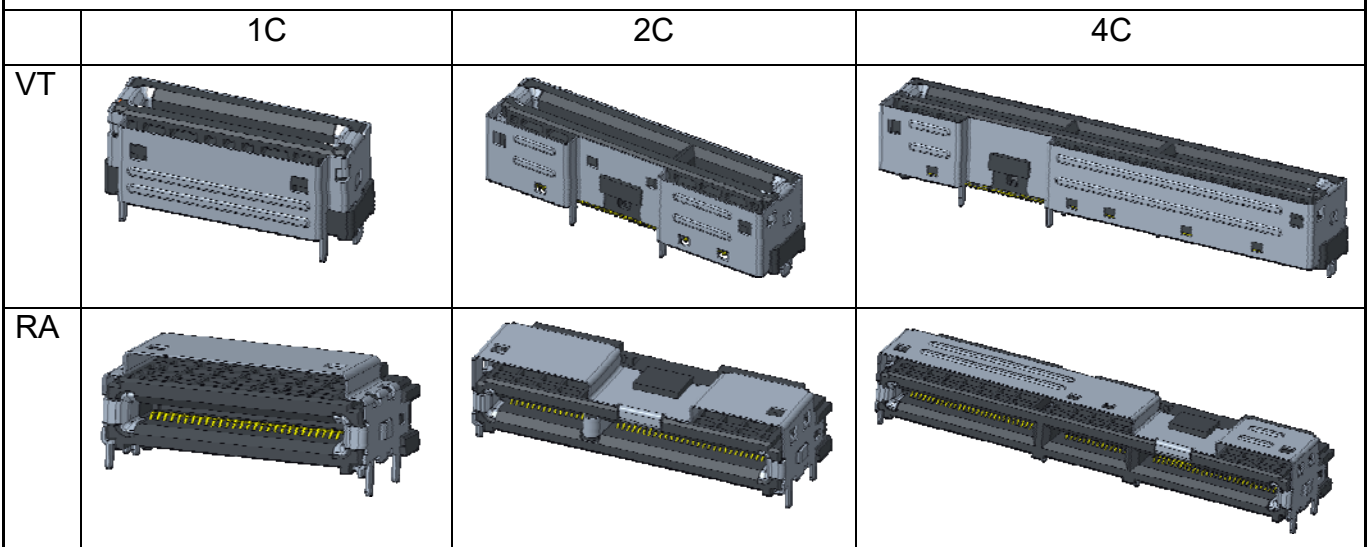


Figure 1

## 4.0 APPLICATION PROCESS

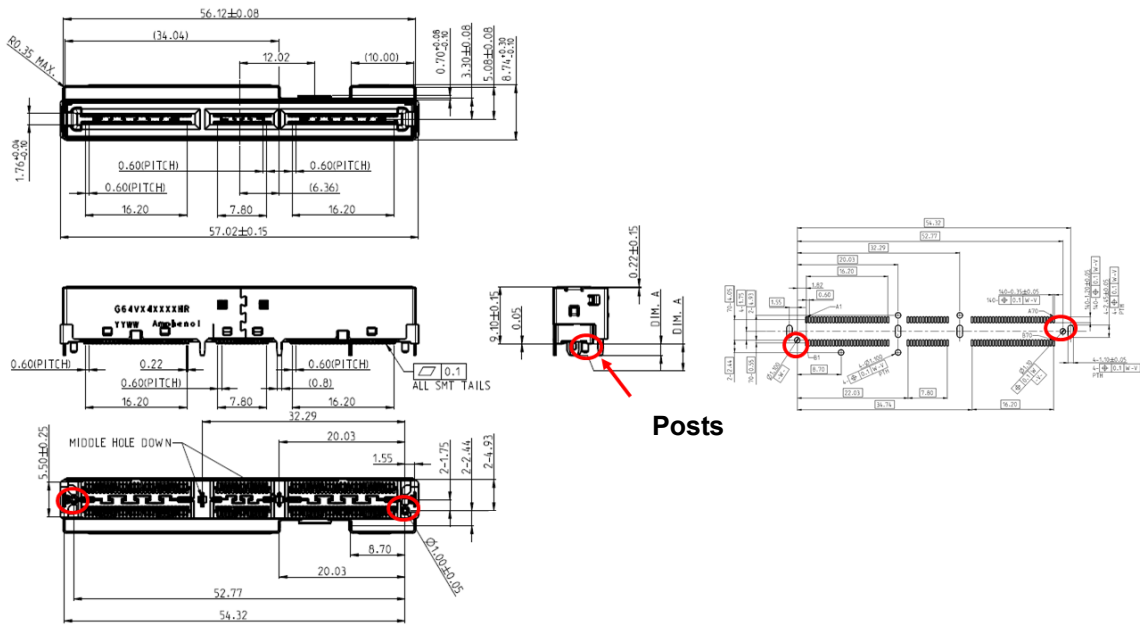
4.1 CONNECTOR mounts on PCB, the both side posts have to fix the PC board holes (see Figure 2) , the posts provide true position and control connector is forward on the correct direction.

