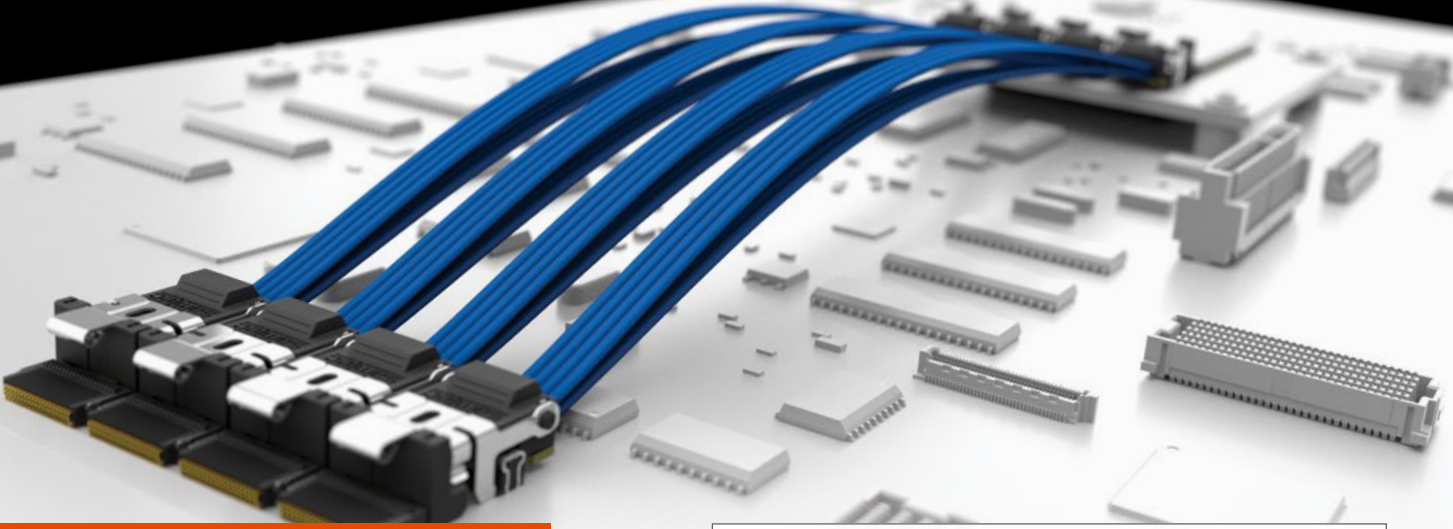




# FLYOVER™ SYSTEMS



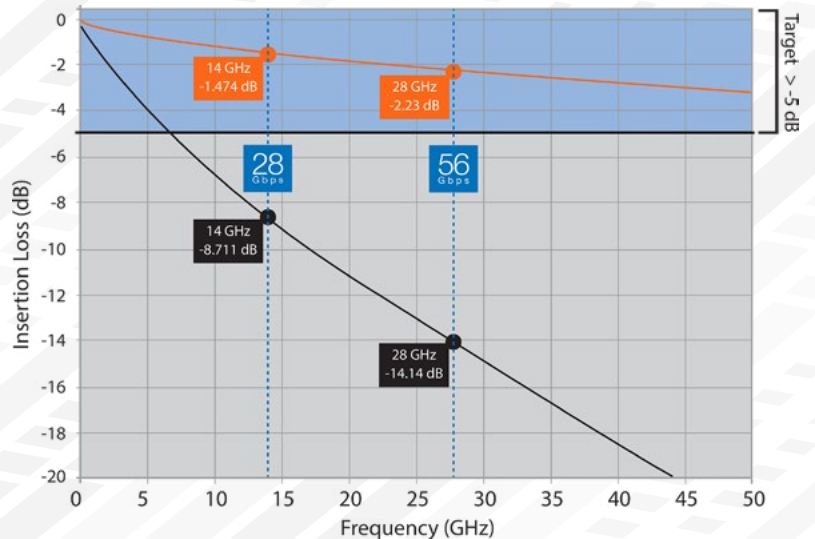
## THE PROBLEM

As bandwidth requirements rapidly increase routing signals through lossy PCBs, vias and other components has become one of the most complex challenges designers face.

BANDWIDTH VS. TRADITIONAL & HIGH-SPEED MATERIALS				
	FR408	MEGTRON 6	Micro Twinax	Optics
10 Gbps	<10"	10"+	10"+	10"+
14 Gbps	<5"	<10"	10"+	10"+
28 Gbps	<2"	<5"	10"+	10"+
56 Gbps	0.0"	<2"	10"+	10"+
112 Gbps	0.0"	0.0"	<10"	10"+

## THE SOLUTION

Samtec's "Flyover" design approach breaks the constraints of traditional signaling substrate and hardware offerings, resulting in a cost effective, high-performance answer to the challenges of 28 Gbps bandwidth and beyond.



