

samtec SILICON-TO-SILICON™ SOLUTIONS FOR NEXT GEN CONNECTIVITY DEMANDS.

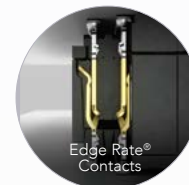
PAM4

56
Gbps

ACCELERATE®HD

Ultra Dense, High-Performance Multi-Row Strips

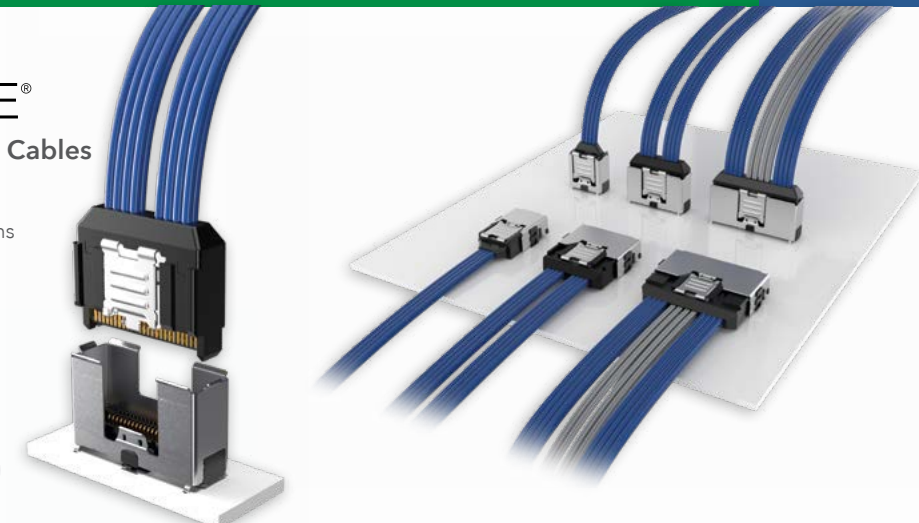
- Up to 240 total I/Os
- Slim 5 mm width
- 0.635 mm pitch open-pin-field
- **In Development:** Up to 400 I/Os



ACCELERATE®

Slim Body Direct Attach Cables

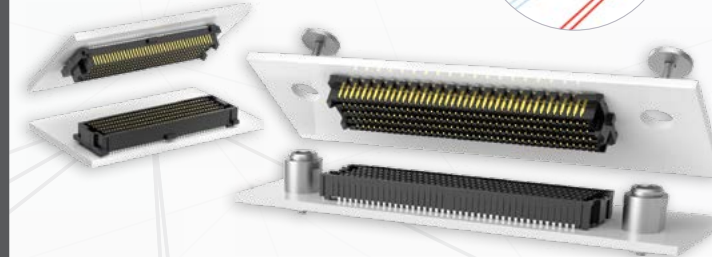
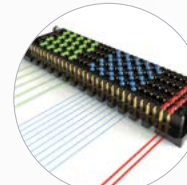
- 8 & 16 Pairs
- Vertical & right-angle systems
- **In Development:** next gen with 24 pairs and additional sideband support



SEARAY™ | LPARRAY™

High-Speed Open-Pin-Field Arrays

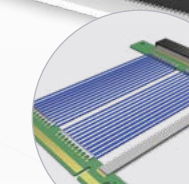
- Maximum routing & grounding flexibility
- 1.27 mm pitch SEARAY™
- Ultra dense 0.80 mm pitch SEARAY™
- Low profile LP Array™
- Rugged Edge Rate® contact system



PCI EXPRESS®

PCIe® Gen 5 Compatible Cables & Sockets - In Development

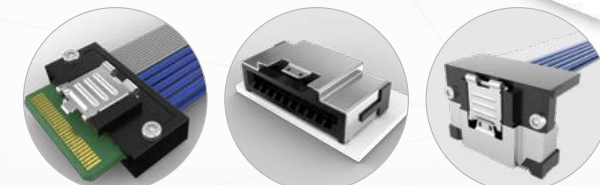
- 1.00 mm pitch
- Precision differential pair stamping technology
- Cable & edge card socket



