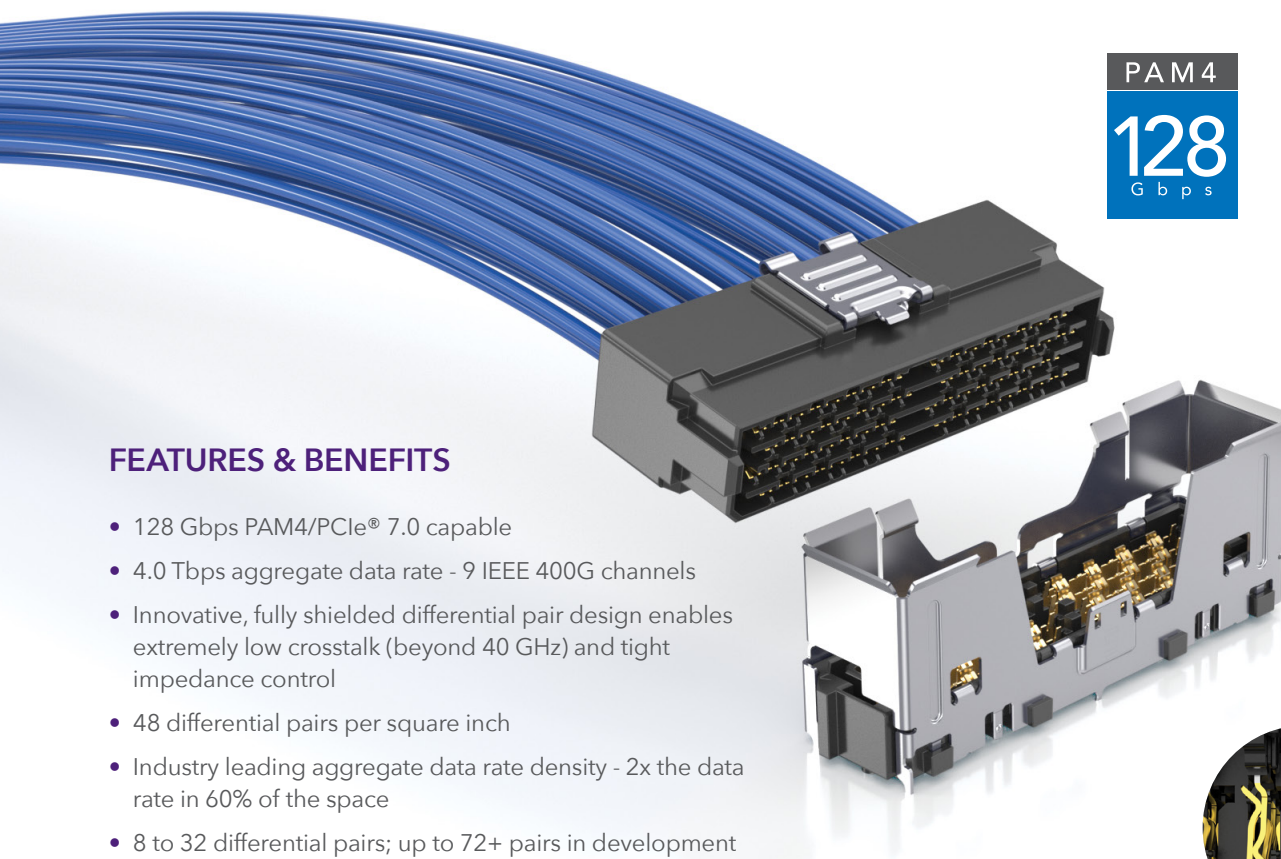




EXTREME HIGH-SPEED, HIGH-DENSITY CABLE



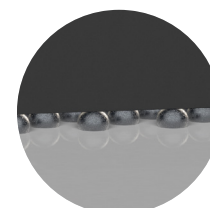
PAM 4
128
G b p s

FEATURES & BENEFITS

- 128 Gbps PAM4/PCIe® 7.0 capable
- 4.0 Tbps aggregate data rate - 9 IEEE 400G channels
- Innovative, fully shielded differential pair design enables extremely low crosstalk (beyond 40 GHz) and tight impedance control
- 48 differential pairs per square inch
- Industry leading aggregate data rate density - 2x the data rate in 60% of the space
- 8 to 32 differential pairs; up to 72+ pairs in development
- Panel I/O solution available with extended EMI shielding (NVACE/NVACP) or rugged 38999 shell (NVA3E/NVA3P)
- Eye Speed® Thinax™ ultra performance twinax cable version in development



Two reliable points of contact guaranteed



BGA attach for density and optimized trace breakout region

Aggregate Data Rate (NRZ)						
1024 Gbps	1536 Gbps	2048 Gbps		3072 Gbps	4096 Gbps	9216 Gbps*
1 Bank			2 Bank			3 Bank*
2 Row	3 Row	4 Row	2 Row	3 Row	4 Row	6 Row*
8 Pairs	12 Pairs	16 Pairs		24 Pairs	32 Pairs	72 Pairs*
						*In development

KEY SPECIFICATIONS (NVAC/NVAM-CT)

