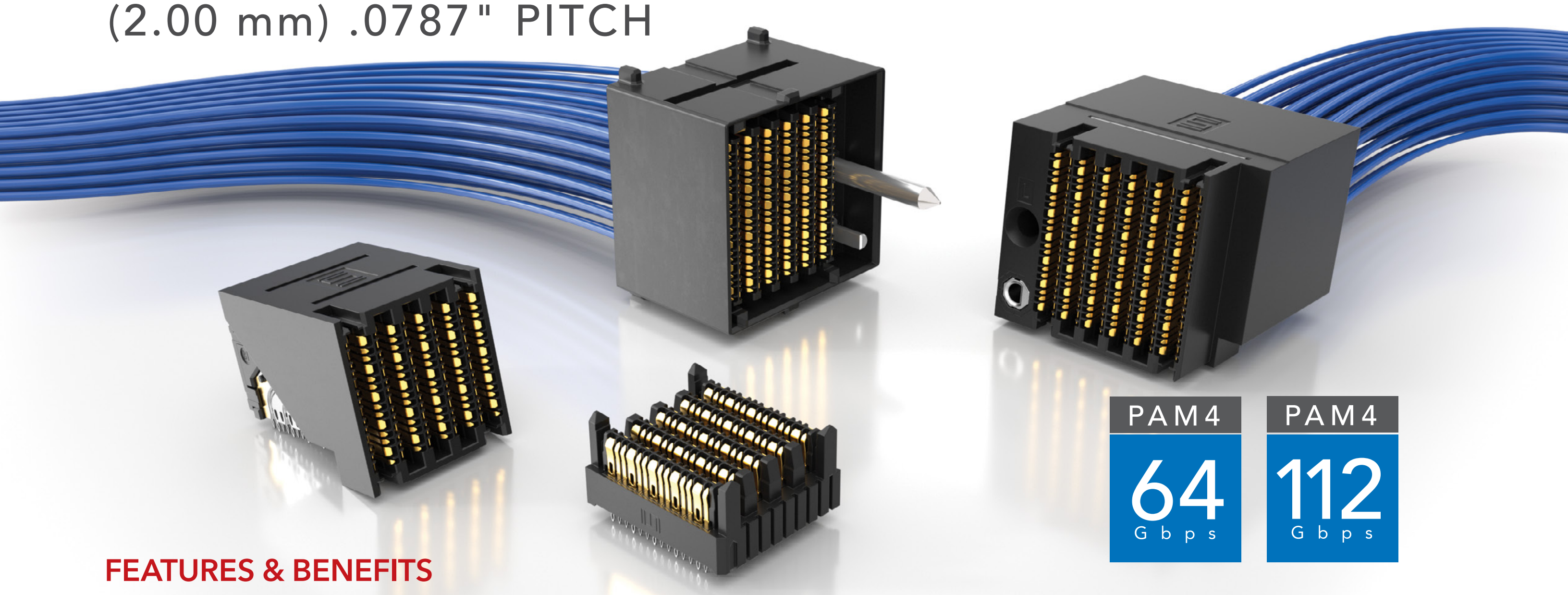
ExaMAX®

HIGH-SPEED BACKPLANE CONNECTOR & CABLE SYSTEMS

(2.00 mm) .0787" PITCH



PAM4 **64** Gbps

PAM4 **112** Gbps

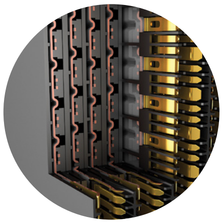
FEATURES & BENEFITS

ExaMAX® High-Speed Backplane System

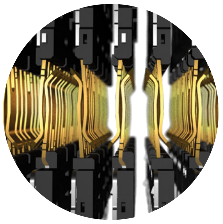
- Meets a variety of industry specifications
- Traditional, coplanar and direct mate orthogonal
- 24 - 72 pair designs (4 and 6 pairs; 6, 8, 10 and 12 columns)
- Shielded wafer design reduces crosstalk and includes one sideband signal per column
- Press-fit tails provide a reliable electrical connection
- PCIe® 6.0/CXL® 3.2 capable

ExaMAX® High-Speed Backplane Cable Assemblies

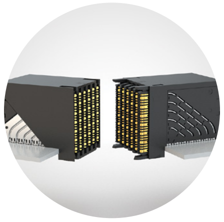
- 30 & 34 AWG Eye Speed® ultra low skew twinax cable
- 34 AWG Eye Speed Thinax™ ultra low skew twinax cable
- Offers improved signal integrity, increased flexibility and routability
- Highly customizable with modular flexibility
- Reduce costs due to lower layer counts
- PCIe® 6.0/CXL® 3.2 capable



Staggered Differential Pair Design



Two Reliable Points of Contact with a 2.4 mm Wipe



In Development: Open-Pin-Field, Coplaner Configuration

In Development: 2 Pair Design for a Lower Profile

In Development: ExaMAX2® 8 Pairs for 112 Gbps PAM4 Performance

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	2.6 A per pin	125 VAC/177 VDC	N/A