GEN Z

Differential Pair Edge Card Socket

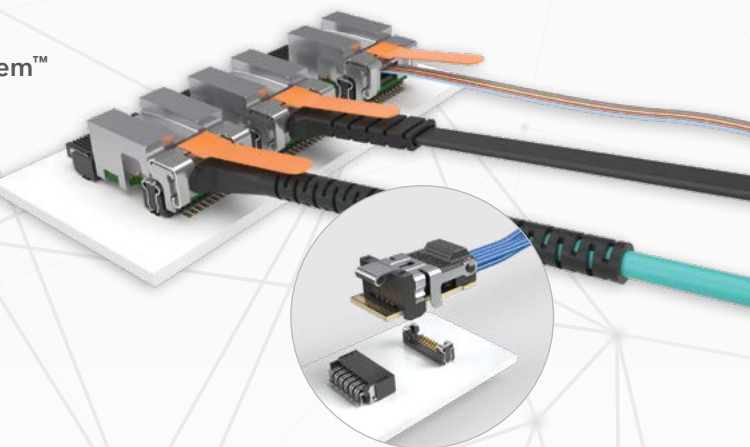
- Compliant to SFF-TA-1002
- PCIe® Gen 5
- 0.60 mm pitch
- **In Development:** right-angle socket, 112 Gbps PAM4 systems, cable systems in multiple configurations



FIREFLY™

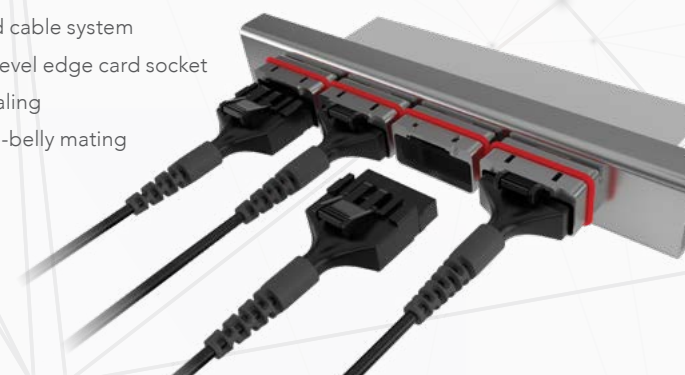
High-Performance Micro Flyover System™

- Signals bypass lossy PCB materials
- Future-proof copper or optical system
- x4 & x12 optical; x4 full duplex or x12 unidirectional copper
- **In Development:** rugged fiber / coatings, extended temp system, submersible design, PCIe® Gen 4 (25 Gbps x 2, 56 Gbps 4+4), 56 Gbps PAM4 (4+4, 8+8), 112 Gbps (x8, 8+8)



Auto 2.0 High-Speed Cable System - In Development

- Rugged cable system
- Board-level edge card socket
- IP54 sealing
- Belly-to-belly mating



PAM4

112
Gbps

ACCELERATE®HP

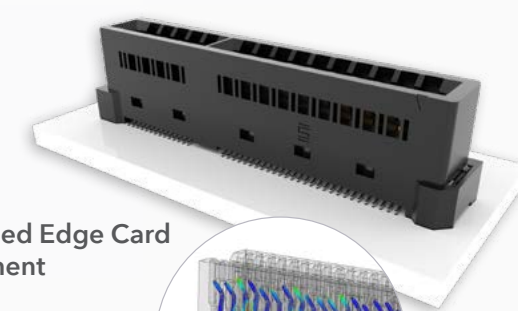
High-Performance Multi-Row Strips - In Development

- High pin counts (80 - 400)
- Ultra-high pin counts (400 - 1000+)
- 112 Gbps mezzanine strip
- Right-angle open-pin-field array
- 5 mm & 10 mm stack heights



PCI EXPRESS®

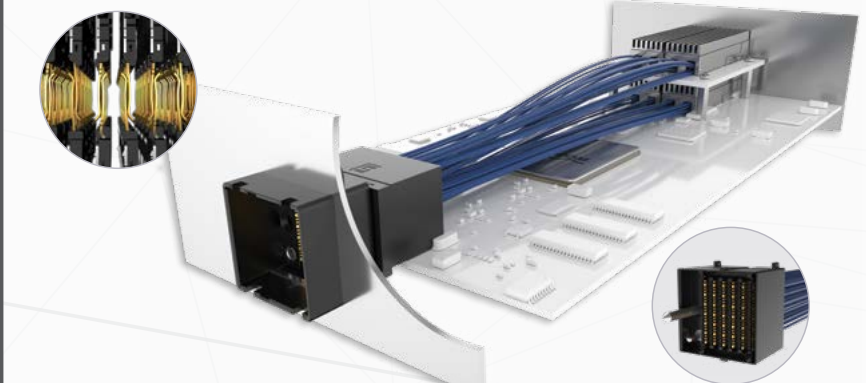
112 Gbps PAM4 High-Speed Edge Card Technology - In Development



ExaMAX®

High-Performance Backplane Cables

- Two reliable points of contact
- 4 or 6 pairs per column; 4-16 columns
- Improved signal integrity
- Increased signal path lengths at higher data rates
- Eye Speed® ultra low skew twinax cable