30 AWG 100 Ω Low Skew Twinax Cable

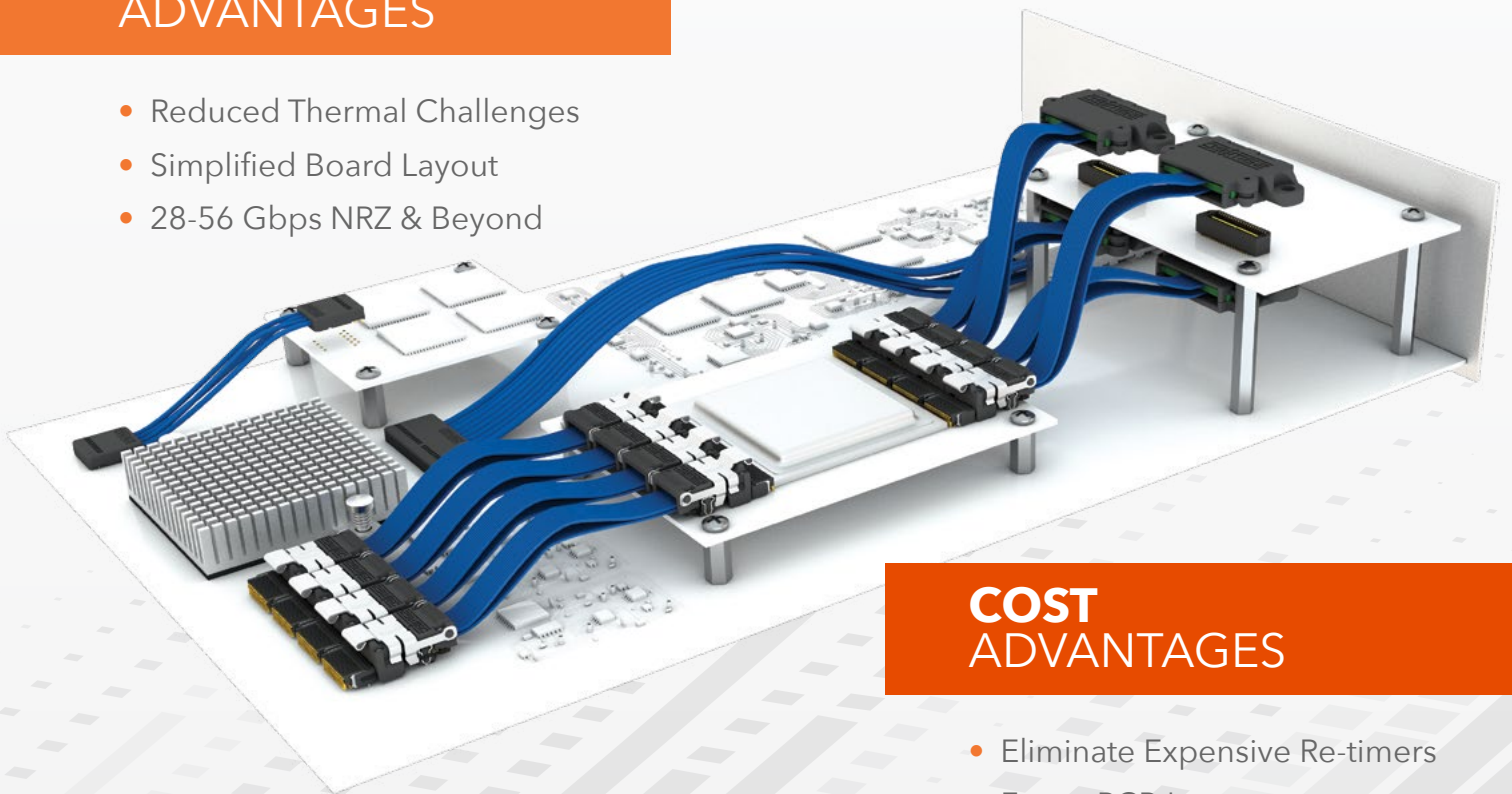
Backplane PCB trace, 5.7 mil wide, 8.3 mil space

# NEXT GEN PERFORMANCE WITHOUT ADDED COST

Samtec's high-performance, low loss twinax cable systems support 28 Gbps and beyond while providing for extended signal reach and system architecture design flexibility - without adding cost to the overall system.

## PERFORMANCE ADVANTAGES

- Reduced Thermal Challenges
- Simplified Board Layout
- 28-56 Gbps NRZ & Beyond



## COST ADVANTAGES

- Eliminate Expensive Re-timers
- Fewer PCB Layers
- Less Expensive PCB Materials



For more information, visit us online.

[Twinax Flyover Application Design Guide](#) | [Flyover QSFP Application Design Guide](#)  
[FireFly™ Application Design Guide](#) | [samtec.com](http://samtec.com)