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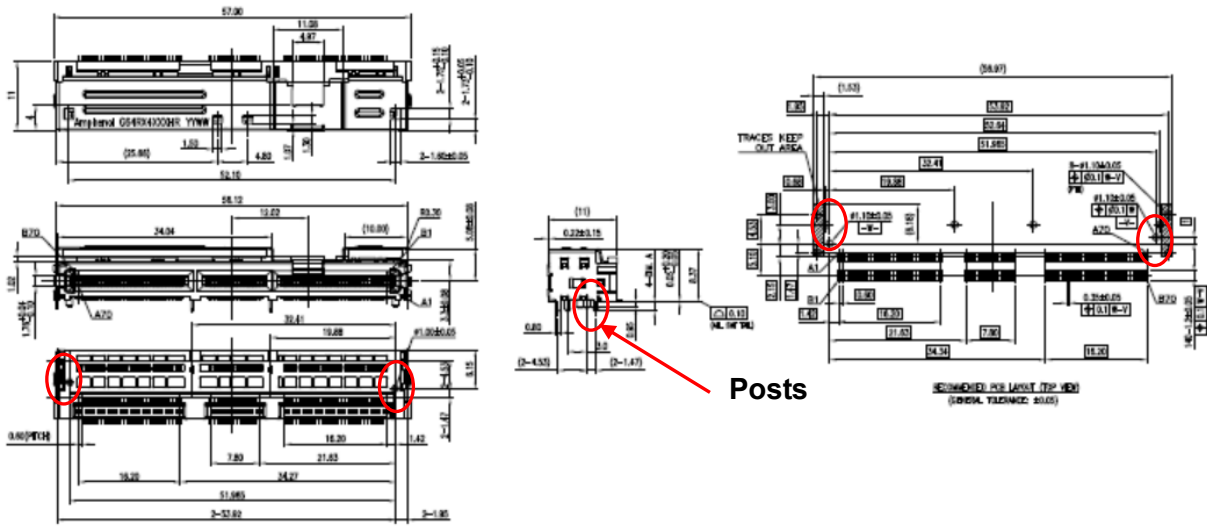


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Posts

Z-Link Vertical 4C



Posts

Z-Link Right Anlge 4C

Figure 2

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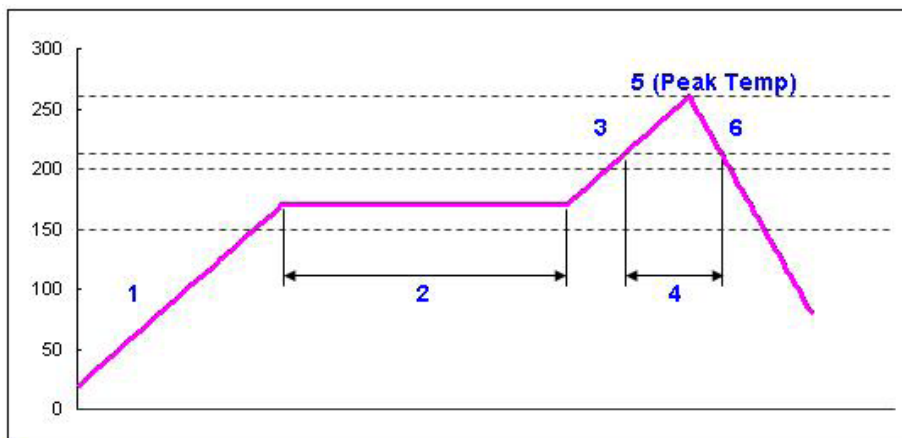
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## 4.2 IR Reflow Profile

