

Equalized Cables

Get a Performance Boost Without the Expense of Altering the Board

Samtec is now offering an equalized cable option for two of our most popular high speed cable assemblies. The equalized option for these systems is an ideal middle-ground solution for applications where traditional copper cables are inadequate, but an expensive optical upgrade is unnecessary.

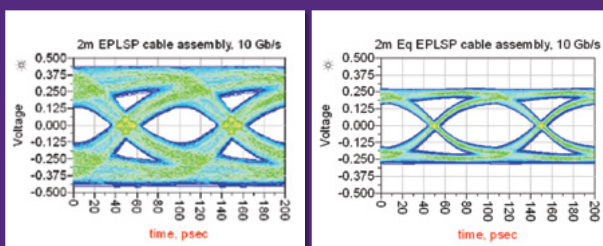
Equalized cables are beneficial in systems where equalization was not implemented into the chip. They are a simple way to upgrade existing systems without the expense of altering the board. Performance improvements with equalization include usable length increased by 20 - 35%, usable data rate increased by 20 - 30%, reduced jitter and improved bit error rate.

Choice of Two High Speed Cable Systems:

- Eye Speed® I/O System
 - 0,80 mm pitch
 - Connector design minimizes PCB real estate
 - Two-piece system allows for high cycles
 - Positive latching
 - Die cast housing shielded for EMI protection
 - Rugged Edge Rate™ contacts
- AcceleRate™ 30 AWG 100Ω twinax cable
 - 0,80 mm pitch
 - Lower-cost alternative to Eye Speed® system
 - Low profile vs Mini-SAS
 - Aluminum shield and drain
 - Metal squeeze latch
 - Mates with vertical or right angle connectors on board



Performance Comparisons with Equalization



Unequalized (EPLSP Series)

Equalized (EPLSP-E Series)

Eye Speed® I/O System Comparisons				AcceleRate™ Twinax System Comparisons			
Data Rate	EPLSP	EPLSP-E	Δ	Data Rate	ECDP	ECDP-E	Δ
14 Gbps	2 m (80')	2,8 m (112')	+40%	14 Gbps	62" (1.6 m)	86" (2.2 m)	+39%
28 Gbps	N/A	0,5 m (20')	N/A	28 Gbps	N/A	25" (0.64 m)	N/A
Cable Length	EPLSP	EPLSP-E	Δ	Cable Length	ECDP	ECDP-E	Δ
1 meter (39.4")	21 Gbps	25.5 Gbps	+20%	12" (305 mm)	23 Gbps	30 Gbps	+30%
3 meter (118")	9.5 Gbps	13 Gbps	+37%	36" (914 mm)	18.5 Gbps	24.5 Gbps	+32%

Rated at 7dB insertion loss. Performance & complete test data available at www.samtec.com?EPLSP or contact sig@samtec.com

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For more High Speed Cable Solutions, please visit samtec.com/hdr