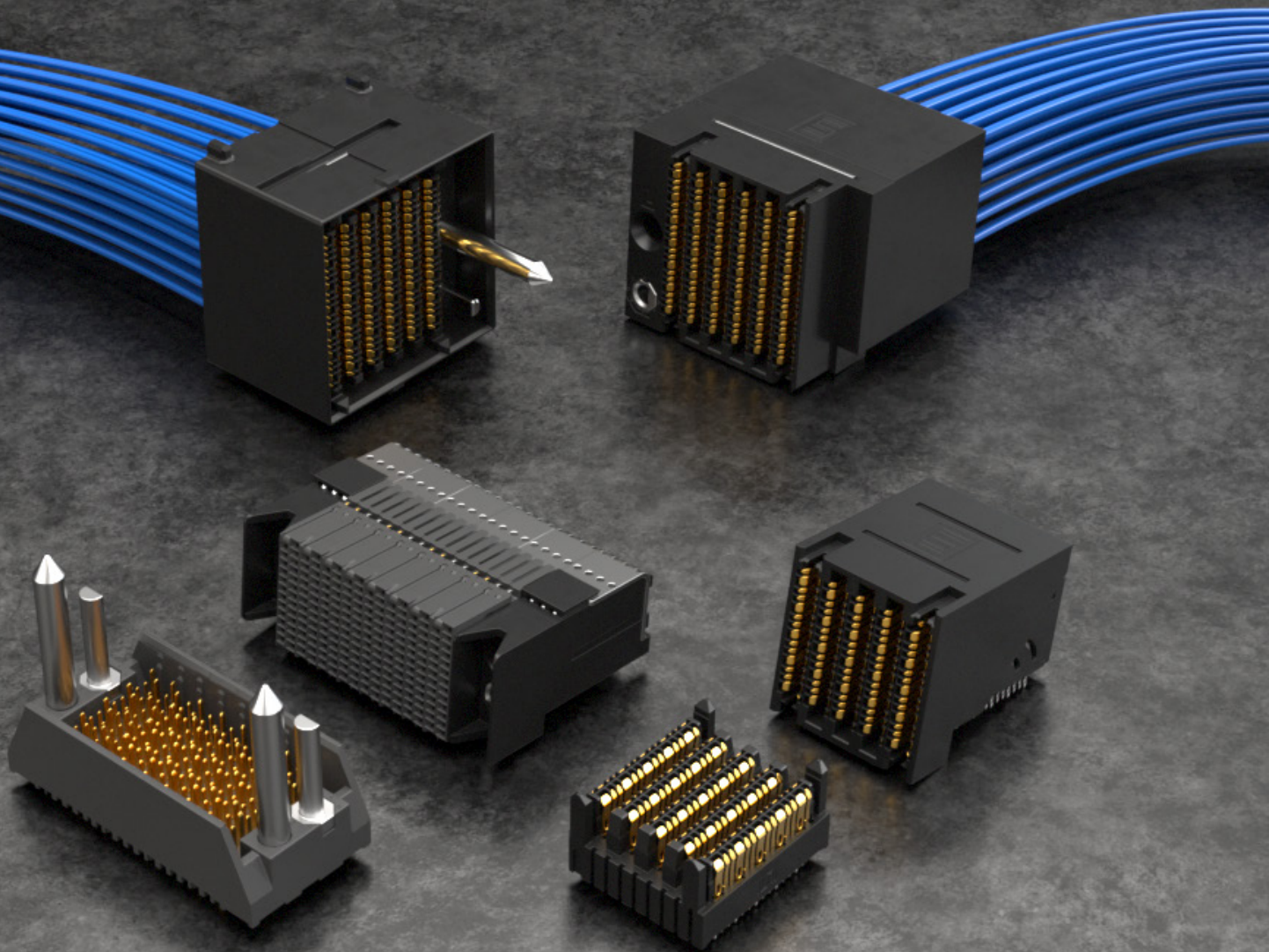


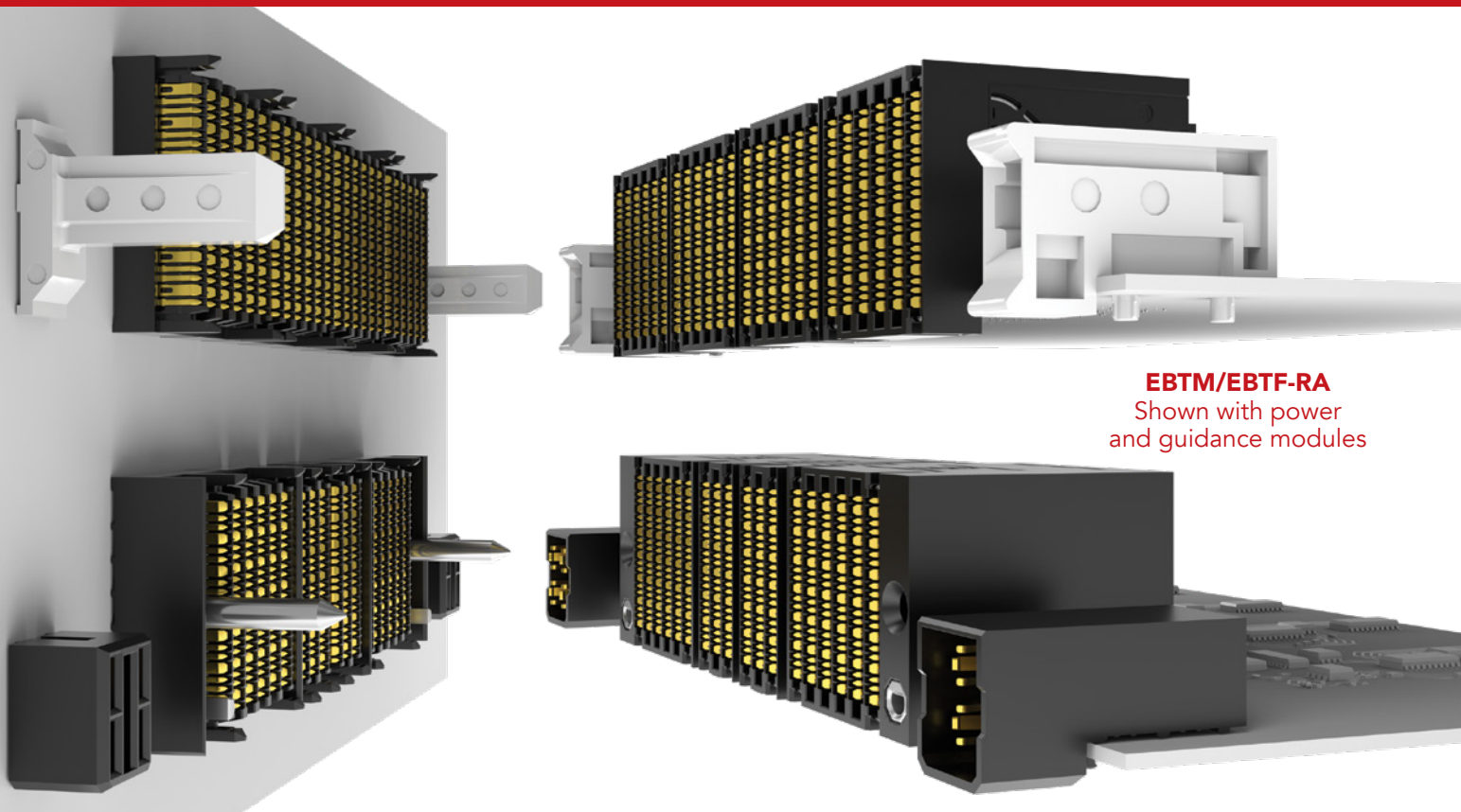


HIGH-SPEED BACKPLANE SYSTEMS



HIGH-SPEED BACKPLANE SYSTEMS

