



ACCELERATE® PCIe® 6.0 CABLE ASSEMBLIES

PAM4

64
G T p s

SLIM, DIRECT ATTACH CABLE SYSTEM

- Supports 64 GTps PAM4 applications
- PCIe® 6.0/CXL® 3.1 capable
- 8, 16 and 24 differential pair options
 - 16 differential pair option can support PCIe® x4 plus sidebands
 - 24 differential pair option can support PCIe® x8 plus sidebands
- Incredibly slim 7.6 mm width
- High-density 2-row design with a 0.635 mm pitch
- 34 AWG, Eye Speed® ultra low skew twinax, multiple impedance options
- "Reversed Polarity" pinout option for reduced Far-End Crosstalk
- Utilizes Samtec's Flyover® cable technology to simplify board layout and extend signal reach
- Right-angle socket available (ARF6-RA)



ARC6/ARF6

ACCELERATE®

PCI EXPRESS®

ADDITIONAL ACCELERATE®, PCIe® 6.0 CAPABLE SOLUTIONS

AcceleRate® HD High-Density Slim Body Arrays

Slim 5 mm width, 4-row design with up to 400 total I/Os



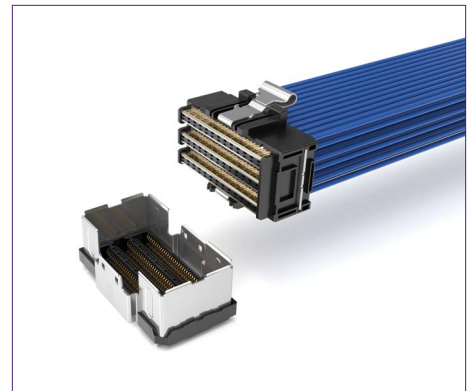
AcceleRate® HP High-Performance Arrays

Extreme performance to 112 Gbps PAM4 in an open-pin-field design



AcceleRate® HP High-Performance Cable System

Industry's highest density 112 Gbps PAM4 cable-to-board system



Please visit samtec.com/accelerate-cable for more about Samtec's AcceleRate® Cable, or samtec.com/accelerate to learn more about the product family.

RECOMMENDED PINOUTS & SIDEBANDS

PCIe® 5.0 CHANNEL SIMULATION RESULTS

Exceeds 5.0 minimum requirement:
 Eye Height (EH) ≥ 15 mV
 Eye Width (EW) ≥ 0.3 UI

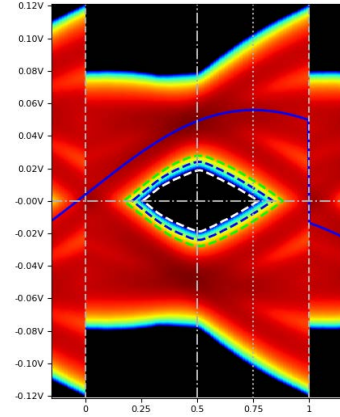
ARC6-16, PCIe® x4

2	GND	GND	1
4	PETp0	PETp1	3
6	PETn0	PETn1	5
8	GND	GND	7
10	PETp2	PETp3	9
12	PETn2	PETn3	11
14	GND	GND	13
16	2WCL_A	FLEXIO9_A	15
18	2WDA_A	FLEXIO0_A	17
20	GND	GND	19
22	PERST#_A	RCLK_Ap	21
24	PRPE_A	RCLK_An	23
26	GND	GND	25
28	FLEXIO3_A	FLEXIO5_A	27
30	FLEXIO4_A	FLEXIO6_A	29
32	GND	GND	31
34	FLEXIO1_A	FLEXIO7_A	33
36	FLEXIO2_A	FLEXIO8_A	35
38	GND	GND	37
40	PERp2	PERp3	39
42	PERn2	PERn3	41
44	GND	GND	43
46	PERp0	PERp1	45
48	PERn0	PERn1	47
50	GND	GND	49

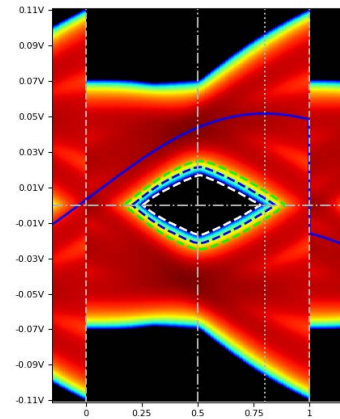
ARC6-24, PCIe® x8

2	GND	GND	1
4	PETp0	PETp1	3
6	PETn0	PETn1	5
8	GND	GND	7
10	PETp2	PETp3	9
12	PETn2	PETn3	11
14	GND	GND	13
16	PETp4	PETp5	15
18	PETn4	PETn5	17
20	GND	GND	19
22	PETp6	PETp7	21
24	PETn6	PETn7	23
26	GND	GND	25
28	2WCL_A	FLEXIO9_A	27
30	2WDA_A	FLEXIO0_A	29
32	GND	GND	31
34	PERST#_A	RCLK_Ap	33
36	PRPE_A	RCLK_An	35
38	GND	GND	37
40	FLEXIO3_A	FLEXIO5_A	39
42	FLEXIO4_A	FLEXIO6_A	41
44	GND	GND	43
46	FLEXIO1_A	FLEXIO7_A	45
48	FLEXIO2_A	FLEXIO8_A	47
50	GND	GND	49
52	PERp6	PERp7	51
54	PERn6	PERn7	53
56	GND	GND	55
58	PERp4	PERp5	57
60	PERn4	PERn5	59
62	GND	GND	61
64	PERp2	PERp3	63
66	PERn2	PERn3	65
68	GND	GND	67
70	PERp0	PERp1	69
72	PERn0	PERn1	71
74	GND	GND	73

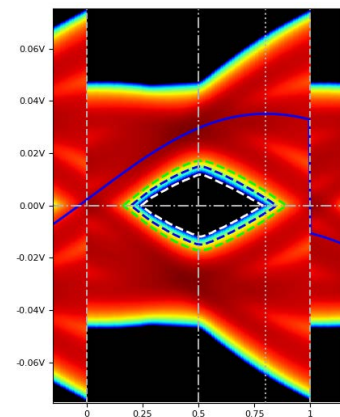
250 mm CABLE LENGTH
 EH = 37.62 mV & EW = 0.517 UI



500 mm CABLE LENGTH
 EH = 33.75 mV & EW = 0.526 UI



1000 mm CABLE LENGTH
 EH = 23.69 mV & EW = 0.543 UI



* Modeled Assembly: 16 pair ARC6 with 34 AWG 100 Ω Eye Speed® (solid core) cable mated with two vertical ARF6 connectors