The aperture of the stencil is dependence on the circuit pad size and stencil thickness. For SMT tail commended the stencil thickness should not be less than 0.15 mm, but don't include shell DIP tail. The stencil aperture size of at least 90% of pad size should be used. When a thinner stencil is used, the apertures may have to be enlarged slightly to facilitate sufficient paste, in order to ensure a good joint.

The PCB containing the connector should be reflowed using a reflow profile which is in compliance with the customer's data sheet for the paste used or as per product specification for the series. For recommended reflow profile, please refer to respective product specification. (see Figure 3)

It is recommended that the soak time be long enough to allow temperature to stabilize over the whole area under the connector and the time above liquid be long enough for total reflow. This component is suitable for processing through the temperatures used in lead free processes but should not be subjected to temperatures in excess of 260°C



1	Average ramp rate	3°C per second max.
2	Pre-heat temp.(minimum)	150°C
	Pre-heat temp.(maximum)	200°C
	Pre-heat time	60 to 120 seconds
3	Ramp to peak	3°C per second max.
4	Time over liquidus(217°C )	60 to 150 seconds
5	Peak temp.	260 +0/-10°C
	Time within 5°C of peak	10 seconds max.
6	Ramp- cool down	6°C per second max.
	Time 25°C to peak	8 minutes max.

Figure 3

Note: Recommended the nozzle put the RA connector on PCB to press over 0.1mm in SMT process

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## 4.3 Rework and Repair

It is recommended that a commercially available hot air rework station be used for the repair of this product. Many of these repair stations are readily available and the selected manufacturer is based on a matter of choice. It is very important that the correct nozzle be used for this operation.

Dependent on the card thickness and stack up, in some circumstances, it may be desirable to pre-heat in an oven to 100°C gradually and hold for 30 to 60 minutes to avoid thermal shock to the PCB. It is recommended to shield adjacent components especially component body and solder joints during the rework process to avoid overheating and melting of the joints.

For removal process, this connector should be removed manually. To avoid additional heat cycle, excessive solder should be removed from the site immediately after the connector lifted off, while the board is still hot. A hand held, solder vacuum tool or solder wicking braid can be used. Both methods should be performed by qualified operators only. This is because damage to the board or pads is the greatest concern. After the removal, this connector should now be discarded as it cannot be reused.

Before replacing with a new connector, the residual solder on the pads should be removed using either a vacuum scavenging system or by hand from a skilled operator. Then the solder pads should be cleaned with alcohol and brush to ensure a clean surface. It is recommended that the pads be pasted again using a 0.15mm stencil. Once the new connector has been placed on the PCB, it should be reflowed.

## 5. 0 MATING and UNMATING of Receptacle and Plug/ Card

5.1 Paddle card inserting in receptacle connector have to be vertical and aligning the Key; the difference key spaces will prevent for reverse plugging

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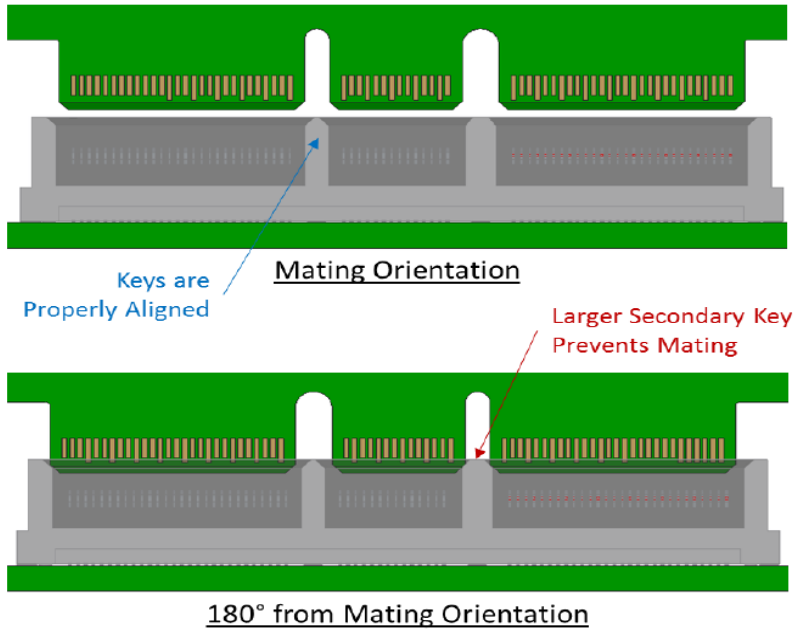