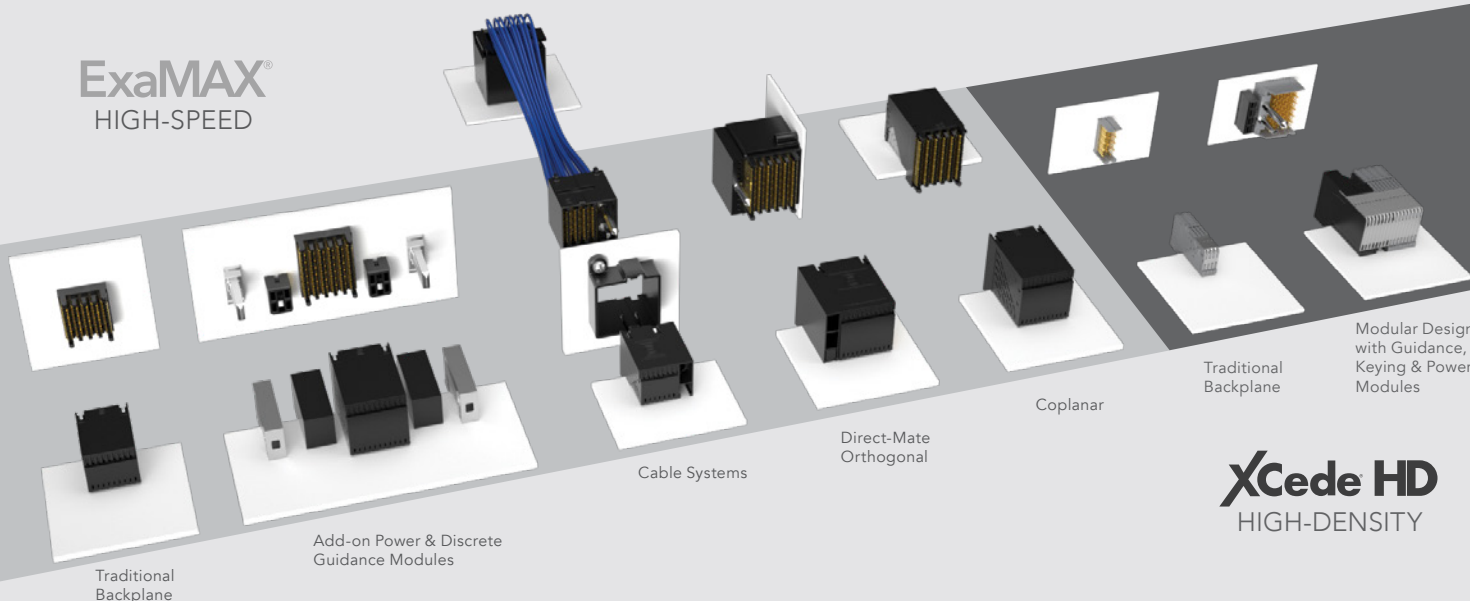
HIGH-DENSITY • DESIGN FLEXIBILITY • HIGH RELIABILITY



EBTM/EBTF-RA

Shown with power
and guidance modules

ExaMAX[®]
