

HSAutoLink II Interconnect System >

HSAutoLink II connectors and cable assemblies provide a versatile and robust differential-pair connectivity solution for transportation applications. With a variety of customizable high-speed pin configurations, the HSAutoLink II system supports high-speed signaling protocols including USB 2.0, 3.0, 100Base-T1, low-voltage differential signal (LVDS) and others with data rates up to 13.5 Gbps.



ADVANTAGES AND FEATURES

Offers a variety of options to meet application requirements

Multiple off-the-shelf cable and header variants are available to simplify validation and engineer work, while custom solutions are also possible to match customer performance needs.

Includes sealed options for use in environments subject to various exposure levels

Sealed connectors and headers feature fully protected perimeter seals rated at IP67, with IP69K ratings possible in customized designs.

Provides excellent long-term reliability with robust design

The proven low-force helix (LFH) terminal interface, fully protected shield case and high-temperature plastic housings ensure good signal integrity and dependable performance.

Enables high versatility with support for multiple protocols in the same connector

The connector supports LVDS, USB 2.0 and 3.0, FD Link III and IV, GMSL 2 and 3, 100BaseT1 and DisplayPort protocols.

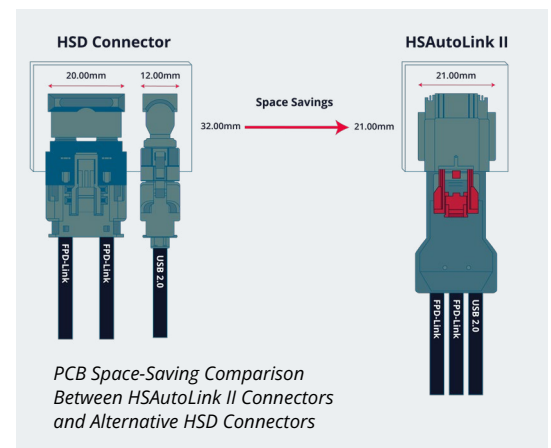
Delivers high-speed communication protocols for applications including cameras, infotainment, telematics and advanced driver assistance systems (ADAS)

Connectors support up to 13.5 Gbps per lane depending on type of cable.

Current	1.5A (max.)
Pitch	1.27mm
Circuits	6, 12, 14, hybrid
Data Rate	Up to 13.5 Gbps
Sealing	Up to Class 2 (IP67/IP69K)
Operating Temperatures	-40 to +105°C

Reduces PCB footprint with customizable pinout configurations

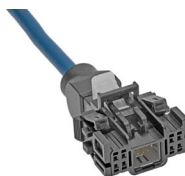
With multiple high-speed pinout configurations and cable exit options, HSAutoLink II saves space on the PCB compared with alternative products.



12-Circuit Unsealed Wire-to-Wire Connector and Plug



12-Circuit Sealed Wire-to-Wire Connector and Plug



Wire-to-Board Hybrid Connector



12-Circuit Sealed Wire-to-Board Header



12-Circuit Unsealed Wire-to-Board Header

HSAutoLink II Interconnect System >

MARKETS AND APPLICATIONS

Automotive

Advanced driver assistance systems (ADAS) cameras
Camera-to-controller/controller-to-display connections
Connected vehicle services
Diagnostics or data uploading systems
Infotainment systems
LCD screens
Navigation systems
Safety system cameras
Telematics devices

Commercial Vehicles

Agricultural equipment
Motorcycles
All-terrain vehicles
Watercrafts



Cameras



Infotainment Systems



Agricultural Equipment

SPECIFICATIONS

Reference Information

Packaging: Trays (headers), loose (cable assemblies)
Designed in: Millimeters
RoHS: Yes
Halogen: Low halogen
Glow Wire Capable: N/A
Flammability Rating: UL 94 HB

Electrical

Voltage (max.): 36V
Current (max.): 1.5A
Contact Resistance: 20 milliohms
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 100 Megohms (min.)

Mechanical

Pitch: 1.27mm
Insertion Force to PCB: 20N (max.)
Mating Force: 75N (max.)
Unmating Force: 100N (max.)
Durability (min.):
Connector—25 cycles
Terminal system—5,000 cycles

Physical

Housing: High-temperature plastic
Orientation:
Header - Vertical, right angle
Cable Assemblies - 180°, 90°, others available upon request
Contact: High-performance Copper Alloy
Terminal Plating:
Contact Area—0.38μm Gold (min.)
Solder Tail Area—2.5μm Tin (min.)
Underplating—2.5μm overall (min.)
Shield Plating:
Overplating—2.5μm Tin (min.)
Underplating—1.25μm overall (min.)
PCB Thickness: 1.60mm (nominal)
Operating Temperatures: -40 to +105°C

www.molex.com