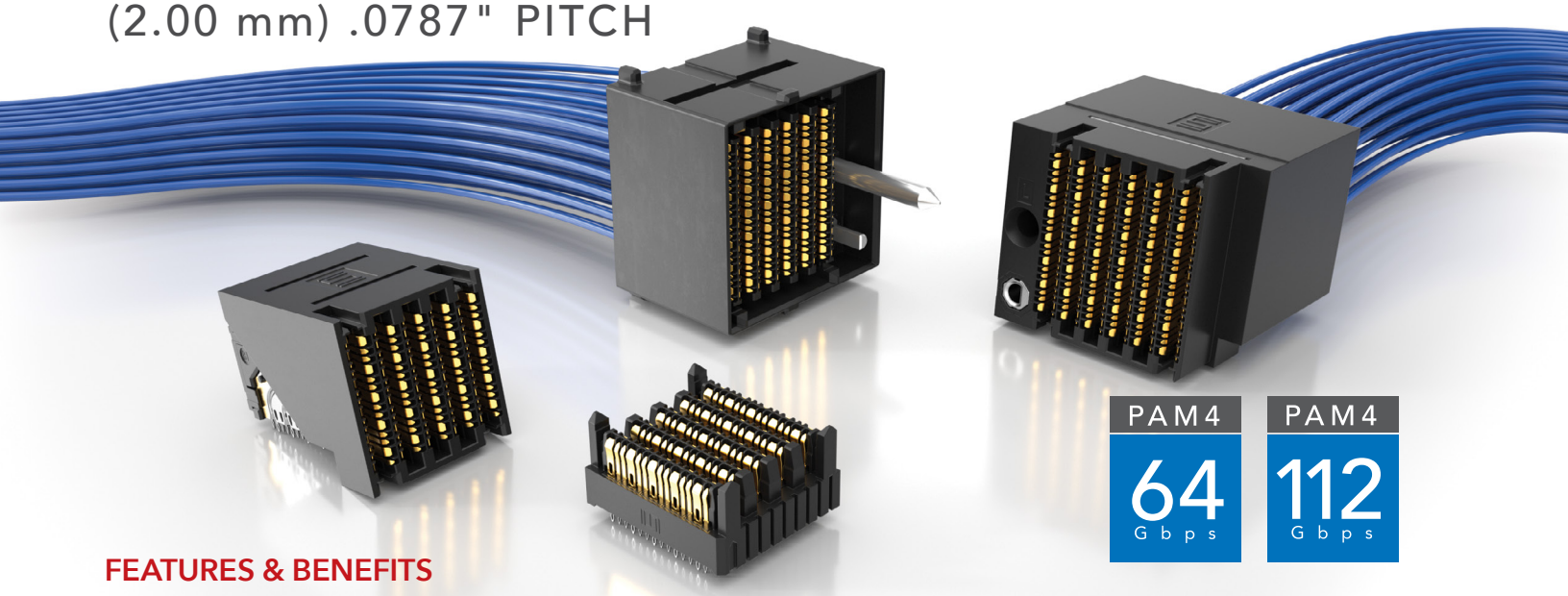
ExaMAX®

HIGH-SPEED BACKPLANE CONNECTOR & CABLE SYSTEMS

(2.00 mm) .0787" PITCH



PAM4 64 Gbps

PAM4 112 Gbps

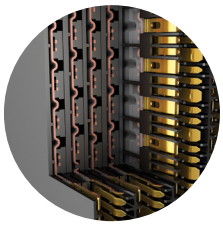
FEATURES & BENEFITS

ExaMAX® High-Speed Backplane System

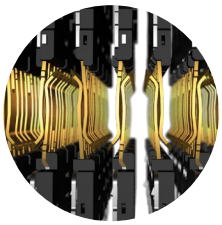
- Meets a variety of industry specifications
- Exceeds OIF CEI-28G-LR specification for 28 Gbps standards
- 24 - 72 pair designs (4 and 6 pairs; 6, 8, 10 and 12 columns)
- Wafer design includes one sideband signal per column
- Press-fit tails provide a reliable electrical connection
- PCIe® 6.0/CXL® 3.2 capable