HIGH-SPEED



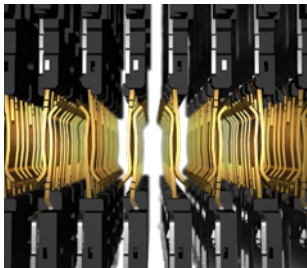
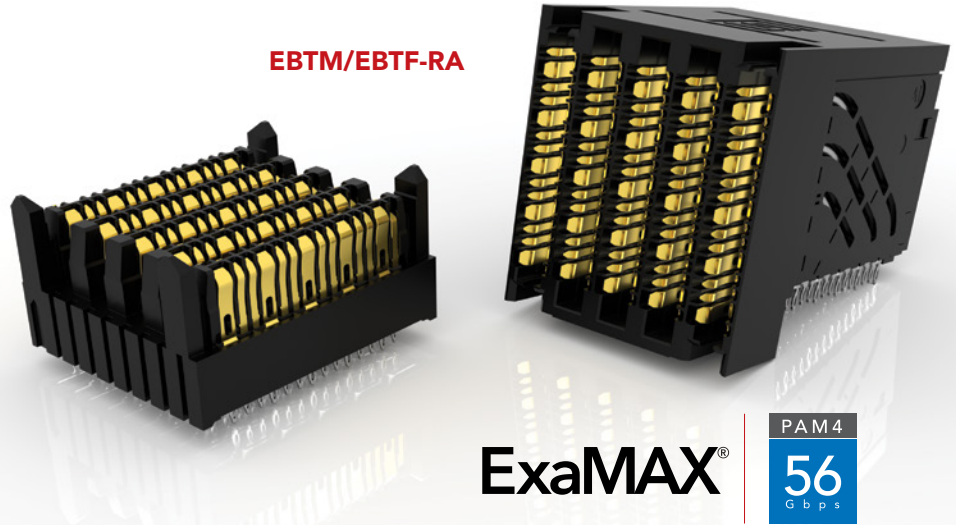
Modular Design
with Guidance,
Keying & Power
Modules