Figure 4. Mechanical keying

## 5.2 The linear and angular gatherability of the connector.

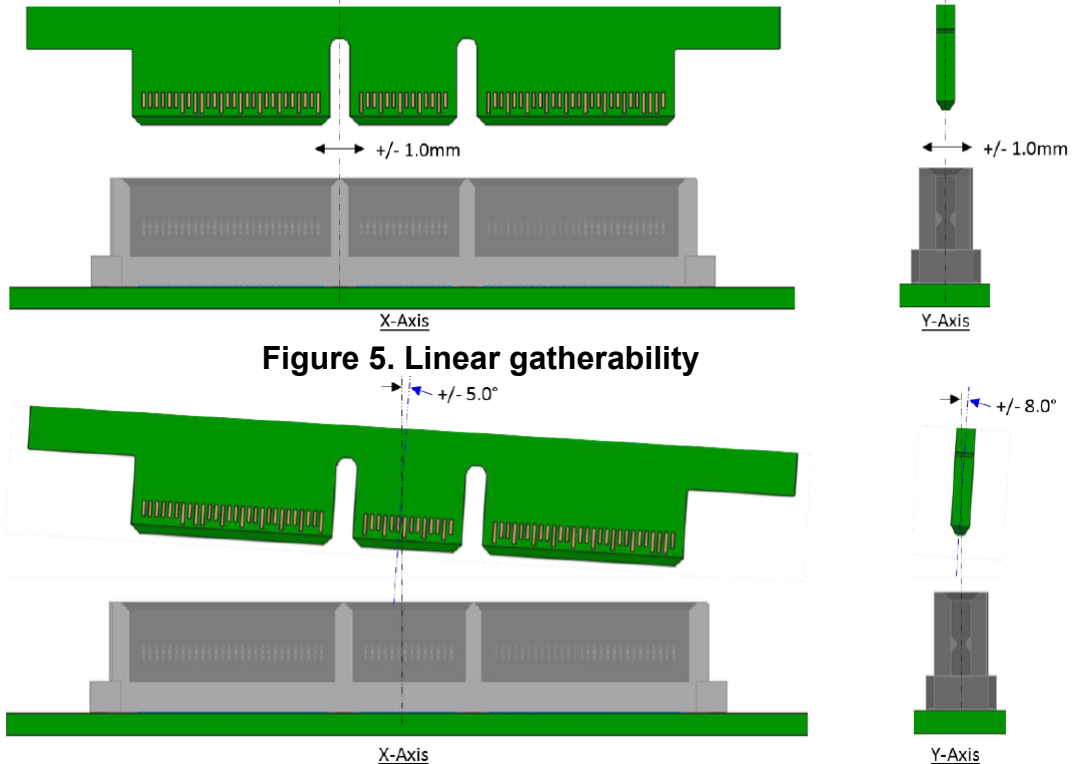


Figure 6. Angular gatherability

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## 6.0 Pin Assignment

Gen-Z Connector Pinout 12V - Symmetric Transmission						
Row	Seq	Signal (Side B)	Description	Signal (Side A)	Description	Seq
H1	2	12V	High Power Supply	12V	High Power Supply	2
H0	1	GND	High Power Return	GND	High Power Return	1
<b>Key</b>						
1	2	12V	12 V Power	GND	Ground	1
2	2	12V	12 V Power	GND	Ground	1
3	2	12V	12 V Power	GND	Ground	1
4	2	12V	12 V Power	GND	Ground	1
5	2	12V	12 V Power	GND	Ground	1
6	2	12V	12 V Power	GND	Ground	1
7	2	Wake#/MFG	MFG manufacturing only. Post manufacturing this pin is Wake	MGMT_CLK	Management	2
8	2	PWR_BREAK	Power Break	MGMT_DAT	Management	2
9	2	DualPortEn#	Dual-Interface Enable	MGMT_RST#	Management Reset	2
10	2	PERST0#	Reset Interface 0 in Dual-Interface Enable State	LED#/Activity	LED state and activity	2
11	2	3.3VAux	3.3 V Auxiliary Power	PERST1#/CLKREQ	Reset Interface 1 in Dual-Interface Enable State/Clock Request	2
12	2	PWRDIS	Power Disable	PRSNT_1C#	Presence Detect	2
13	1	GND	Ground	GND	Ground	1
14	2	REFCLKn0	Reference Clock (Port 0)	REFCLKn1	Reference Clock (Port 1)	2
15	2	REFCLKp0		REFCLKp1		2
16	1	GND	Ground	GND	Ground	1
17	2	TX0n	Differential Pair	RX0n	Differential Pair	2
18	2	TX0p		RX0p		2
19	1	GND	Ground	GND	Ground	1
20	2	TX1n	Differential Pair	RX1n	Differential Pair	2
21	2	TX1p		RX1p		2
22	1	GND	Ground	GND	Ground	1
23	2	TX2n	Differential Pair	RX2n	Differential Pair	2
24	2	TX2p		RX2p		2
25	1	GND	Ground	GND	Ground	1
26	2	TX3n	Differential Pair	RX3n	Differential Pair	2
