≣FCi Basics

Amphenol ICC

BergStak[®] 0.80mm Shielded Board-to-Board Connector

RELIABLE, HIGH-SPEED SHIELDED CONNECTORS

BergStak® 0.80mm connector family is known for its fast data transmission, high signal quality, and time-proven reliability under extended periods of application. Bergstak® shielded connector with 0.80mm pitch supports high-speed data applications up to 10Gb/s. These connectors feature a shielded design that provides superior EMC performance and significantly improved electromagnetic compatibility.

- Superior EMI protection
- Self-alignment features
- Open space for trace
- Free pin of use

FEATURES

- EMC shielding
- 64 positions , with 40-140 contact options
 20mm stack height, with options from 9mm-20mm
- Supports data rate from 2.5Gb/s up to 10Gb/s
- Self-alignment feature
- Scoop-proof housings
- Available in UL94V-0 material
- Lead-free and RoHs compliant

BENEFITS

- Significantly reduced coupling inductance leading to excellent electromagnetic compatibility
- Application flexibility

TARGET MARKETS

- Meets PCIe[®] Gen 1 to Gen 3 and 10G Base KR specifications
- Prevents misalignment, delivers consistent reliability and high performance
- Prevents reverse mating
- High flammability rating
- Meets environmental, health and safety requirements

TECHNICAL INFORMATION

MATERIAL

- Shell : Stainless steel
- Housing: LCP UL94–V0
- Receptacle Terminal: Nickel copper
- Plug Terminal: Brass
- Plating: Solder area finish in matte pure tin over nickel
 - Contact area PdNi+gold

ELECTRICAL PERFORMANCE

- Current Rating: 0.8A
- LLCR: Initial 30m Ω ; After Test: 50m Ω
- Insulation Resistance: 1000MΩ min.
- Voltage Rating: 100VAC
- Signal Integrity for PCIe® Gen 1 to Gen 3 and 10G Base KR
- Data Rate: 2.5Gb/s up to 10Gb/s

MECHANICAL PERFORMANCE

- Durability: 100 cycles
- Mating Force: 0.9N max. per contact
- Un-mating Force: 0.1N min. per contact
- Contact Retention Force: 1N min. per contact

ENVIRONMENTAL

- Operating Temperature Range: -40°C to 125°C
- High Temperature Life: 125°C for 96 hours
- Humidity: 90-95% relative for 240 hours
- Mixed Flow Gas: Duration 7 days

SPECIFICATIONS

• GS-12-1599

PACKAGING

Tape & Reel

TARGET MARKETS/APPLICATIONS



Communication



Server / Storage



Industrial & Instrumentation

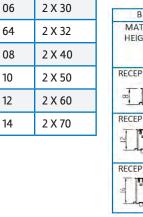
Medical

PART NUMBERS

Description	Part Numbers
Bergstak® Shielded 0.80mm, Vertical Receptacle, SMT, 64 Positions	10147212-644406LF
Bergstak® Shielded 0.80mm, Vertical Header, SMT, 64 Positions	10147213-644406LF

PART NUMBER SELECTOR

10147	212 —	AA	В	C D	E	LF						
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AA	Position			ᆝᄔ					, l		(wi	th kapton tape
04	2 X 20							D	Polari	zatio	n Peg	Hold Dow
06	2 X 30							0	rotarr	YES		NO
64	2 X 32	B MATED	PLUG 1	PLUG 2	Drawing 101 PLUG 3	47212 PLUG 4		2		NO		NO
08	2 X 40	HEIGHT			LIG	मूह		2		NU		NU
10	2 X 50	RECEP 2	- +			i di inc	С		Pla	ating	on cont	tact area
12	2 X 60	≣ा_∞	11a				4	Gold 0.2µm / pure tin 2.5µm min.(LF)				
14	2 X 70	RECEP 3	Lefter T	480	un and a state of the state of	427		Nick	el under	plate	e overa	ll 1.27µm min.
		a Ch	T.				5		•	•		μm min.(LF) ll 1.27μm min.
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								Und	erplate (overa	ll 1.27μ	m min.(LF)
10147	213 —	AA	В	C D	E	LF						
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AA	Position								լ լ		(wit	th kapton tape)
04	2 X 20							D	Polari	zatior	n Peg	Hold Dowr
06	2 X 30	В	For Re	eceptacle See [Drawing 1014	7212		0		YES		NO
	2 X 32	MATED HEIGHT	PLUG 1	PLUG 2	PLUG 3	PLUG 4		2		NO		-
64												
64 08	2 X 40				13			2		NU		NO



В	For Receptacle See Drawing 10147212					
MATED HEIGHT		PLUG 2	PLUG 3	PLUG 4		
RECEP 2				20.27		
∞_ L	P a			150		
RECEP 3				1991 1991		
RECEP 4	120			500		

	2	NO	NÜ				
С	Plating on contact area						
4	Gold 0.2µm / pure tin 2.5µm min.(LF) Nickel under plate overall 1.27µm min.						
5	Gold 0.38μm / pure tin 2μm min.(LF) Nickel under plate overall 1.27μm min.						
6	Gold Flash 0.1µm min. over palladium Nickel 0.76µm min./pure tin 2µm min.(LF) Nickel underplate overall 1.27µm min.						
9	Gold 0.2µm min./gold 0.05µm min. nickel Underplate overall 1.27µm min.(LF)						

BERGSTK08SD0420EA4

www.amphenol-icc.com

Mouser Electronics

Authorized Distributor

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