

ACCELERATE[®]HP

EXTREME DENSITY CABLE SYSTEM

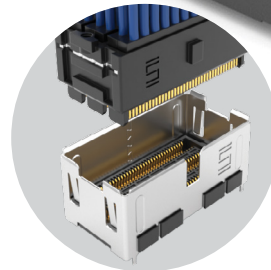
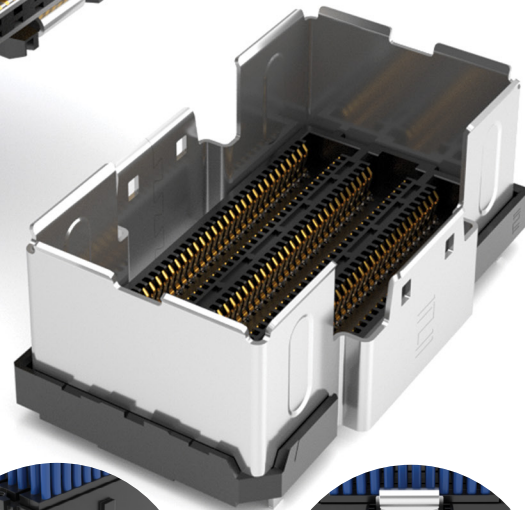
(0.635 mm) .025" PITCH

PAM4

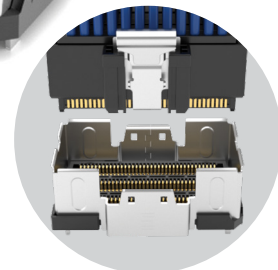
112
G b p s

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 to 6 rows (8 rows in development); 8 or 12 pairs per row
- Up to 96 Thinax[™] cables in development
- Single-ended micro coax configuration
 - 34 AWG ThinSE[™] coax
 - 12 or 18 coax per row
 - Dedicated G-S-G-S-G layout for reduced crosstalk
- Right-angle mating connector in development
- 112 Gbps PAM4 Gen 2 on-package system with up to 144 differential pairs and Eye Speed Thinax[™] ultra performance twinax cable (ART6/ATF6); contact HDR@samtec.com for information



Locking for maximum density
(removal tool required)



Squeeze latching
for quick disconnect

KEY SPECIFICATIONS (ARP6)

PITCH	CABLE	SIGNAL ROUTING	INSULATOR MATERIAL	CONTACT MATERIAL	PLATING	OPERATING TEMP RANGE
(0.635 mm) .025"	34 AWG ultra low skew Thinax [™]	92 Ω Differential	Black LCP	Copper Alloy	Au or Sn over 50 μ " (1.27 μ m) Ni	-40 °C to +125 °C

(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 Ultra low skew Thinax™ cable	Specify NO. OF POSITIONS from chart	-04 = Four Rows	-“XX.X” = Length in Inches 05.0" (127 mm) minimum	-T = Top	-L = Squeeze Latch	-L = Squeeze Latch
	-SE = 50 Ω ThinSE™ coax cable		-06 = Six Rows		-B = Bottom	-T = Locking Tool	-T = Locking Tool
	-DS = Mixed -DP & -SE				-S = Single Latch (-04 row only; required for mating APF6-RA-S)	-S = Single Latch (-04 row only; required for mating APF6-RA-S)	

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

LENGTH = (CABLE LENGTH) + (7.1) .28 ±1%
CABLE LENGTH ±1%
(12.40) .488

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

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-S	-L = 10 μ" (0.25 μm) Gold on contact area, Matte Tin on tail	-04 = Four Rows	-0 = Column Attach (not available with -RA-S)	-L = Squeeze Latch	-TR = Tape & Reel
	-03.5 = (3.5 mm) .138"		-S = 30 μ" (0.76 μm) Gold on contact area, Matte Tin on tail	-06 = Six Rows	-1 = Tin/Lead Alloy Solder Charge (-RA-S only)	-T = Through-hole Locking Tool	-FR = Full Reel Tape & Reel (must order maximum quantity per reel; contact Samtec for quantity breaks)
					-2 = Lead-Free Solder Charge (-RA-S only)	-S = Surface Mount Locking Tool (-06 only)	
						-RA-S = Right-angle mid-board shield (ARP6-S mate only)	

**APF6-L/APF6-T
APF6-S/APF6-S-RA Cable Mates:**
ARP6

(12.08) .476

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

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

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

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Samtec:](#)

[APF6-025-03.5-S-04-0-L-TR](#) [APF6-025-03.5-S-06-0-L-TR](#) [APF6-100-03.5-L-04-0-A-TR](#) [APF6-040-03.5-L-04-0-A-FR](#)
[APF6-020-03.5-L-04-2-FR](#) [APF6-040-03.5-L-04-2-FR](#) [APF6-100-03.5-S-04-0-FR](#) [APF6-037-03.5-S-06-0-L-TR](#) [APF6-](#)
[060-03.5-L-04-0-A-TR](#) [APF6-100-03.5-S-04-2-FR](#) [APF6-037-03.5-S-04-2-T-TR](#) [APF6-100-03.5-S-04-0-TR](#) [APF6-020-](#)
[03.5-L-04-0-A-TR](#) [APF6-040-03.5-L-04-0-A-TR](#)