XCode HD
HIGH-DENSITY

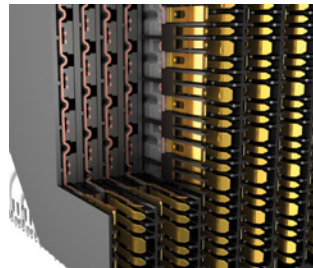
EXAMAX® HIGH-SPEED BACKPLANE

- Meets industry specifications such as PCI Express®, Intel OPI and VPI, SAS, SATA, Fibre Channel, InfiniBand™ and Ethernet
- 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
- Cable assemblies available (EBCM/EBCF)

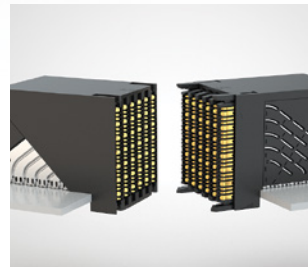
EBTM/EBTF-RA



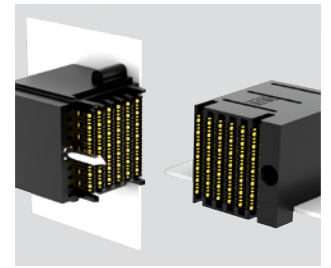
Two reliable points of contact



Staggered differential pair design with an embossed ground plane



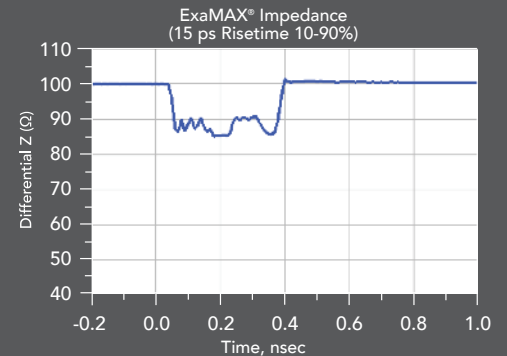
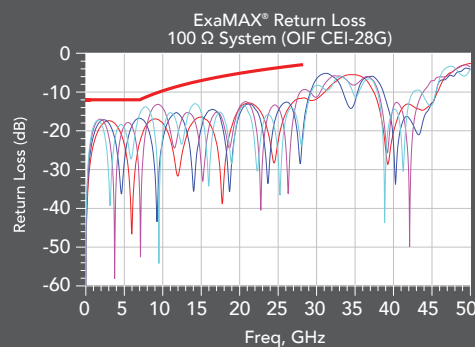
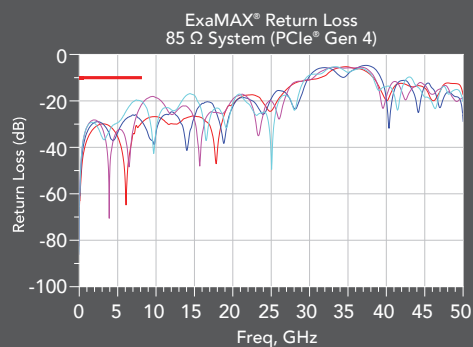
Coplanar available to bypass the midplane (EBTM-RA)



