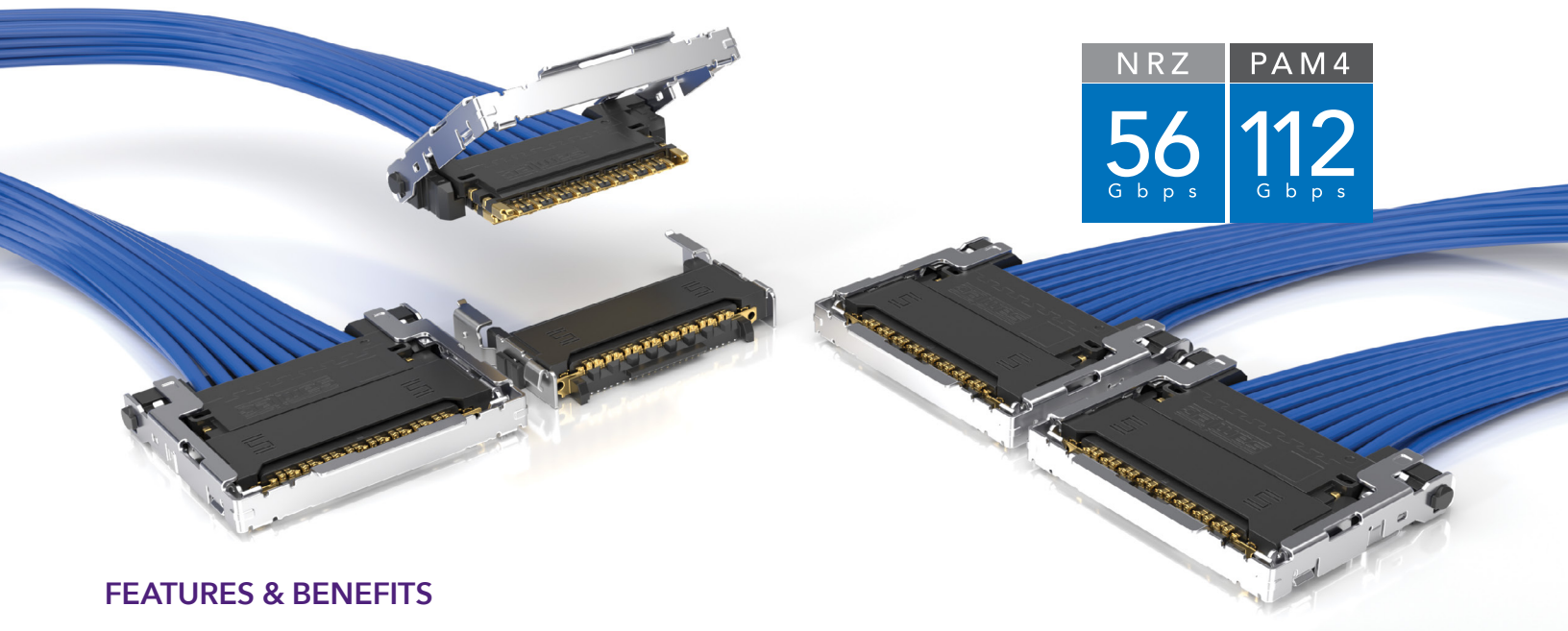




# 112 Gbps PAM4, LOW PROFILE HIGH-DENSITY CABLE SYSTEM



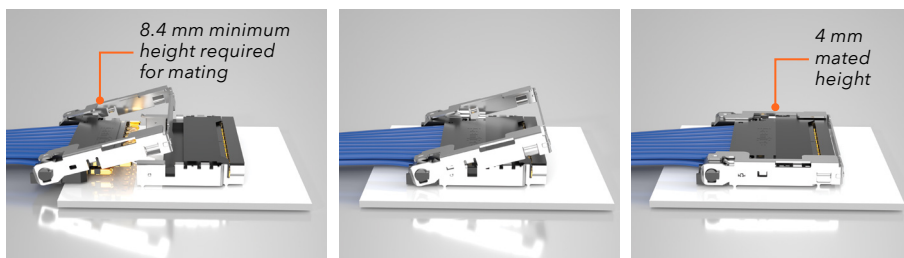
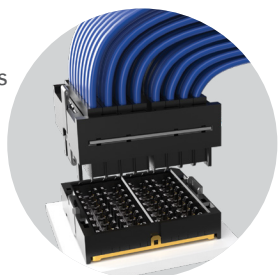
|         |          |
|---------|----------|
| NRZ     | PAM4     |
| 56 Gbps | 112 Gbps |

## FEATURES & BENEFITS

- Ultra low profile interconnect for placement adjacent to the IC package, under heat sinks or other cooling hardware
- Up to 16 pairs in an incredibly low 4 mm profile
- 112 Gbps PAM4 per lane enabling 25.6 TB aggregate with a path to 51.2 TB
- Si-Fly™ HD is the highest density on-package system with 224 Gbps PAM4 performance, routing signals from the silicon package through Eye Speed® AIR™ ultra performance twinax cable (HPC/HPI). Contact [HDR@samtec.com](mailto:HDR@samtec.com) for additional information.
- PCIe® 6.0/CXL™ 3.1 capable



Si-Fly™ HD features 64 pairs in an incredibly small 14 mm x 14 mm footprint



In development: Rugged latching configuration provides a secure connection directly adjacent to the IC package for increased signal integrity performance

