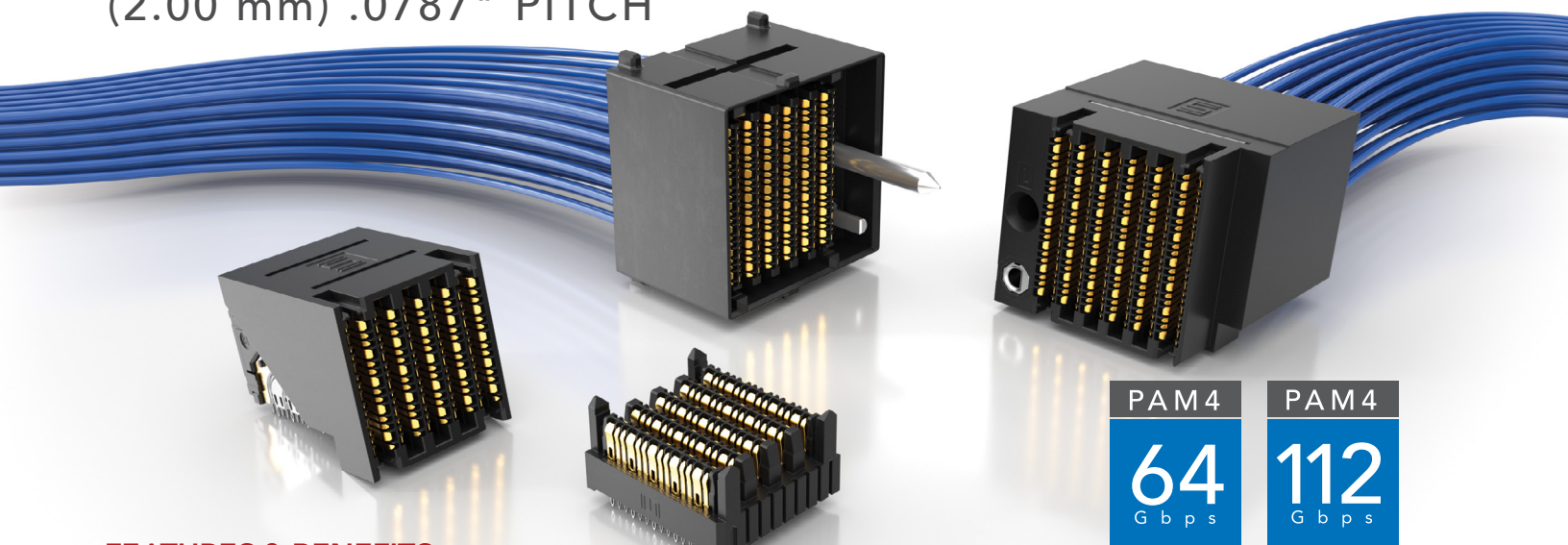


# ExaMAX<sup>®</sup>

## HIGH-SPEED BACKPLANE CONNECTOR & CABLE SYSTEMS

(2.00 mm) .0787" PITCH



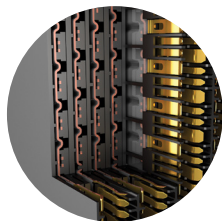
### FEATURES & BENEFITS

#### ExaMAX<sup>®</sup> High-Speed Backplane System

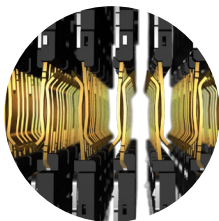
- Meets a variety of industry specifications
- Traditional, coplanar and direct mate orthogonal
- 24 - 72 pair designs (4 and 6 pairs; 6, 8, 10 and 12 columns)
- Shielded wafer design reduces crosstalk and includes one sideband signal per column
- Press-fit tails provide a reliable electrical connection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

#### ExaMAX<sup>®</sup> High-Speed Backplane Cable Assemblies

- 30 & 34 AWG Eye Speed<sup>®</sup> ultra low skew twinax cable
- 34 AWG Eye Speed Thinax<sup>™</sup> 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<sup>®</sup> 6.0/CXL<sup>®</sup> 3.2 capable



Staggered  
Differential  
Pair Design



Two Reliable Points  
of Contact with  
a 2.4 mm Wipe



In Development:  
Open-Pin-Field,  
Coplanar Configuration



In Development:  
2 Pair Design for  
a Lower Profile



In Development:  
ExaMAX2<sup>®</sup> 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 $\mu$ " (1.27 $\mu$ m) 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 $\mu$ " (1.27 $\mu$ m) 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 $\mu$ " (1.27 $\mu$ m) Ni       | -40 °C to +105 °C    | 2.6 A per pin  | 125 VAC/177 VDC | N/A                  |