NOVARAY®

Extreme Performance / Extreme Density Arrays

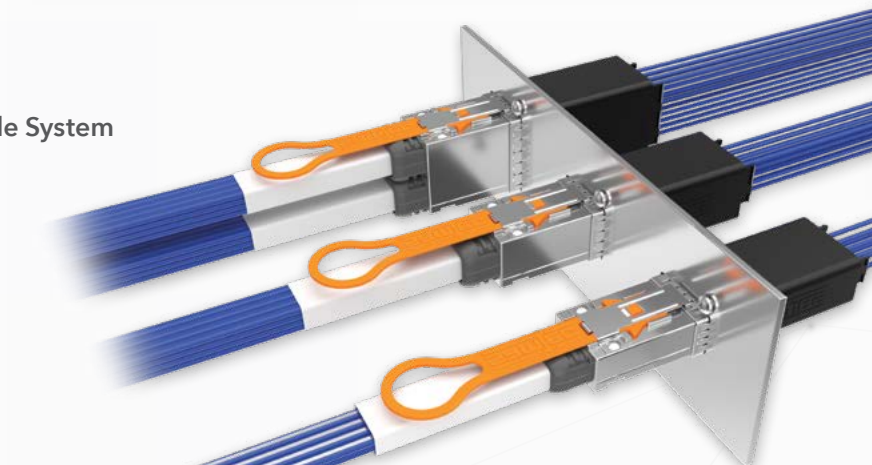
- 4.0 Tbps aggregate data rate
- Extremely low crosstalk
- Tight impedance control
- 0.80 mm pitch terminals / sockets
- 0.80 mm pitch cable assembly
- **In Development:** right-angle cable mate, 10 mm & 12 mm stack heights, mixed power / single-ended banks, rugged micro backplane system



NOVARAY® I/O

Extreme Density Bulkhead Cable System - In Development

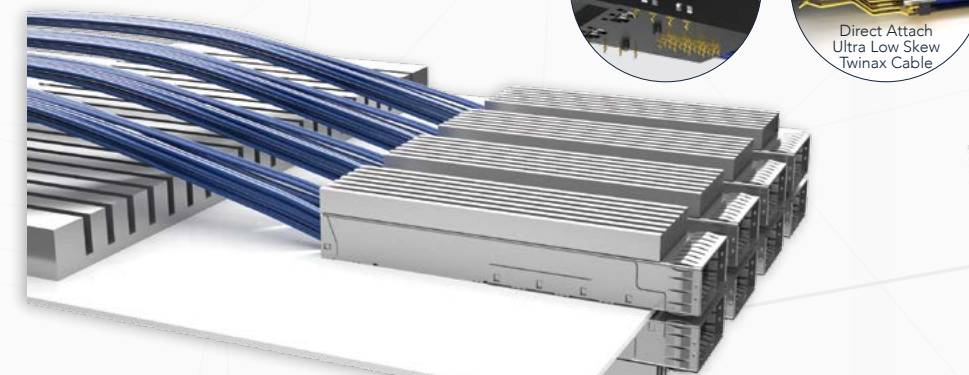
- Future-proof design
- High-density, high-performance
- 8, 16, 32 pairs / port



FLYOVER®

Double-Density QSFP28 Cable System

- 8 channels, 28 Gbps NRZ / channel
- Direct connect sidebands increase system airflow
- Belly-to-belly mating enables maximum density
- **In Development:** 112 Gbps PAM4 system