Direct-mate orthogonal (EBDM-RA) eliminates the midplane for a shorter signal path

PERFORMANCE CHARTS

ExaMAX® is engineered for 92 Ω impedance to address both 85 Ω and 100 Ω applications



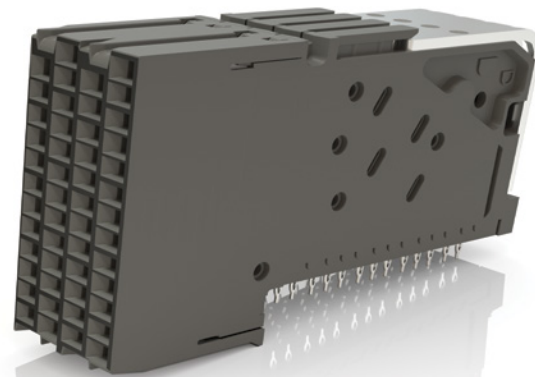
ExaMAX® is a trademark of AFCl

XCEDE® HD HIGH-DENSITY BACKPLANE

- Small form factor and modular design provides significant space-savings and flexibility
- High-performance system
- Up to 84 differential pairs per linear inch
- 3, 4 and 6-pair designs on 4, 6 and 8 columns
- Integrated power, guidance, keying and side walls available
- 85 Ω and 100 Ω options
- Combine any configuration of modules to create one integrated receptacle (BSP Series); corresponding terminal modules are individually mounted to the backplane



