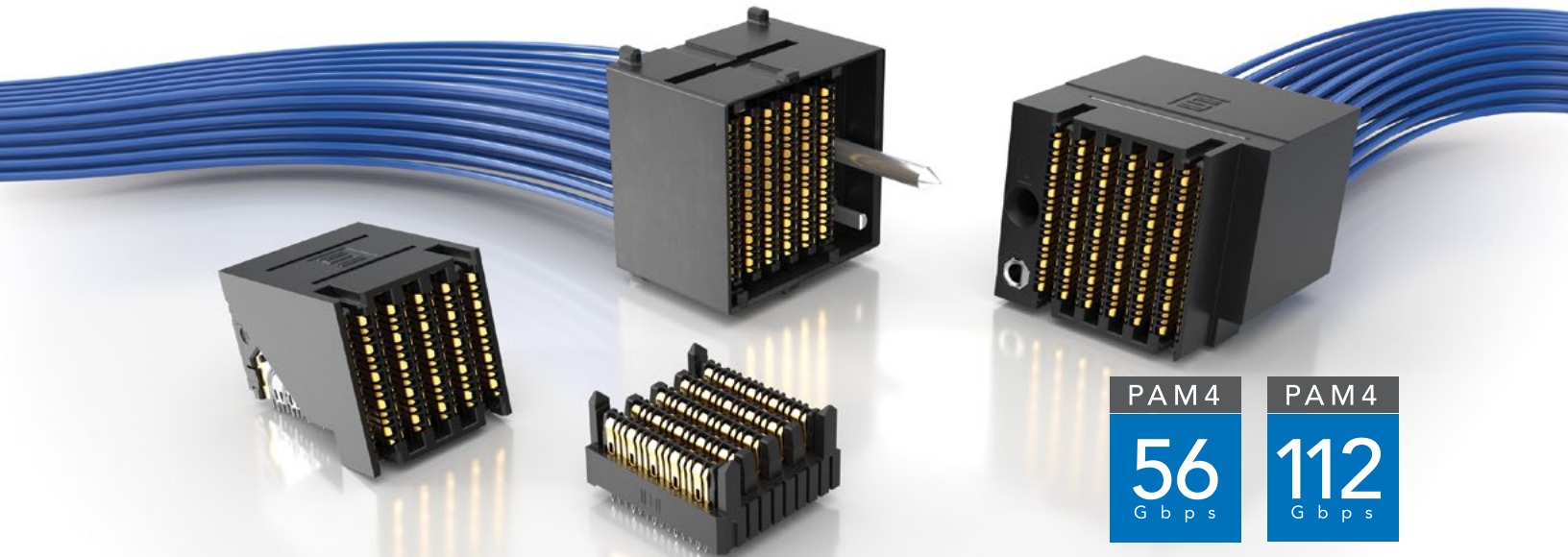


# ExaMAX<sup>®</sup>

## HIGH-SPEED BACKPLANE CONNECTOR & CABLE SYSTEMS

(2.00 mm) .0787" PITCH



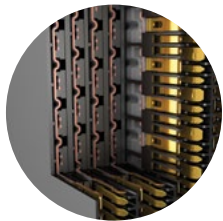
### FEATURES & BENEFITS

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

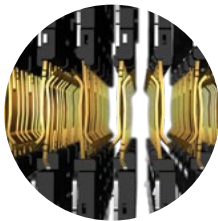
- Meets a variety of industry specifications
- Exceeds OIF CEI-28G-LR specification for 28 Gbps standards
- 24 - 72 pair designs (4 and 6 pairs; 6, 8, 10 and 12 columns)
- Wafer design increases isolation for reduced crosstalk
- Press-fit tails provide a reliable electrical connection

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

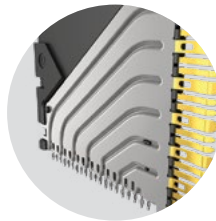
- 30 & 34 AWG Eye Speed<sup>®</sup> Ultra Low Skew Twinax Cable offers improved signal integrity, increased flexibility and routability
- Highly customizable with modular flexibility
- Reduce costs due to lower layer counts
- Multiple end options available



Staggered Differential Pair Design



Two Reliable Points of Contact at All Times



Wafer Design Reduces Crosstalk



Traditional, Coplanar and Direct Mate Orthogonal



Intermateable with all ExaMAX<sup>®</sup> Connectors

### KEY SPECIFICATIONS

| PITCH   | INSULATOR MATERIAL                   | CONTACT MATERIAL | PLATING                                 | OPERATING TEMP RANGE | CURRENT RATING |
|---------|--------------------------------------|------------------|---|----------------------|----------------|
| 2.00 mm | LCP<br>Zinc Alloy (EGBX Series only) | Copper Alloy     | Sn over 50 $\mu$ "<br>(1.27 $\mu$ m) Ni | -55 °C to +105 °C    | 4.2 A per pin  |

