

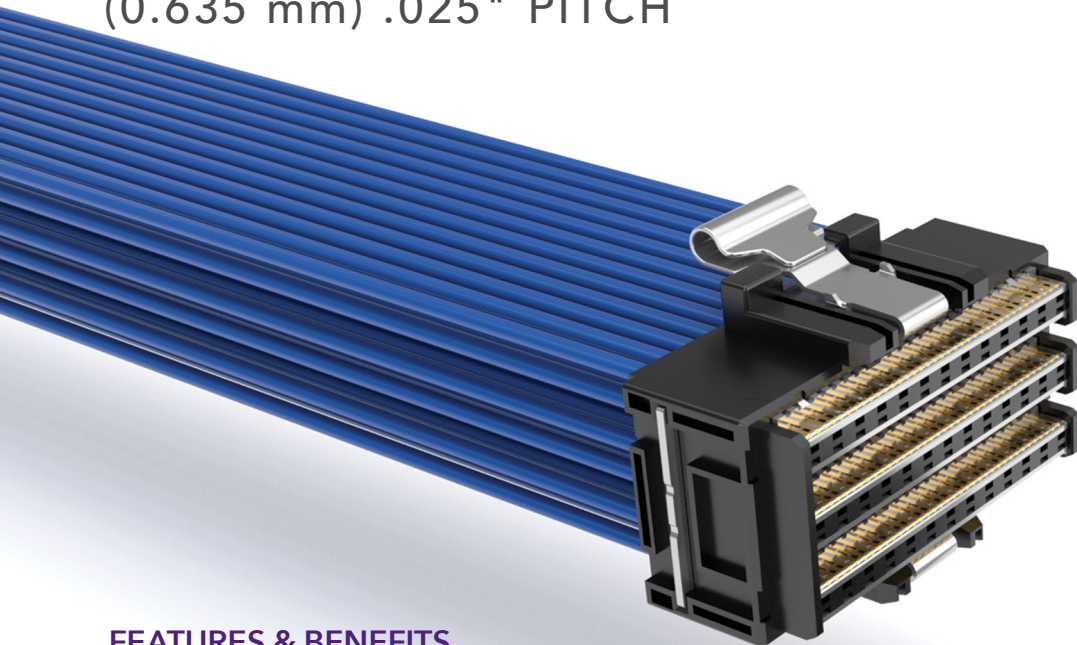
ACCELERATE[®]HP

EXTREME DENSITY CABLE SYSTEM

(0.635 mm) .025" PITCH

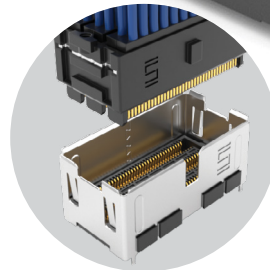
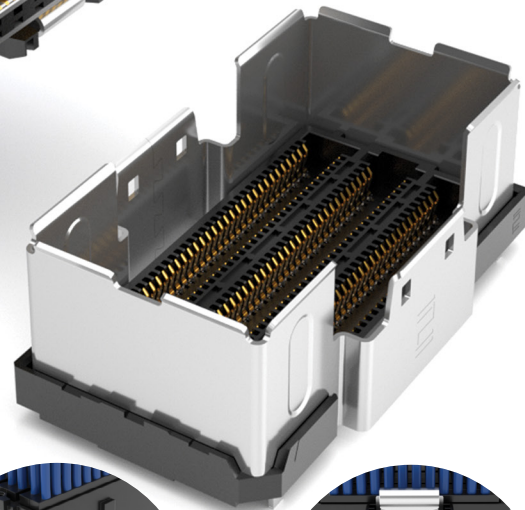
PAM4

112
G b p s

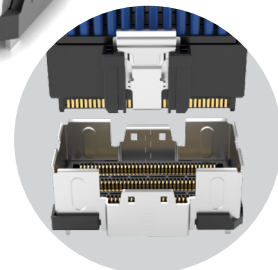


FEATURES & BENEFITS

- Industry's highest density 112G PAM4 cable system
- 0.635 mm contact pitch; 2.20 x 2.40 mm row-to-row pitch
- 4, 6 and 8 rows; 8 or 12 pairs per row
- Up to 96 Thinax™ ultra low skew twinax cable
- Single-ended micro coax configuration
 - 34 AWG ThinSE™ micro coax cables
 - 12 or 18 coax per row
 - Dedicated G-S-G-S-G layout for reduced crosstalk
- Right-angle mating connector
- 112 Gbps PAM4 double density direct-to-chip package solution with up to 144 differential pairs and Eye Speed Thinax™ ultra low skew twinax cable (ART6/ATF6); contact HDR@samtec.com for information
- Cable-to-cable solution in development