ExaMAX® High-Speed Backplane Cable Assemblies

- 30 & 34 AWG Eye Speed® Ultra Low Skew Twinax Cable offers improved signal integrity, increased flexibility and routability
- Highly customizable with modular flexibility
- Reduce costs due to lower layer counts
- PCIe® 6.0/CXL® 3.2 capable
- Eye Speed® Thinax™ ultra performance twinax cable version in development



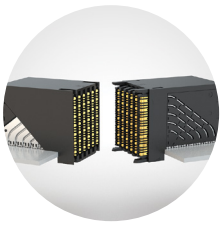
Staggered Differential Pair Design



Two Reliable Points of Contact with a 2.4 mm Wipe



Shielded Wafer Design Reduces Crosstalk



Traditional, Coplanar and Direct Mate Orthogonal



In Development: 8 Pairs for Greater Design Flexibility

KEY SPECIFICATIONS

SERIES	INSULATOR MATERIAL	CONTACT MATERIAL	PLATING	OPERATING TEMP RANGE	CURRENT RATING	VOLTAGE RATING	LEAD-FREE SOLDERABLE
EBTM/EBTF/EBDM	Liquid Crystal Polymer	Copper Alloy	Sn or Au over 50 µ" (1.27 µm) Ni	-55 °C to +105 °C	4 A per pin	150 VAC/212 VDC	Yes
EPTT/EPTS	High Temperature Thermoplastic	Copper Alloy	Sn or Au over 50 µ" (1.27 µm) Ni	-55 °C to +105 °C	14.1 A per pin	150 VAC/212 VDC	Yes
EBCM/EBCF	Liquid Crystal Polymer	Copper Alloy	Au over 50 µ" (1.27 µm) Ni	-40 °C to +105 °C	3.6 A per pin	125 VAC/177 VDC	N/A

PCI-SIG®, PCI Express® and the PCIe® design marks are registered trademarks and/or service marks of PCI-SIG.

Unless otherwise approved in writing by Samtec, all parts and components are designed and built according to Samtec's specifications which are subject to change without notice.

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ExaMAX®

PAM4 112 Gbps

(2.00 mm) .0787" PITCH • BACKPLANE CABLES

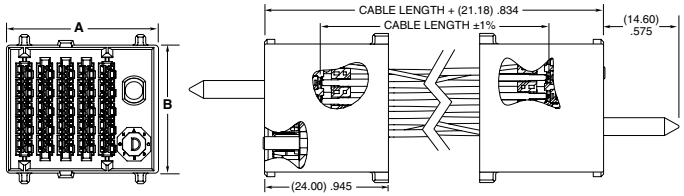
EBCM	GAUGE/ SIG. MAP	PAIRS PER COLUMN	COLUMNS	END 1 PIN	END 1 GUIDE	END 1 KEY	CABLE LENGTH	END 2 PIN	END 2	END 2 KEY
Cable Header	**–1** = 34 AWG/Tx to Rx Sig. Map **–2** = 30 AWG/Tx to Rx Sig. Map **–3** = 34 AWG/1:1 Sig. Map **–4** = 30 AWG/1:1 Sig. Map	**–4** = 4 Pairs **–6** = 6 Pairs	**–04, –06, –08, –10, –12, –14, –16**	**–1** = Standard	**–L** = Left Guidance **–R** = Right Guidance	**–A thru –H** = Position of Flat on Key (See Table) **–N** = No Key	**–"XX"** = Length in Inches 4 Pairs: 06" (152.4 mm) minimum 6 Pairs: 08" (203.2 mm) minimum	**–1** = Standard	**–L** = Male, Left Guidance **–R** = Male, Right Guidance **–FL** = Female, Right-angle Left Guidance (–3 & –4 Signal Map only) **–FR** = Female, Right-angle Right Guidance (–3 & –4 Signal Map only) **–FV** = Female, Vertical (–3 & –4 Signal Map only)	(Leave Blank for –FV End 2) **–A thru –H** = Position of Flat on Key (See Table) **–N** = No Key