(2.00 mm) .0787" PITCH • BACKPLANE CABLES

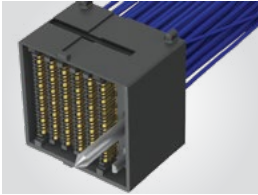
| EBCM         | GAUGE/<br>SIG. MAP   | PAIRS PER<br>COLUMN                    | COLUMNS                                    | END 1<br>PIN     | END 1<br>GUIDE                                      | END 1<br>KEY  | CABLE<br>LENGTH   | END 2<br>PIN     | END 2   | END 2<br>KEY   |
|--------------|--|--|--|------------------|---|---|---|------------------|---|--|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

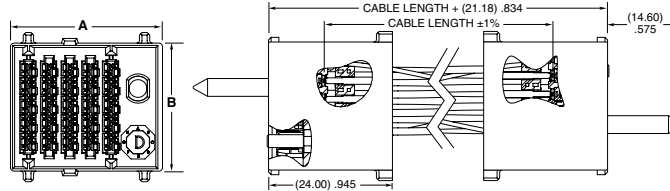
| NO. OF COLUMNS | A             |
|----------------|---------------|
| -04            | (17.45) .687  |
| -06            | (21.45) .845  |
| -08            | (25.45) 1.002 |
| -10            | (29.45) 1.159 |
| -12            | (33.45) 1.317 |
| -14            | (37.45) 1.474 |
| -16            | (41.45)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

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

**EBCM**  
Mates with:  
EBCF, EBTf, EBCB



END 1: -L-G SHOWN      END 2

View complete specifications at: [samtec.com?EBCM](http://samtec.com?EBCM)

| EBCF         | GAUGE/<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 Socket | -1<br>= 34 AWG/Tx to Rx Sig. Map<br><br>-2<br>= 30 AWG/Tx to Rx Sig. Map<br><br>-3<br>= 34 AWG/1:1 Sig. Map<br><br>-4<br>= 30 AWG/1:1 Sig. Map | -4<br>= 4 Pairs<br><br>-6<br>= 6 Pairs | -04,<br>-06, -08,<br>-10, -12,<br>-14, -16 | -V<br>= Vertical Latch | -1<br>= Standard | "-XX"<br>= Length in Inches<br>06" (152.4 mm)<br>minimum | -V<br>= Vertical Latch<br><br>-R<br>= Right-Angle | -1<br>= Standard | (-R End Only)<br><br>-L<br>= Left Guidance<br><br>-R<br>= Right Guidance | (Leave Blank for no Key; -R End Only)<br><br>-A<br>thru<br>-H<br>= Position of Flat on Key (See Table) |

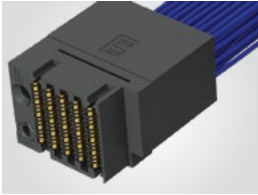
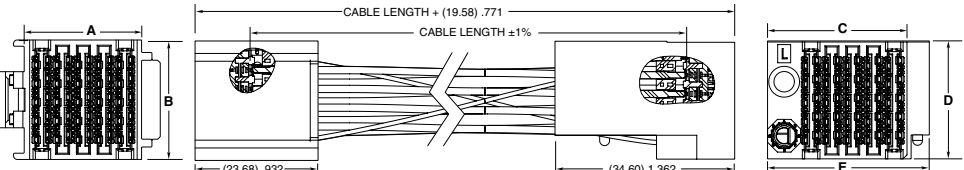
| NO. OF COLUMNS | A             | C             | E             |
|----------------|---------------|---------------|---------------|
| -04            | (10.60) .417  | (14.85) .585  | (19.15) .754  |
| -06            | (14.60) .575  | (18.85) .742  | (23.15) .911  |
| -08            | (18.60) .732  | (22.85) .900  | (27.15) 1.069 |
| -10            | (22.60) .890  | (26.85) 1.057 | (31.15) 1.226 |
| -12            | (26.60) 1.047 | (30.85) 1.530 | (35.15) 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 |
|         |    |    |    |    |    |    |    |    |

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 AFCL.

View complete specifications at: [samtec.com?EBCF](http://samtec.com?EBCF)