

# ULTRA RUGGED I/O SYSTEMS

(1.00 mm) .0394" PITCH



## FEATURES & BENEFITS

MAX  
**2.9**  
A m p s

- Small form factor
- Four points of contact for an extremely reliable connection
- Up to 40 positions per row
- Cable-to-cable & cable-to-board solutions
- EMI shielding in development to reduce noise generated and protect sensitive lines
- Through-hole or surface mount
- 28 & 30 AWG cable



Shown actual size at 20 total positions



Hyperboloid-type contact for extreme high mating cycles



Extreme density with up to 1,450 total I/Os in a 1RU panel (29 cables at 50 total I/Os each)

## KEY SPECIFICATIONS (P1PD(X), B1SD(X) & P1M)

PITCH	INSULATOR MATERIAL	CONTACT MATERIAL	SHIELD MATERIAL	PLATING	OPERATING TEMP RANGE	CURRENT RATING	VOLTAGE RATING
1.00 mm	Liquid Crystal Polymer	Beryllium Copper	Zinc Alloy	Au over 50 μm (1.27 μm) Ni	-10 °C to +80 °C (PVC) -40 °C to +125 °C (*Teflon™ Fluoropolymer)	2.9 A per pin (2 pins powered)	253 VAC

\*Teflon™ is a trademark of The Chemours Company FC, LLC used under license by Samtec.

**(1.00 mm) .0394" PITCH • NON-PANEL MOUNT I/O CABLE/COMPONENTS**

SERIES	NO. OF POSITIONS	WIRE GAUGE	COLOR CODE	PLATING	ASSEMBLED LENGTH	PINOUT
<b>B1SD</b> = Double Row Non-Panel Mount PVC Cable	<b>-10, -15, -25, -30</b> (Per Row)	<b>-28</b> = 28 AWG  <b>-30</b> = 30 AWG	(Leave blank for standard wire)  <b>C</b> = Color Code Wire (Not available with B1SDT)	<b>-H</b> = 30 μ" (0.76 μm) Gold on contact area, Gold flash on tail	<b>-"XX.X"</b> = Length in inches 06.0" (152.4 mm) minimum	(Leave blank for single ended)  <b>-1</b> = Pin 1 to Pin 1  <b>-2</b> = Pin 1 to Pin 2  <b>-3</b> = Pin 1 to Pin N  <b>-4</b> = Pin 1 to Pin N-1

**B1SD, B1SDT Cable Mates:**  
P1PD, P1PDT  
**Board Mates:**  
P1M

**B1SDX-10-XXX-H-XX.X-3 SHOWN**

NO. OF POSITIONS	A	B	C	D
-10	(9.00) .354	(13.94) .549	(23.75) .935	(27.75) 1.093
-15	(14.00) .551	(18.94) .746	(28.75) 1.132	(32.75) 1.289
-25	(24.00) .945	(28.94) 1.139	(38.75) 1.526	(42.75) 1.683
-30	(29.00) 1.142	(33.94) 1.336	(43.75) 1.722	(47.75) 1.880

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**Notes:**  
Teflon™ Fluoropolymer Cable is intended for crimp only. Contact Samtec for solderable cable applications.

Some lengths, styles and options are non-standard, non-returnable.

View complete specifications at: [samtec.com?B1SD](http://samtec.com?B1SD) & [samtec.com?B1SDT](http://samtec.com?B1SDT)

**B1SD CABLE HOLDER (Required for use with IBT1)**

SERIES	NUMBER OF POSITIONS
B1SDR	-10, -15, -25, -30

B1SDS	NO. OF POSITIONS	N	OPTION
	<b>-10, -15, -25, -30</b>		<b>-CS</b> = Captive Screw

NO. OF POSITIONS	A
-10	(27.75) 1.093
-15	(32.75) 1.289
-25	(42.75) 1.683
-30	(47.75) 1.880

**Note:**  
Some lengths, styles and options are non-standard, non-returnable.

IBT1	NO. OF POSITIONS	1
	<b>-10, -15, -25, -30</b>	

NO. OF POSITIONS	A	B
-10	(12.290) .484	(9.00) .354
-15	(17.290) .681	(14.00) .551
-25	(27.290) 1.074	(24.00) .945
-30	(32.290) 1.271	(29.00) 1.143

CC508	01	PLATING	PACKAGING
		<b>-H</b> = 30 μ" (0.76 μm) Gold on contact area, Gold flash on tail	<b>-R</b> = Full Reel (25,000 Contacts Per Reel)  <b>-M</b> = Mini Reel (1,000 to 5,000 Contacts Per Reel)  <b>-B</b> = Bubble Bag (35 Contacts)

**TOOLING**

Hand Tool: TBD	Mini Applicator: TBD
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View complete specifications at: [samtec.com?B1SDS](http://samtec.com?B1SDS), [samtec.com?IBT1](http://samtec.com?IBT1) & [samtec.com?CC508](http://samtec.com?CC508)