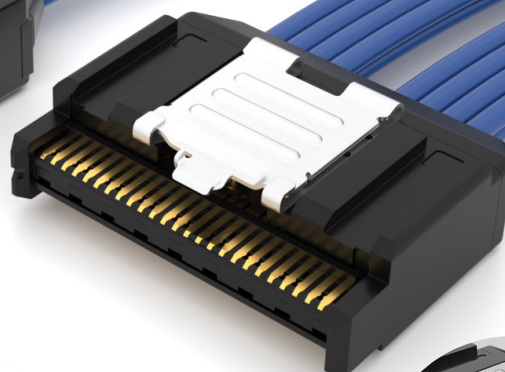


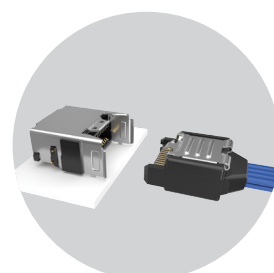
# ACCELERATE<sup>®</sup>

## SLIM, DIRECT ATTACH CABLE ASSEMBLIES

(0.635 mm) .025" PITCH



Contacts directly soldered to the twinax for improved signal integrity



Right-angle available.  
Visit [samtec.com?ARF6-RA](https://www.samtec.com?ARF6-RA) for specifications.

### FEATURES & BENEFITS

- Slimmest cable assembly in the industry – 7.6 mm width
- High-density 2-row design; 8, 16 and 24 differential pair configurations
- Differential pair (Thinax™), single-ended (ThinSE™) and mixed signaling available
- Multiple wiring options including reverse polarity
- Mating board level socket (ARF6 Series) features standard rugged weld tabs for increased stability on the PCB
- Rugged metal latching and shielding
- Supports 64 Gbps PAM4 (32 Gbps NRZ) applications; PCIe® 6.0/CXL® 3.2 capable
- Utilizes Samtec's Flyover® Technology to simplify board layout and extend signal reach
- In development: AcceleRate® Boost cable-to-board system provides optimized 112 Gbps PAM4 performance with up to 96 differential pairs using Thinax™ ultra low skew twinax cable. This is the next evolution of Samtec's popular ARC6/ARF6 product solution.

### KEY SPECIFICATIONS (ARC6/ARF6)

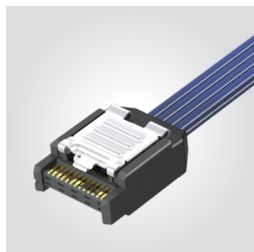
CABLE	INSULATOR MATERIAL	CONTACT MATERIAL	PLATING	OPERATING TEMP RANGE	CURRENT RATING	VOLTAGE RATING
34 AWG, 100 Ω ultra low skew twinax cable	Black LCP	Copper Alloy	Au over 50 μ" (1.27 μm) Ni	-40 °C to +125 °C	1.2 A (1 pin powered)	135 VAC/191 VDC
34 AWG, 92 Ω Thinax™ ultra low skew twinax cable						
34 AWG, 50 Ω ThinSE™ coax cable						

PCI-SIG®, PCI Express® and the PCIe® design marks are registered trademarks and/or service marks of PCI-SIG.

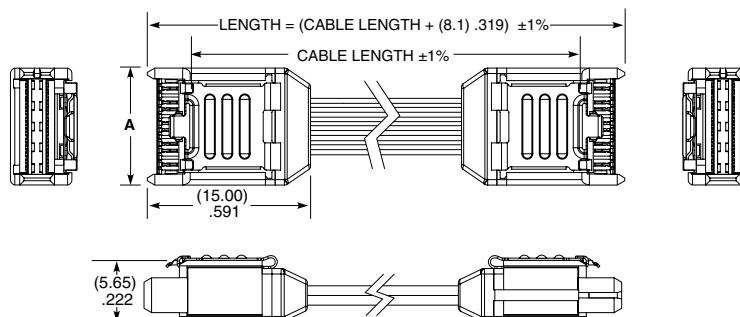
(0.635 mm) .025" • SLIM CABLE & SOCKET

ARC6	SIGNAL TYPE	NO OF PAIRS/POSITIONS	CABLE LENGTH	END 1	END 2	WIRING OPTION	CABLE TYPE
	Leave blank for Differential Pair (-DP)	-08, -16, -24 (-DP only)	- "XX.X" = Length in Inches 03.0" (76.2 mm) minimum	-LU = Latch Up	-LU = Latch Up	-2 = Pin 1 to Pin 2 (End 2 -LD option only)	-1 = 34 AWG, 100 Ω ultra low skew twinax cable (-DP only)
	-S = Single-Ended	-13, -25, -37 (-S & -M only)			-LD = Latch Down (Not available with -M style)	-3 = Pin 1 to Pin N-1 (End 2 -LU option only)	-3 = 34 AWG, 92 Ω Thinax™ ultra low skew twinax cable (-DP only)
	-M = Mixed -DP & -S					-2R = Pin 1 to Pin 2 Reversed Polarity (-DP style & End 2 -LD option only) 06.0" (152.4 mm) min. cable length	-4 = 34 AWG, 50 Ω ThinSE™ coax cable (-S only)
						-3R = Pin 1 to Pin N-1 Reversed Polarity (-DP style & End 2 -LU option only) 06.0" (152.4 mm) min. cable length	-6 = Thinax™ (-3) and ThinSE™ (-4) cables (-M only)

**ARC6**  
Board Mates:  
ARF6



NO. OF PAIRS/POSITIONS	A	N	N-1
-08/-13	(10.90) .429	26	25
-16/-25	(18.52) .729	50	49
-24/-37	(26.14) 1.029	74	73



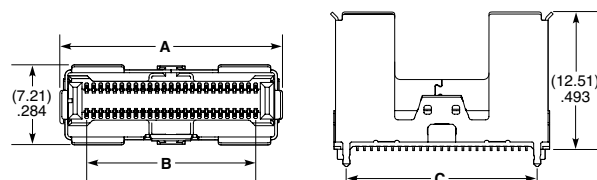
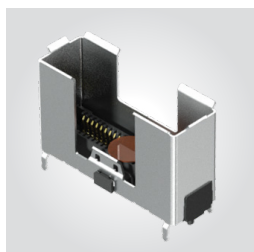
ARC6-08-XX.X-LU-LU-3-X SHOWN

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

View complete specifications at: [samtec.com?ARC6](http://samtec.com?ARC6)

ARF6	NO. OF PAIRS	PLATING	ROW	A	K	"X"R
	-08 (13 pins/row)	-S = 30 μ" (0.76 μm) Gold on contact area, Matte Tin on tail	-D = Double Row	-A = Alignment Pin	-K = Polyimide film Pick & Place Pad	-TR = Tape & Reel
	-16 (25 pins/row)					-FR = Full Reel Tape & Reel (must order maximum quantity per reel; contact Samtec for quantity breaks)
	-24 (37 pins/row)	-STL = 30 μ" (0.76 μm) Gold on contact area, Matte Tin/Lead on tail				

**ARF6**  
Cable Mates:  
ARC6



ARF6-16-S-D-A SHOWN

NO. OF PAIRS	A	B	C
-08	(12.46) .491	(7.62) .300	(9.59) .378
-16	(20.08) .791	(15.24) .600	(17.21) .678
-24	(27.70) 1.091	(22.86) .900	(24.83) .978

**Notes:**  
Tape & Reel packaging and K-Dot are standard.

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

View complete specifications at: [samtec.com?ARF6](http://samtec.com?ARF6)