Locking for maximum density
(removal tool required)



Squeeze latching
for quick disconnect

KEY SPECIFICATIONS (ARP6)

CABLE	INSULATOR MATERIAL	CONTACT MATERIAL	PLATING	OPERATING TEMP RANGE	CURRENT RATING	VOLTAGE RATING
34 AWG, 92 Ω Thinax™ ultra skew twinax cable	Black LCP	Copper Alloy	Au or Sn over 50 μ" (1.27 μm) Ni	-40 °C to +125 °C	1.3 A (6 pins powered)	165 VAC/233 VDC
34 AWG, 50 Ω ThinSE™ micro coax cable						

(0.635 mm) .025" • HIGH-DENSITY/PERFORMANCE CABLE

ARP6	STYLE	NO. OF POSITIONS	NO. OF ROWS	CABLE LENGTH	END 2 ORIENTATION	END 1 OPTION	END 2 OPTION
	-DP = 92 Ω Thinax™ ultra low skew twinax cable -SE = 50 Ω ThinSE™ micro coax cable -DS = Mixed -DP & -SE	Specify NO. OF POSITIONS from chart	-04 = Four Rows -06 = Six Rows -08 = Eight Rows	"XX.X" = Length in Inches 05.0" (127 mm) minimum	-T = Top -B = Bottom	-L = Squeeze Latch -T = Locking Tool -S = Single Latch (-04 row only; required for mating APF6-RA-S)	-L = Squeeze Latch -T = Locking Tool -S = Single Latch (-04 row only; required for mating APF6-RA-S)

ARP6 Board Mates:
APF6-L, APF6-T, APF6-S, APF6-RA*, APF6-RA-S
*APF6-RA requires APF6-C cage to mate with ARP6.

ARP6-DP-037-06-XX.X-B-L-L SHOWN

NO. OF POSITIONS PER ROW	A	NO. OF ROWS	B	C
-025	(20.34) .801	-04	(12.54) .494	(18.58) .731
-037	(27.96) 1.101	-06	(17.14) .675	(23.39) .921
		-08	(21.74) .856	(27.99) 1.102

STYLE	NO. OF POSITIONS PER ROW	PINOUT ARRANGEMENT
-DP	-025	8 Differential Pairs Per Row
-DP	-037	12 Differential Pairs Per Row
-SE	-025	12 Single-ended Signals Per Row
-SE	-037	18 Single-ended Signals Per Row
-DS	-025	2 Rows of 12 SE, Remaining Rows 8 DP Each
-DS	-037	2 Rows of 18 SE, Remaining Rows 12 DP Each

View complete specifications at: samtec.com?ARP6

APF6	NO. OF POSITIONS	LEAD STYLE	PLATING	ROW	SOLDER TYPE	OPTION	"X"R
	-025, -037 (Per Row)	Leave blank for -RA & -RA-S -03.5 = (3.5 mm) .138"	-L = 10 μ" (0.25 μm) Gold on contact area, Matte Tin on tail (Not available with -RA & -RA-S) -S = 30 μ" (0.76 μm) Gold on contact area, Matte Tin on tail	-04 = Four Rows -06 = Six Rows -08 = Eight Rows	-0 = Column Attach (not available with -RA-S) -1 = Tin/Lead Alloy Solder Charge (-RA & -RA-S only) -2 = Lead-Free Solder Charge (-RA & -RA-S only)	-L = Squeeze Latch -T = Through-hole Locking Tool -S = Surface Mount Locking Tool (-06 & -08 only) -RA = Right-angle panel mount (-04 row only) (Requires cage; visit samtec.com?APF6-C) -RA-S = Right-angle mid-board shield (-04 row & ARP6-S mate only)	-TR = Tape & Reel -FR = Full Reel Tape & Reel (must order maximum quantity per reel; contact Samtec for quantity breaks)

APF6-L, APF6-T, APF6-S, APF6-RA, APF6-RA-S Cable Mates:
ARP6

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

APF6-025-03.5-X-04-0-L SHOWN

View complete specifications at: samtec.com?APF6-L, samtec.com?APF6-T, samtec.com?APF6-S, samtec.com?APF6-RA & samtec.com?APF6-RA-S