## KEY SPECIFICATIONS (CPC/CPI)

| CABLE                        | SIGNAL ROUTING | INSULATOR MATERIAL | CONTACT MATERIAL | PLATING                    |
|------------------------------|----------------|--------------------|------------------|----------------------------|
| 34 AWG ultra low skew twinax | 92 Ω & 100 Ω   | Black LCP          | Copper Alloy     | Au over 50 μ" (1.27 μm) Ni |

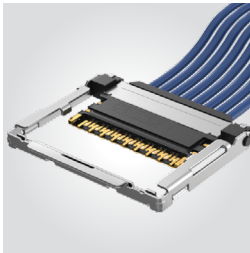
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## 0.6 mm LOW PROFILE CABLE & INTERCONNECT

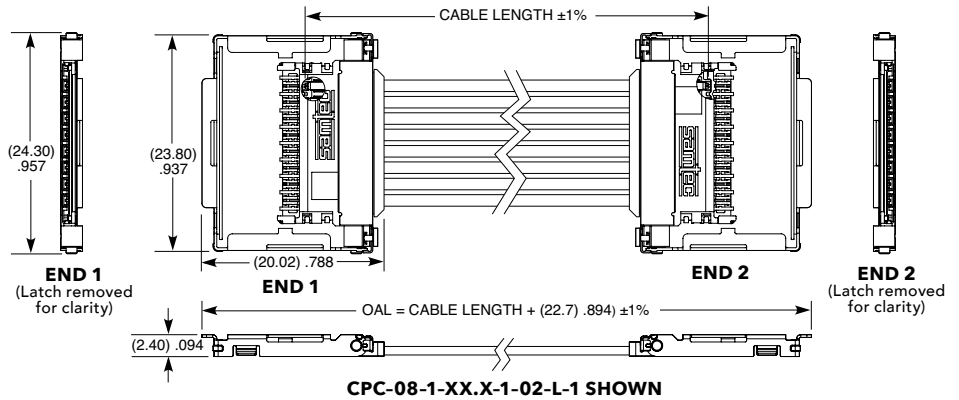
| CPC | NO. OF PAIRS | CABLE STYLE   | CABLE LENGTH   | ROW  | END 2        | L | WIRING OPTION                             |
|-----|--------------|---|--|--|--------------|---|---|
|     | -08, -16     | -1<br>= 92 Ω 34 AWG<br>ultra low skew<br>twinax cable<br><br>-2<br>= 100 Ω 34 AWG<br>ultra low skew<br>twinax cable | -"XX.X"<br>= Wire Length in Inches<br>06.0" (152.4 mm) minimum | -1<br>= 1 Row<br>(-08 pairs only)<br><br>-2<br>= 2 Row<br>(-16 Pairs only) | -02<br>= CPC |   | Specify<br>WIRING<br>OPTION<br>from chart |

| WIRING OPTION | ROW    | CONFIGURATION                  |
|---------------|--------|--------------------------------|
| -1            | Single | Pin A1 to A25                  |
|               | Double | Pin A1 to A25<br>Pin B1 to B25 |
| -2            | Single | Pin A1 to A1                   |
|               | Double | Pin A1 to B1<br>Pin B1 to A1   |

**CPC**  
Board Mates:  
CPI



PRELIMINARY

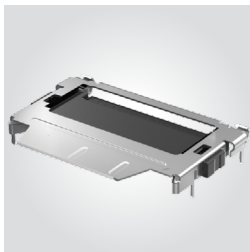


**Note:**  
Cable lengths longer than 40.00" (1 meter) are not supported with S.I. test data.

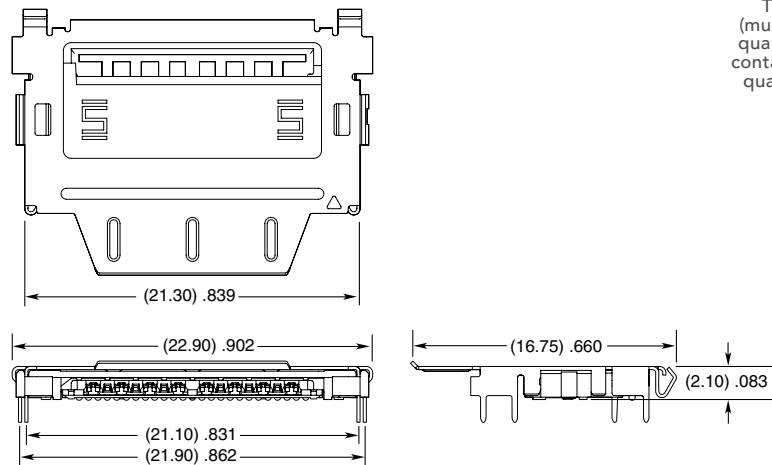
View complete specifications at: [samtec.com?CPC](http://samtec.com?CPC)

| CPI | NO. OF PAIRS | LEAD STYLE             | ROW   | PLATING OPTION  | RA | SOLDER TYPE                   | L | "X"R   |
|-----|--------------|------------------------|---|---|----|-------------------------------|---|--|
|     | -08,<br>-16  | -01<br>= Surface Mount | -1<br>= 1 Row, 8 Pairs<br><br>-2<br>= 2 Row, 16 Pairs | -S<br>= 30 μ" (0.76 μm)<br>Gold on contact area,<br>Tin on tail |    | -2<br>= Lead-Free Solder Ball |   | -TR<br>= Tape & Reel<br><br>-FR<br>= Full Reel Tape & Reel (must order max. quantity per reel; contact Samtec for quantity breaks) |

**CPI**  
Cable Mates:  
CPC



PRELIMINARY



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

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