CABLE	SIGNAL ROUTING	INSULATOR MATERIAL	CONTACT MATERIAL	PLATING	OPERATING TEMP RANGE	CURRENT RATING	VOLTAGE RATING
34 AWG ultra low skew twinax	92 Ω & 100 Ω	LCP	Copper Alloy	Au over 50 μ" (1.27 μm) Ni	-40 °C to +125 °C	2.0 A per pin (signal) 9.9 A per pin (ground)	-180 VAC/255 VDC

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EXTREME PERFORMANCE & DENSITY SYSTEM

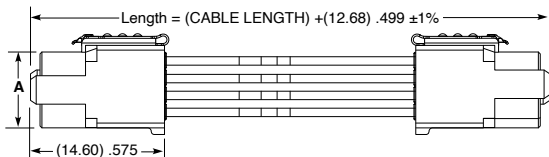
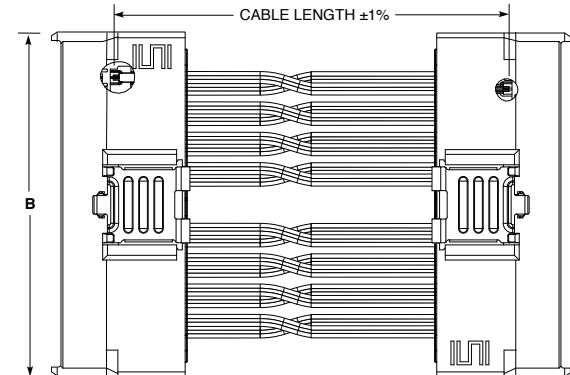
NVAC	STYLE	CABLE STYLE	NO. OF ROWS	NO. OF BANKS	CABLE LENGTH	01	PIN OUT	OPTION
	-DP = 4 pairs per wafer	-1 = 34 AWG, 100 Ω ultra low skew twinax -3 = 34 AWG, 92 Ω ultra low skew twinax	-02 = 2 Rows -03 = 3 Rows -04 = 4 Rows	-1 = 1 Bank -2 = 2 Banks	-“XX.X” = Length in inches (152.4 mm) 06.0” minimum		-1 = Pin A01 to Pin AN (N equals last position)	-L = Latch

NVAC Board Mates: NVAM-CT



NO. OF BANKS	N	B
-1	16	(20.25) .797
-2	32	(36.25) 1.427

ROWS	A
-02	(4.40) .173
-03	(6.20) .244
-04	(8.00) .315

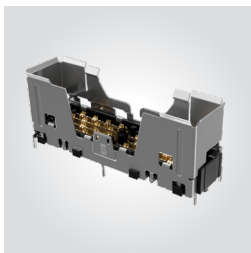


Notes:
Cable lengths longer than 40.00" (1 meter) are not supported with S.I. test data.

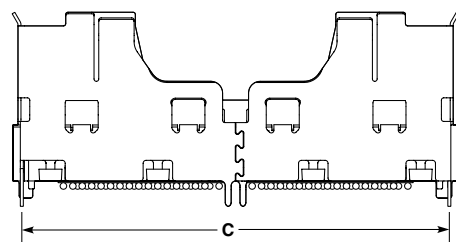
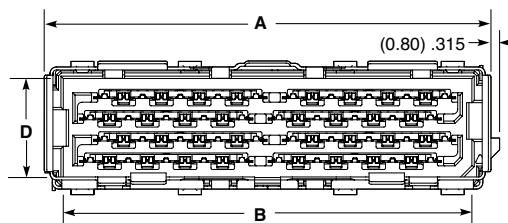
View complete specifications at: samtec.com?NVAC

NVAM	STYLE	NO. OF ROWS	NO. OF BANKS	02.0	PLATING OPTIONS	SOLDER TYPE	CT	"X"R
	-DP = 4 pairs per wafer	-02 = 2 Rows -03 = 3 Rows -04 = 4 Rows	-1 = 1 Bank -2 = 2 Banks		-S = 30 μ" (0.76 μm) Gold on contact area, Matte Tin on solder tail	-2 = Lead-Free Solder Charge		-TR = Tape & Reel -FR = Full Reel Tape & Reel (must order max. quantity per reel; contact Samtec for quantity breaks)

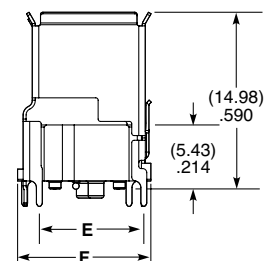
NVAM-CT Board Mates: NVAC



NO. OF ROWS	D	E	F
-02	(4.80) .189	(5.26) .207	(7.70) .303
-03	(6.60) .260	(7.06) .278	(9.50) .374
-04	(8.40) .331	(8.86) .348	(11.30) .445



NO. OF BANKS	A	B	C
-1	(21.89) .862	(18.65) .734	(20.25) .797
-2	(37.89) 1.492	(34.65) 1.364	(36.25) 1.427



Note:
Some sizes, styles and options are non-standard, non-returnable.

View complete specifications at: samtec.com?NVAM-CT