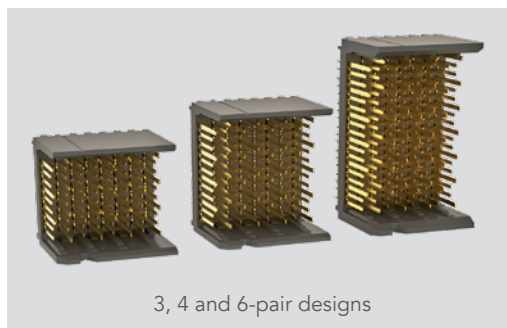
HDTM/HDTF



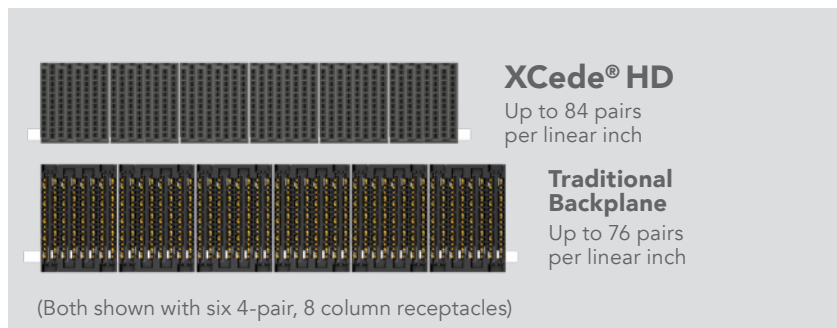
Xcede HD

16
Gbps

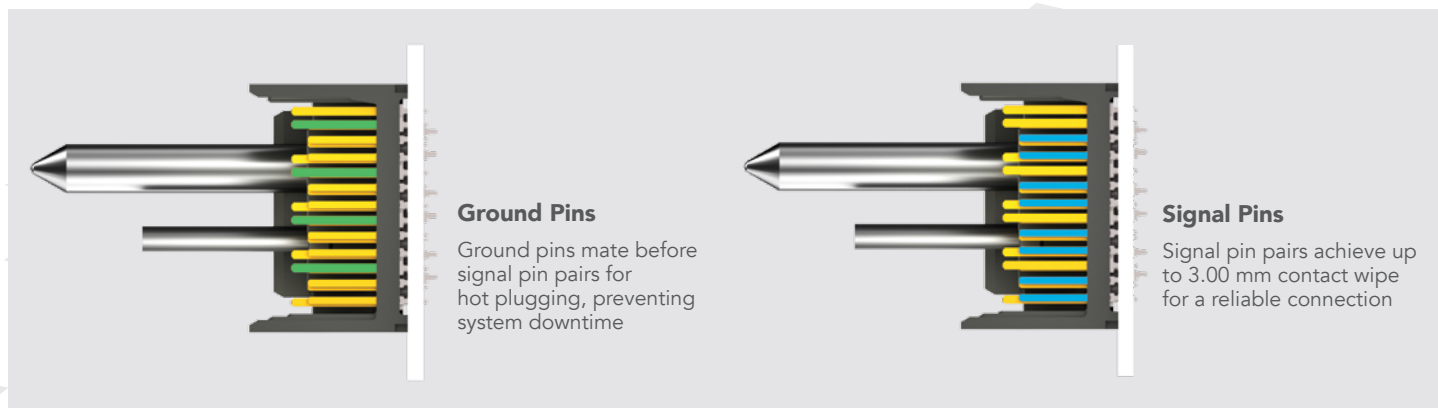
SMALL FORM FACTOR



DENSITY COMPARISON



SIGNAL/GROUND PIN STAGING

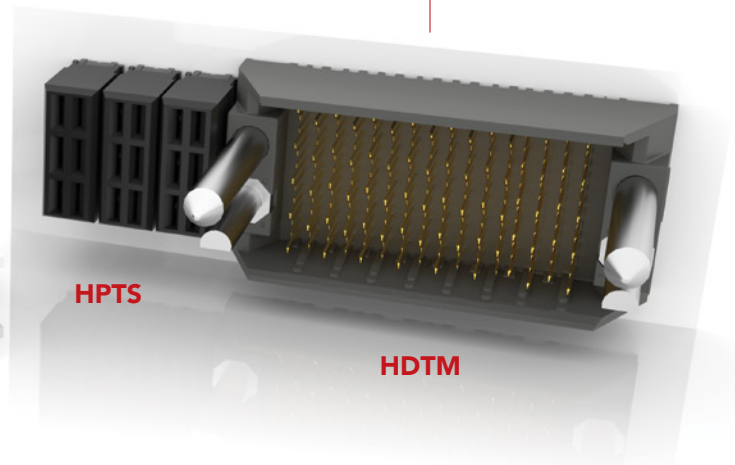
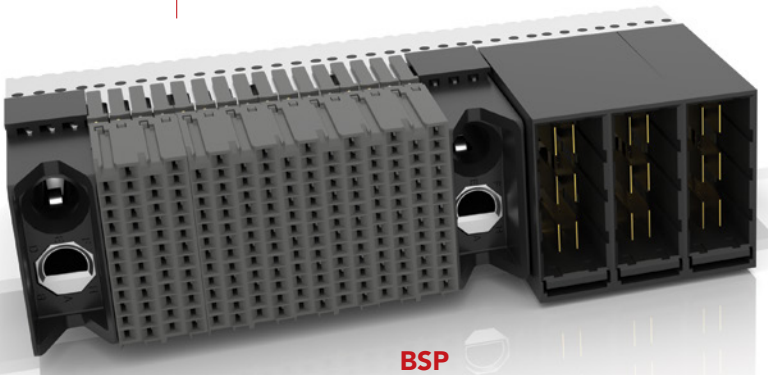


MODULAR DESIGN

XCede® HD consists of signal, power and keying/guidance modules for incredible design flexibility. The modules can be customized in any configuration to meet specific application requirements. Contact HSBP@samtec.com for more information about building a full XCede® HD solution.