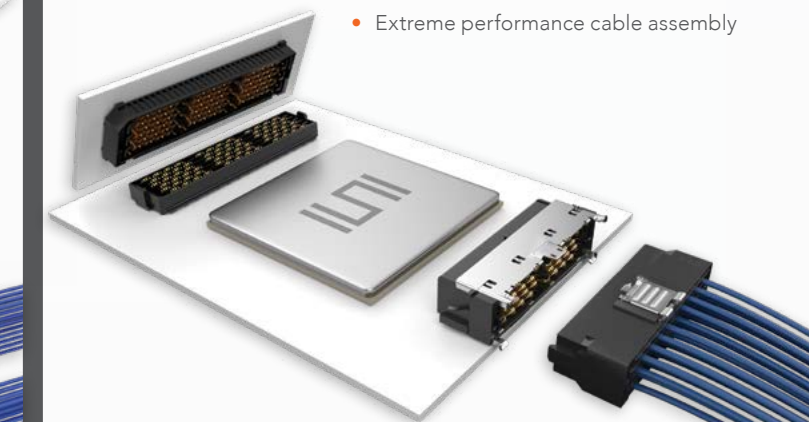
PAM4

224
Gbps

NOVARAY®

Next Gen Extreme Performance Systems - In Development

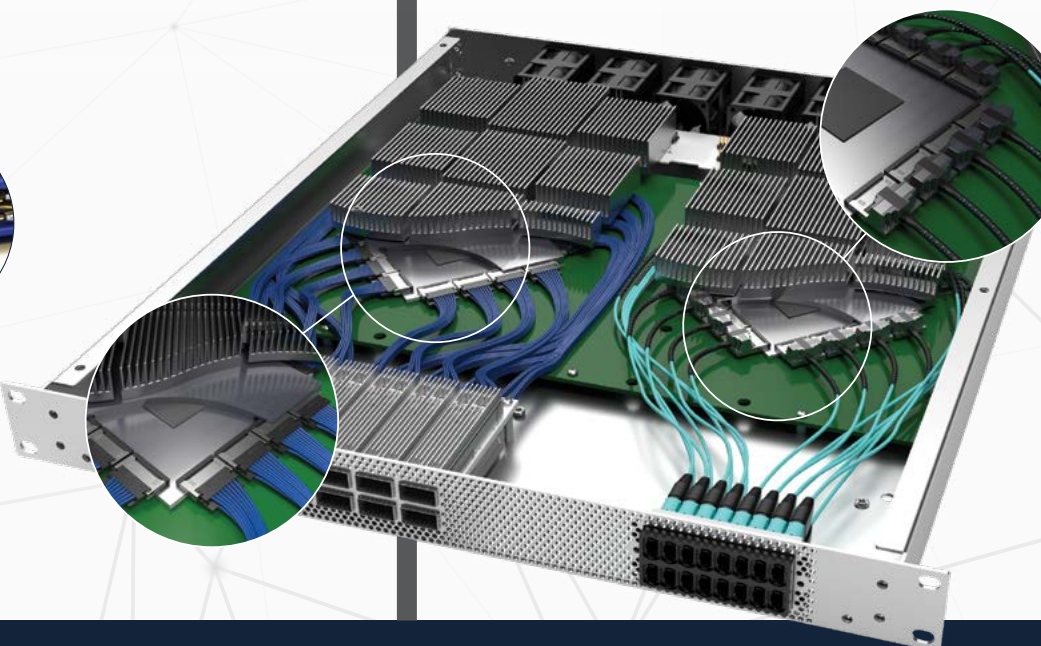
- Open-pin-field array
- Extended pair counts
- Extreme performance cable assembly



SI-FLY™

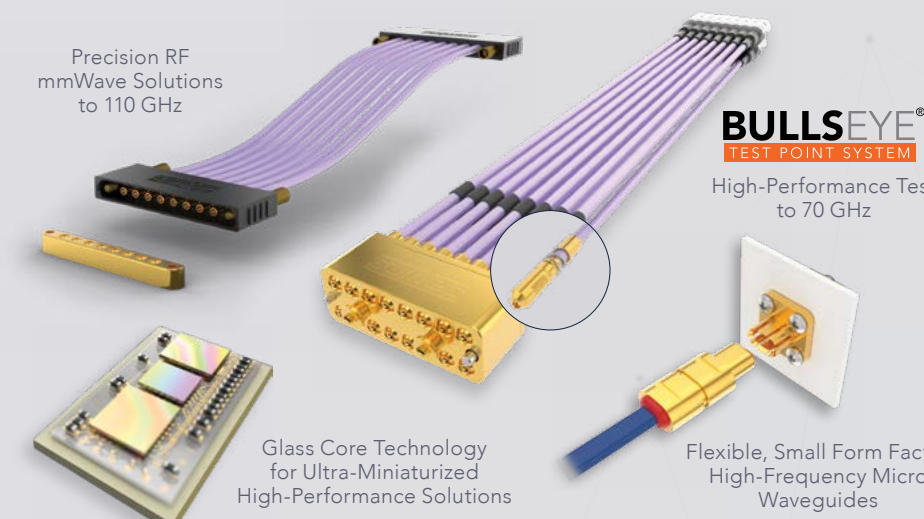
Direct Connect to IC Package - In Development

- 51.2 TB on-package pluggable system
- Ultra high density enables increased channel performance & reach
- **Roadmap:** direct connect Optics-to-IC package system



TECHNOLOGIES & SUPPORT FOR NEXT GEN SYSTEM DEVELOPMENT & OPTIMIZATION

High-Performance Analog Systems



Ultra-High Power Micro Systems



Severe Environment Testing (SET)

Samtec interconnects are subject to a wide variety of standard test procedures to help ensure quality and durability in any application.

Severe Environment Testing includes additional testing for interconnect systems that will be used in extreme or harsh environment applications:

- High Mating Cycles with 100% Humidity
- Intense Shock and Vibration: LLCR and Event Detection
- Temperature Cycling (500 Cycles)
- Non-Operating Class Temperature
- DWV at Altitude
- Electrostatic Discharge (ESD)



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