NO. OF COLUMNS	A
–04	(17.45) .687
–06	(21.45) .845
–08	(25.45) 1.002
–10	(29.45) 1.159
–12	(33.45) 1.317
–14	(37.45) 1.474
–16	(41.45) 1.632

PAIRS PER COLUMN	B
–4	(24.80) .976
–6	(32.00) 1.260

EBCM
Mates with:
EBCF, EBTF
Retention Bracket:
EBCB





END 1: –L–G SHOWN **END 2**

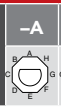
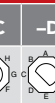
View complete specifications at: samtec.com?EBCM

EBCF	GAUGE/ SIG. MAP	PAIRS / COLUMN	COLUMNS	END 1	END 1 PIN	CABLE LENGTH	END 2 OPTION	END 2 PIN	END 2 GUIDE	END 2 KEY
Cable Socket	**–1** = 34 AWG/ Tx to Rx Sig. Map **–2** = 30 AWG/ Tx to Rx Sig. Map **–3** = 34 AWG/1:1 Sig. Map **–4** = 30 AWG/1:1 Sig. Map	**–4** = 4 Pairs **–6** = 6 Pairs	**–04, –06, –08, –10, –12, –14, –16**	**–V** = Vertical Latch	**–1** = Standard	**–"XX"** = Length in Inches 4 Pairs: 06" (152.4 mm) minimum 6 Pairs: 08" (203.2 mm) minimum	**–V** = Vertical Latch **–R** = Right-Angle	**–1** = Standard	(–R End Only) **–L** = Left Guidance **–R** = Right Guidance	(Leave Blank for no Key; –R End Only) **–A thru –H** = Position of Flat on Key (See Table)

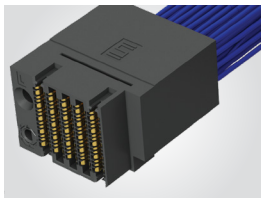
NO. OF COLUMNS	A	C	E
–04	(10.60) .417	(14.85) .585	(19.15) .754
–06	(14.60) .575	(18.85) .742	(23.15) .911
–08	(18.60) .732	(22.85) .900	(27.15) 1.069
–10	(22.60) .890	(26.85) 1.057	(31.15) 1.226
–12	(26.60) 1.047	(38.85) 1.530	(43.15) 1.699
–14	(30.60) 1.205	(34.85) 1.372	(39.15) 1.541
–16	(34.60) 1.362	(38.85) 1.530	(43.15) 1.699

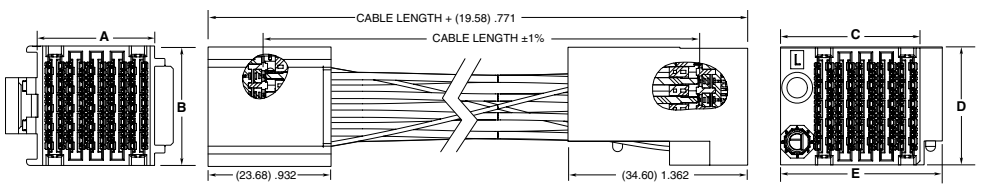
PAIRS PER COLUMN	B	D
–4	(23.00) .906	(22.70) .894
–6	(30.20) 1.189	(29.90) 1.177

KEYING

–L / –R	–A	–B	–C	–D	–E	–F	–G	–H
								

EBCF
Mates with:
EBCM, EBTM
Latching Shroud:
EBCL





END 1: –V SHOWN **END 2: –L–G SHOWN**

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

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View complete specifications at: samtec.com?EBCF

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