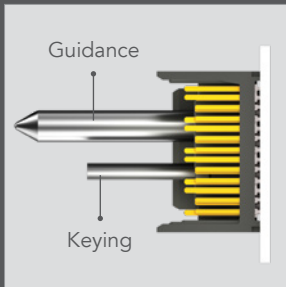
How to build a full solution:

- ① Right-angle modules can be built into a single customizable BSP
- ② Build a BSP part by combining any number, in any configuration, of HDTFs, power and keying/guidance modules to create one receptacle
- ③ Header modules mount to the backplane individually, in any configuration of HDTM and HPTS Series

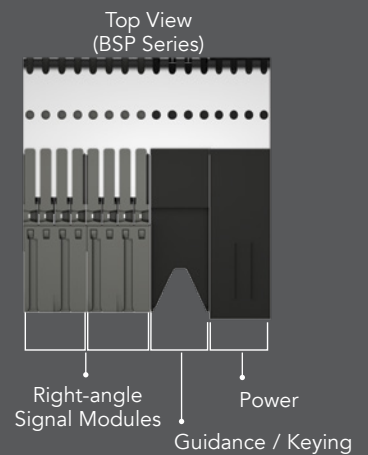
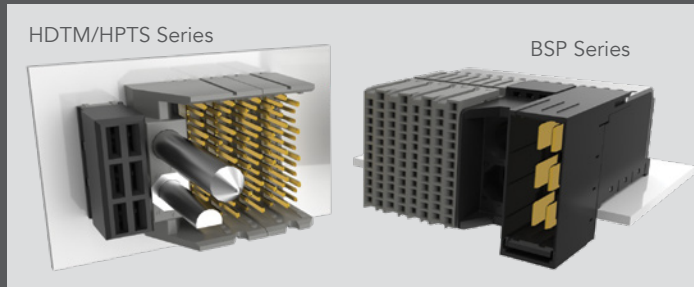


XCede® is a registered trademark of Amphenol Corporation.

PRODUCT BREAKDOWN (BSP Custom Configuration Shown)



Side View
(HDTM/HPTS Series)



EXAMAX® BACKPLANE CABLE ASSEMBLIES

- Utilizes Samtec's Eye Speed® ultra low skew twinax cable technology for improved signal integrity, increased flexibility and routability
- Highly customizable with modular flexibility
- Reduce costs due to lower layer counts
- 30 and 34 AWG
- Multiple end options available