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ExaMAX®

PAM4
64
Gbps

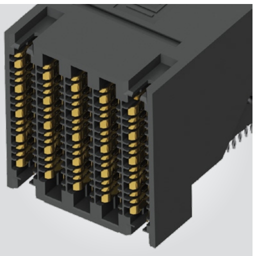
(2.00 mm) .0787" PITCH • RIGHT-ANGLE SOCKET & DIRECT-MATE ORTHOGONAL

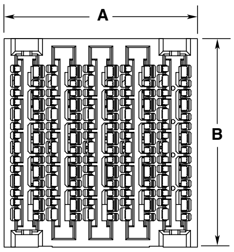
EBTF	NO. OF PAIRS PER COLUMN	COLUMNS	COLUMN PITCH	PLATING	RA	PIN CONFIGURATION	GUIDANCE	KEYING
	–4 = 4 Pairs **–6** = 6 Pairs	**–06, –08, –10, –12** (-12 column only available in -6 pairs)	**–2.0** = (2.0 mm) .0787"	**–S** = 30 µ" (0.76 µm) Gold on contact area, Matte Tin on tails		**–1** = Standard **–5** = Open Pin Field (only available in-6 pairs)	(Leave Blank for no Guidance) **–L** = Left Guidance **–R** = Right Guidance	(Only with –L or –R Guidance; Leave Blank for no Keying) **–A thru –H** = Position of Flat on Key (See Table)

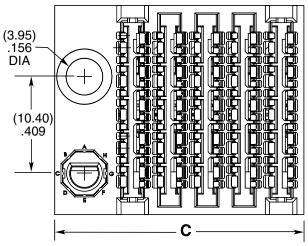
EBTF-RA

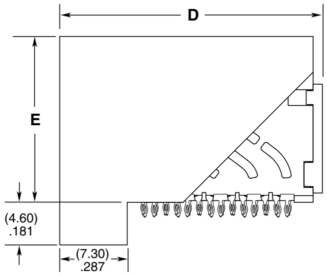
Board Mates:
EBTM,
EBDM-RA

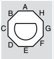
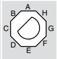
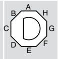
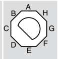
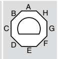
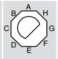
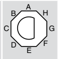
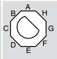
Cable Mates:
EBCM









KEYING (-RA)								
	–A	–B	–C	–D	–E	–F	–G	–H
–L / –R								

NO. OF COLUMNS	A	C
–06	(12.90) .508	(18.85) .742
–08	(16.90) .665	(22.85) .900
–10	(20.90) .823	(26.85) 1.057
–12	(24.90) .980	(30.85) 1.215

NO. OF PAIRS PER COLUMN	B	D	E
–4	(22.50) .886	(28.40) 1.118	(17.90) .705
–6	(29.70) 1.169	(35.60) 1.402	(25.10) .988

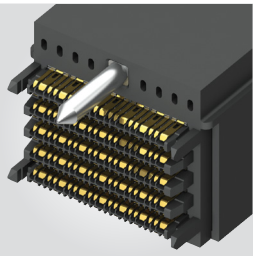
View complete specifications at: samtec.com?EBTF-RA

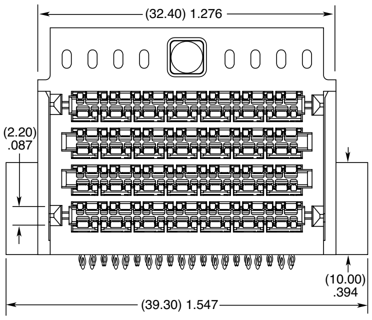
EBDM	PAIRS	COLUMNS	2.0	PLATING	RA	PIN CONFIGURATION	GUIDANCE	SCREW MOUNT
	–6 = 6 Pairs	**–06, –08, –10, –12**		**–S** = 30 µ" (0.76 µm) Gold on contact area, Matte Tin on tails		**–1** = Standard	(Leave Blank for no Pin) **–G** = Guide Pin	(Leave Blank for no Screw Mount) **–S** = Screw Mount

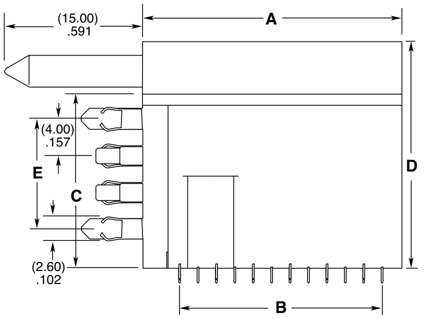
EBDM-RA

Board Mates:
EBTF-RA

Cable Mates:
EBCF







COLUMNS	A	B	C (without –G)	D (with –G)	E
–06	(16.15) .636	(10.00) .394	(15.00) .591	(20.65) .813	(8.00) .315
–08	(20.15) .793	(14.00) .551	(19.00) .748	(24.65) .970	(12.00) .472
–10	(24.15) .951	(18.00) .709	(23.00) .906	(28.65) 1.128	(16.00) .630
–12	(28.15) 1.108	(22.00) .866	(27.00) 1.063	(32.65) 1.285	(20.00) .787

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

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View complete specifications at: samtec.com?EBDM-RA