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

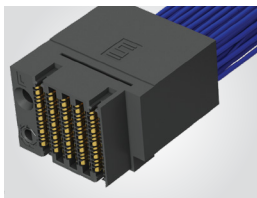
## (2.00 mm) .0787" PITCH • BACKPLANE CABLES

| EBCF            | CABLE/<br>SIG. MAP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | PAIRS /<br>COLUMN                                    | COLUMNS                                                                | END 1                            | END 1<br>PIN            | CABLE<br>LENGTH                                                                                                              | END 2<br>OPTION                                                        | END 2<br>PIN            | END 2<br>GUIDE                                                                                          | END 2<br>KEY                                                                                                                      |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|------------------------------------------------------------------------|----------------------------------|-------------------------|------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|-------------------------|---------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Cable<br>Socket | <b>-1</b><br>= 34 AWG<br>ultra low<br>skew twinax<br>cable/<br>Tx to Rx Sig.<br>Map<br><br><b>-2</b><br>= 30 AWG<br>ultra low<br>skew twinax<br>cable/<br>Tx to Rx Sig.<br>Map<br><br><b>-3</b><br>= 34 AWG<br>ultra low<br>skew twinax<br>cable/<br>1:1 Sig. Map<br><br><b>-4</b><br>= 30 AWG<br>ultra low<br>skew twinax<br>cable/<br>1:1 Sig. Map<br><br><b>-6</b><br>= 34 AWG<br>Thinax™ ultra<br>low skew<br>twinax cable/<br>Tx to Rx Sig.<br>Map<br><br><b>-8</b><br>= 34 AWG<br>Thinax™ ultra<br>low skew<br>twinax cable/<br>1:1 Sig. Map | <b>-4</b><br>= 4 Pairs<br><br><b>-6</b><br>= 6 Pairs | <b>-04,</b><br><b>-06, -08,</b><br><b>-10, -12,</b><br><b>-14, -16</b> | <b>-V</b><br>= Vertical<br>Latch | <b>-1</b><br>= Standard | <b>"XX"</b><br>= Length in<br>Inches<br>4 Pairs:<br>06"<br>(152.4 mm)<br>minimum<br>6 Pairs:<br>08"<br>(203.2 mm)<br>minimum | <b>-V</b><br>= Vertical<br>Latch<br><br><b>-R</b><br>= Right-<br>Angle | <b>-1</b><br>= Standard | <b>(-R End<br/>Only)</b><br><br><b>-L</b><br>= Left<br>Guidance<br><br><b>-R</b><br>= Right<br>Guidance | (Leave<br>Blank for<br>no Key; -R<br>End Only)<br><br><b>-A<br/>thru<br/>-H</b><br>= Position<br>of Flat<br>on Key<br>(See Table) |

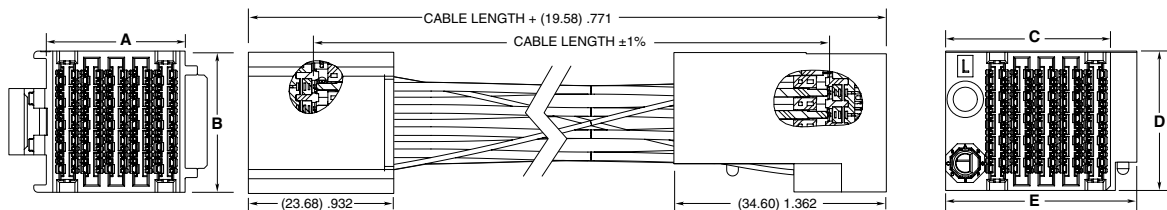
### KEYING

| -L /<br>-R | -A | -B | -C | -D | -E | -F | -G | -H |
|------------|----|----|----|----|----|----|----|----|
|            |    |    |    |    |    |    |    |    |

**EBCF**  
Mates with:  
**EBCM, EBTM**  
Latching  
Shroud:  
**EBCL**



| NO. OF<br>COLUMNS | A             | C             | E             | PAIRS<br>PER<br>COLUMN | B             | D             |
|-------------------|---------------|---------------|---------------|------------------------|---------------|---------------|
| -04               | (10.60) .417  | (14.85) .585  | (19.15) .754  | -4                     | (23.00) .906  | (22.70) .894  |
| -06               | (14.60) .575  | (18.85) .742  | (23.15) .911  | -6                     | (30.20) 1.189 | (29.90) 1.177 |
| -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 | (30.85) 1.215 | (35.15) 1.384 |                        |               |               |
| -14               | (30.60) 1.205 | (34.85) 1.372 | (39.15) 1.541 |                        |               |               |
| -16               | (34.60) 1.362 | (38.85) 1.530 | (43.15) 1.697 |                        |               |               |



END 1: -V SHOWN

END 2: -L-G SHOWN

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

ExaMAX<sup>®</sup> is a registered trademark  
of Amphenol FCI Asia Pte. Ltd.  
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View complete specifications at: [samtec.com?EBCF](http://samtec.com?EBCF)