ExaMAX®

PAM4
112
Gbps



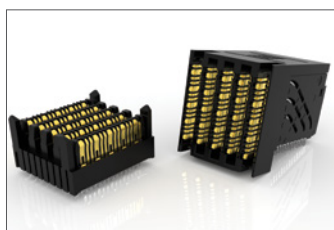
EBCF

EBTM/EBCL

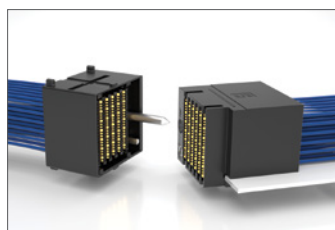
DESIGN FLEXIBILITY



4 and 6 pairs;
4-16 columns



Intermateable with all
ExaMAX® connectors



Integrated guidance and
keying options



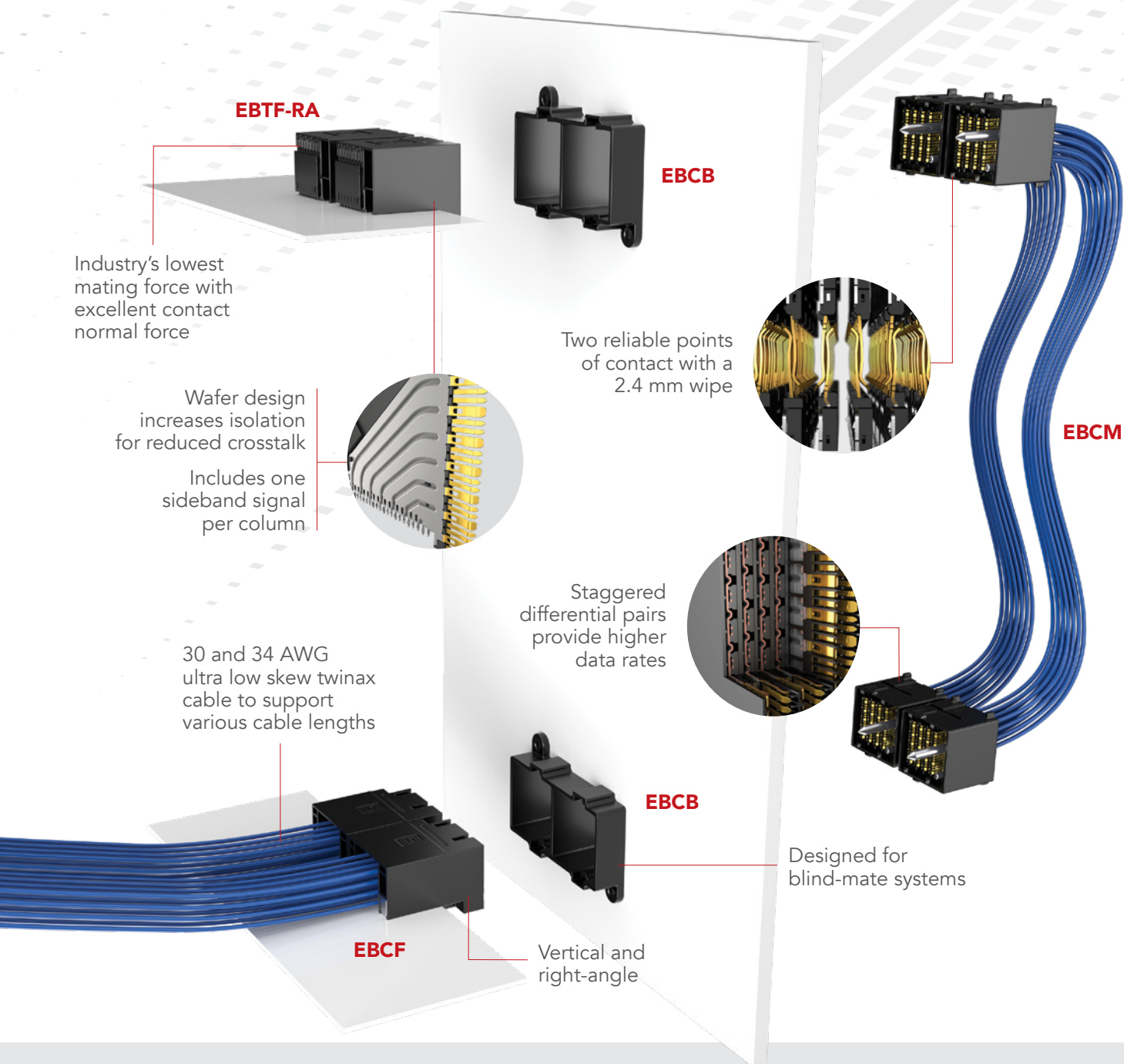
Cable-to-DMO
(Direct Mate Orthogonal)

HIGH-DENSITY APPLICATION



Increases architectural flexibility by overcoming the limitations of a traditional connector-to-connector backplane

samtec.com/backplane

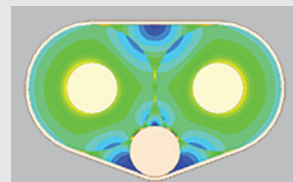
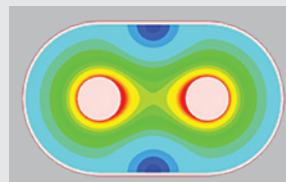


ULTRA LOW SKEW TWINAX CABLE

Samtec's Eye Speed® co-extruded twinax cable technology eliminates the performance limitations and inconsistencies of individually extruded dielectric twinax cabling, improving signal integrity, bandwidth and reach for high-performance system architectures.

- Tight coupling between signal conductors
- Improved bandwidth and reach
- Improved signal integrity and eye pattern opening

**EYE
SPEED
CABLE**





samtec
SUDDEN SERVICE®

UNITED STATES • NORTHERN CALIFORNIA • SOUTHERN CALIFORNIA • SOUTH AMERICA • UNITED KINGDOM
GERMANY • FRANCE • ITALY • NORDIC/BALTIC • BENELUX • ISRAEL • INDIA • AUSTRALIA / NEW ZEALAND
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