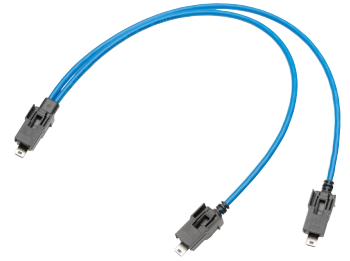


HSAutoLink Interconnect System >

A proven, USCAR30-compliant solution for point-to-point in-vehicle connections, the HSAutoLink Interconnect System includes multiple polarization options and full-length cable shielding for superior signal performance and reduced electromagnetic interference (EMI).



ADVANTAGES AND FEATURES

Enhances design flexibility by supporting multiple protocols in the same connector

The design helps reduce wiring harness complexity by enabling protocols such as USB 2.0, LVDS, Ethernet and A2B, and offering data rates up to 2.0Gbps in four- or five-circuit interfaces.

Ensures proper assembly and provides versatility

With 10 polarization options and colored headers available for either end of the cable assembly, the system helps prevent assembly errors and improves manufacturing efficiency.

Provides superior signal integrity

Full-length cable shielding and a fully protected shield case reduce EMI effects in dense environments, improving performance.

Current	Up to 1.5A (higher current ratings achievable as custom solutions)
Number of Circuits	4 or 5
Data Rates	Up to 2.0Gbps
Data Protocols	USB 2.0, 100Base-T1 Ethernet, LVDS, A2B
Industry Standards	USCAR30
Operating Temperatures	-40 to +105°C

Withstands high temperatures

Headers are manufactured from high-temperature plastic and meet JEDEC 260°C peak temperature specifications, enabling use in harsh automotive environments.

Optimizes device-side space usage

The compact, low-profile system helps meet future needs for high-speed communication links by reducing the connector footprint.

MARKETS AND APPLICATIONS

Automotive

Advanced driver assistance systems (ADAS)
Cameras
Compute modules
Infotainment systems
Multimedia devices
Rear-seat entertainment systems
Telematics systems



ADAS



Infotainment Systems



Agricultural Vehicles

Agricultural Machinery

Agricultural vehicles

HSAutoLink Interconnect System >

SPECIFICATIONS

Reference Information

Packaging:

Headers—tray, tape and reel, tube

Cable assemblies—loose

Designed in: Millimeters

RoHS: Yes

Halogen Free: No

Electrical

Voltage (max.): 30V

Current (max.): 1.5A (higher current ratings achievable—contact Molex for additional technical information)

Contact Resistance: 20 milliohms

Mechanical

Insertion Force to PCB (max.): 20N

Mating Force (max.): 45N

Unmating Force (max.): 45N

Durability (min.):

Connector—10 cycles

Terminal system—N/A

Physical

Housing: High-temperature plastic material

Contact: High-performance copper alloy

Plating: Contact area—0.75µm (min.) gold

Solder tail area—3.8µm (min.) tin

Underplating—1.25µm (min.) overall

PCB Thickness: 1.6mm nominal

Operating Temperatures: -40 to +105°C

ORDERING INFORMATION

Cables

Cable Lengths	Connector Interfaces Available	Number of Circuits
Customizable lengths (min. 220mm)	USCAR/USB Mini-B receptacle	5
	USCAR/USB Mini-B plug	5
	USCAR/USB Type A receptacle	4

Headers

Header Styles (0.80mm Pitch)	Orientation Available	Applications	Termination Interface Styles	Number of Circuits
USCAR Mini-B HSAutoLink	Right angle	Signal, wire-to-board	Surface mount, through hole	5
USCAR Mini-B HSAutoLink	Vertical	Signal, wire-to-board	Through hole	5