

KickStart Connector System >

The KickStart Connector System creates an all-in-one cablebased connection system for cabled boot drives that is flexible, easy to implement, and combines power and signal circuits into a single cable.



FEATURES AND ADVANTAGES

Reduces the need to manage multiple cables by offering an easily implemented single-cable solution for boot drive connectivity

Design incorporates power, high-speed and low-speed signal circuits into a single cable assembly

Maximizes space by using a low-profile design

With a mated height of 11.10mm, KickStart connectors meet the Open Compute Project (OCP) maximum specification of 11.30mm and are lower than any other OCP-recommended internal I/O connector specification

Enables simple hybrid cables and is compatible with Sliver 1C cabled receptacles

Supports a full EDSFF (enterprise and data center standard form factor) x4 hard drive pinout 1-to-1

Small Form Factor Number	SFF-TA-1036
Current	Up to 4.0A
Wire Gauge	24 AWG (power), 30 AWG (high speed), 34 AWG (low speed)
Circuit Count	10 differential pairs, 12 single ended
Height	11.10mm
Operating Temperatures	-40 to +85°C

Offers robust mechanical design

Meets industry specification of 25N active wrench test with margin

Utilizes a known design to minimize risk and enable fast time to market

Contact and termination design are based on proven NearStack PCIe technology

Simplifies system design and procurement as an OCP M-PIC standard

The KickStart Connector System is recommended in M-PIC and standardized in SFF-TA-1036

Increases design flexibility through multiple cable exit options

Horizontal exit cable is available today, with vertical exit cables planned for availability soon

Offers next-generation high-speed capability

Twinax cable and optimized connector design enable the KickStart system to support Gen. 5 PCle (32 Gbps NRZ) speeds, with planned support for Gen. 6 PCle (64 Gbps PAM-4) speeds soon







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MARKETS AND APPLICATIONS

Server and Storage

OCP-based servers Data centers White box servers Storage systems



SPECIFICATIONS

Reference Information

Packaging: Embossed tape with cover

Designed in: Millimeters

RoHS: Yes

Halogen Free: Yes

Electrical

Voltage (max.):

Signals: 29.9V AC RMS

Power: 12V DC

Current (max.):

Power Contact: 4.0A

Signal Contact: 0.65A

Single Ended: 0.3A

Contact Resistance (max.): 10 milliohms

Dielectric Withstanding Voltage: 300V

Insulation Resistance: 1,000 Megohms

Mechanical

Pitch: 2.00mm, high-speed pairs

Height: 11.10mm

Width: 22.30mm

Circuit Size: 10 differential pairs, 12 single ended,

2 power (50 total SMT tails)

Durability (max.): 200 cycles

Mate Force (max.): 40N

Un-mate Force (min.): 5N

Physical

Housing: LCP UL 94 V-2

Contact: Copper Alloy

Plating: Contact Area—Gold

Solder Tail Area—Gold

Underplating—Nickel

Operating Temperatures: -40 to +85°C

www.molex.com/en-us/products/connectors/high-speed-internal-io/kickstart-connector-system