27	2	TX3p		RX3p		2
28	1	GND	Ground	GND	Ground	1
<b>Key</b>						
29	1	GND	Ground	GND	Ground	1
30	2	TX4n	Differential Pair	RX4n	Differential Pair	2
31	2	TX4p		RX4p		2
32	1	GND	Ground	GND	Ground	1
33	2	TX5n	Differential Pair	RX5n	Differential Pair	2
34	2	TX5p		RX5p		2
35	1	GND	Ground	GND	Ground	1
36	2	TX6n	Differential Pair	RX6n	Differential Pair	2
37	2	TX6p		RX6p		2
38	1	GND	Ground	GND	Ground	1
39	2	TX7n	Differential Pair	RX7n	Differential Pair	2
40	2	TX7p		RX7p		2
41	1	GND	Ground	GND	Ground	1
42	2	PRSNT_T#/2C	2C Presence Detect	Res	Reserved	2
<b>Key</b>						
43	1	GND	Ground	GND	Ground	1
44	2	TX8n	Differential Pair	RX8n	Differential Pair	2
45	2	TX8p		RX8p		2
46	1	GND	Ground	GND	Ground	1
47	2	TX9n	Differential Pair	RX9n	Differential Pair	2
48	2	TX9p		RX9p		2
49	1	GND	Ground	GND	Ground	1
50	2	TX10n	Differential Pair	RX10n	Differential Pair	2
51	2	TX10p		RX10p		2
52	1	GND	Ground	GND	Ground	1
53	2	TX11n	Differential Pair	RX11n	Differential Pair	2
54	2	TX11p		RX11p		2
55	1	GND	Ground	GND	Ground	1
56	2	TX12n	Differential Pair	RX12n	Differential Pair	2
57	2	TX12p		RX12p		2
58	1	GND	Ground	GND	Ground	1
59	2	TX13n	Differential Pair	RX13n	Differential Pair	2
60	2	TX13p		RX13p		2
61	1	GND	Ground	GND	Ground	1
62	2	TX14n	Differential Pair	RX14n	Differential Pair	2
63	2	TX14p		RX14p		2
64	1	GND	Ground	GND	Ground	1
65	2	TX15n	Differential Pair	RX15n	Differential Pair	2
66	2	TX15p		RX15p		2
67	1	GND	Ground	GND	Ground	1
68	2	Res	Reserved	Res	Reserved	2
69	2	Res	Reserved	Res	Reserved	2
70	2	PRSNT_T#/4C	4C Presence Detect	Res	Reserved	2

1C Connector

2C Connector

4C Connector

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