

# HSAutoLink Interconnect System

**molex**

The dependable HSAutoLink Interconnect System brings a proven, USCAR-30 compliant solution for point-to-point in-vehicle connections, complete with multiple keying options and full-length cable shielding for superior signal performance and reduced Electro-Magnetic Interference (EMI)

## Features and Advantages

### Data rates up to 2.0 Gbps in 4 and 5 Circuit Connectors

Supports multiple protocols in the same connector (USB 2.0, LVDS, Ethernet, APIX, etc.)

### Multiple polarizations and color-coding available

10 polarizations and colored headers available for either end of the cable assembly. Ensures correct assembly and provides versatility.

### Compact, low-profile system

Optimizes device-side space savings to meet future needs for increasing high-speed communication links

### Full-length cable shielding

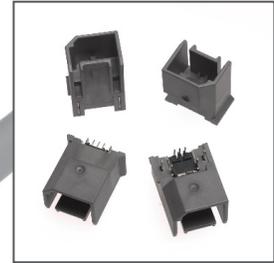
Provides superior signal performance and reduced electro magnetic interference (EMI)

### Fully protected shield case

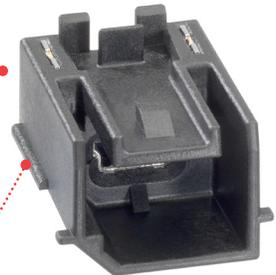
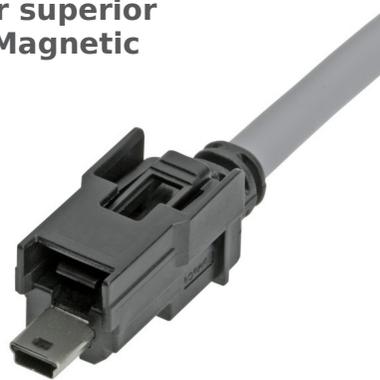
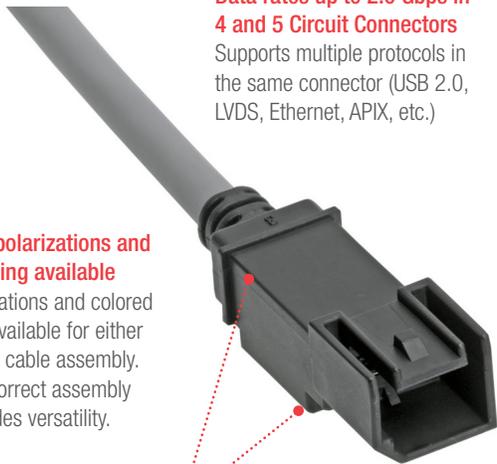
Rear side of right-angle header includes closed shield for robustness, signal integrity, and EMI protection

### Headers manufactured from high-temperature plastic material

Compatible with lead-free through-hole reflow process (Pin-in-Paste) or lead-free selective wave soldering process. Meets Jecdec 260°C peak temperature



HSAutoLink Headers and Cable Assemblies



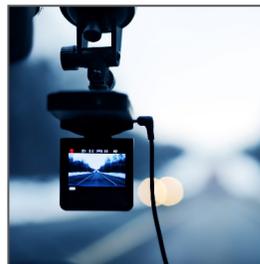
## Applications

### Automotive and Commercial Vehicles

- Infotainment
- Telematics
- Navigation Systems
- Connected Vehicle Services
- Diagnostics and Data Upload
- Camera to Controller
- Controller to Display



Navigation Systems



Camera to Controller



Infotainment

## Specifications

### REFERENCE INFORMATION

Reference Information

Packaging:

Headers: Tray

Cable assemblies: Loose

Mates With: Cable assemblies:

111014, 111015, 111041, 111005 series

Designed In: Millimeters

RoHS: Yes

Halogen Free: No

Glow Wire Capable: N/A

### ELECTRICAL

Voltage (max.): 30V

Current (max.): 1.5A (higher current rating achievable, contact PM for additional technical information)

Contact Resistance: 20 milliohms

### PHYSICAL

Housing:

High temperature plastic material

Contact: High performance copper alloy

Plating:

Contact Area - 0.75µm min. Gold (Au)

Solder Tail Area - 3.8µm min. Tin (Sn)

Underplating - 1.25µm min. overall

PCB Thickness: 1.6mm nominal

Operating Temperature: -40 to +105°C

### MECHANICAL

Insertion Force to PCB: 20N max.

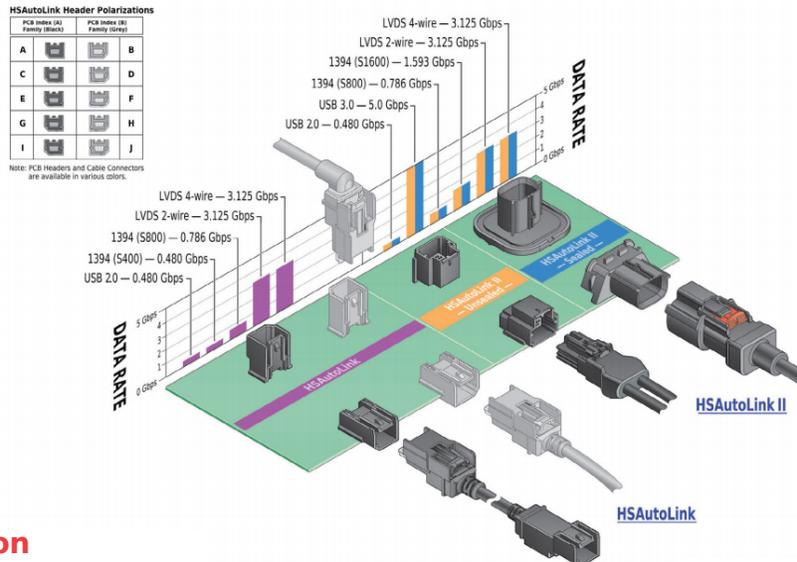
Mating Force: 45N max.

Unmating Force: 45N max.

Durability (min.):

Connector: 10 cycles

Terminal system: N/A



## Ordering Information

### Cable

Series No.	Cable Length	Connector Interfaces Available	Number of Circuits
111005	Customizable Lengths Minimum 220mm	USCAR/USB MINI-B Plug-to-MINI-B Inline Receptacle	5
111014		USCAR/USB MINI-B Plug	5
111015		USCAR/USB TYPE A Receptacle MINI-B Plug	4
111041		LVDS MINI-B Plug MINI-B Inline Receptacle	5

### Header

Header Style (0.80mm pitch)	Series No.	Orientations Available	Application	Termination Interface Style	Number of Circuits
USCAR Mini B HSAutoLink	49616, 104026, 104223	Right-Angle	Signal, Wire-to-Board	Surface Mount, Through Hole	5
USCAR Mini-B HSAutoLink	104004, 104087	Vertical	Signal, Wire-to-Board	Surface Mount, Through Hole	5

[www.molex.com/link/hsautolink.html](http://www.molex.com/link/hsautolink.html)