Automotive Networking Connectivity Solution

Reference Guide

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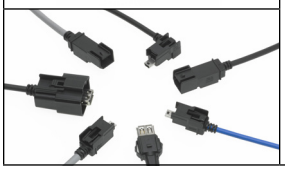
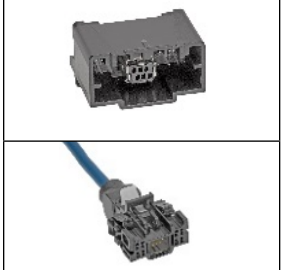
As a leading supplier of high-speed networking solutions, Molex is supporting OEMs in the development of in-vehicle networks that are secure, prioritized, reliable and high bandwidth. Building upon its strength in cables, connectors, media modules and signal integrity innovations, Molex is addressing the increased demand for in-vehicle processing power.

HSAUTOLINK I

	Speed	Protocol	Cable type	Description	Application
	2 Gbps	Up to 100 Base-T1, USB 2.0 LVDS	UTP, STP	Rugged assembly with positive latching and assembly guide rails provides a proven interface offering durability Preassembled housing and industry standard header with multiple keying options, meets all USB 2.0 electrical and EMI shielding requirements and is USCAR-30 compliant	Connected vehicle services, Diagnostics/ Data upload, Infotainment, Navigation, Telematics, Display.
				USCAR-30 compliant ensures products are qualified and market tested to stand up to the rigorous in-vehicle environment Full-length cable shielding provides superior signal performance and reduced Electro-Magnetic Interference (EMI)	

HSAUTOLINK II HYBRID

	Speed	Protocol	Cable type	Description	Application
	13 Gbps	Up to 1000 Base-T1, USB 2.0, LVDS, FTP	UTP, STP, TwinAx, Single wire	Ideal for mixed low speed, high speed and power applications, supporting infotainment systems, telematics and camera devices.	Camera sensor based, Camera, Controller, Diagnostics/Data upload, Infotainment, Navigation, Telematics, ADAS.

HSAUTOLINK II

	Speed	Protocol	Cable type	Description	Application
	13 Gbps	Up to 1000 Base-T1, USB 2.0/USB 3.0, DisplayPort, LVDS, FTP	UTP, STP, TwinAx	Manufactured from high-temperature plastic material that is compatible with lead-free through-hold reflow process (Pin-in-Paste) or lead-free selective wave soldering process Rear (soldering) side of right-angle headers features closed shield case providing robustness and guarantees signal integrity delivering high EMI protection Compact, low-profile optimizing device-side space savings to meet future needs for increasing high-speed communcation links uses proven Molex LFH (Low Force Helix)	Camera sensor based, Camera, Controller, Diagnostics/Data upload, Infotainment, Navigation, Telematics, ADAS.
				Flexible, expandable product family with data rates up to 13 Gbps allowing for combined links and supporting multiple protocols in the same connector Compatible with shielded twisted-pair (STP) or jacketed unshielded twisted pair (JUTP) cable construction which is a cost-competitive solution for high-speed differential signaling applications providing construction flexibility Fully protected perimeter seals and wire seals esuring system is rated to IP67 and IP69K for use in harsh environments and wet locations	

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High-Speed Fakra Mini

	Speed	Protocol	Cable type	Description	Application
 	20 Gbps	Up to MultiGig Ethernet	Coax	The High-Speed FAKRA Mini (HFM) Coaxial Cable Solution delivers 20 Gbps of data speed for the connected vehicle, supporting any modern radar, camera, lidar or sensor applications.	Instrument cluster, ADAS, Modules, Camera, Antenna, GPS, Gateway/ Switch, 4K displays, Infotainment, Internet, Navigation, NextGen wireless LAN, Sensors, Surround view.

USB Illuminated

	Speed	Protocol	Cable type	Description	Application
Type A 	480 Mbps	USB 2.0	STP	Delivers data requirements in an illuminated interface for easy mating in all lighting conditions. Custom colors are available and may be formulated to meet most requests. Max. and min. luminosity may also be customized	Infotainment, Navigation, Media modules
Type C 	Up to 5 Gbps	USB 2.0/USB 3.0	STP		

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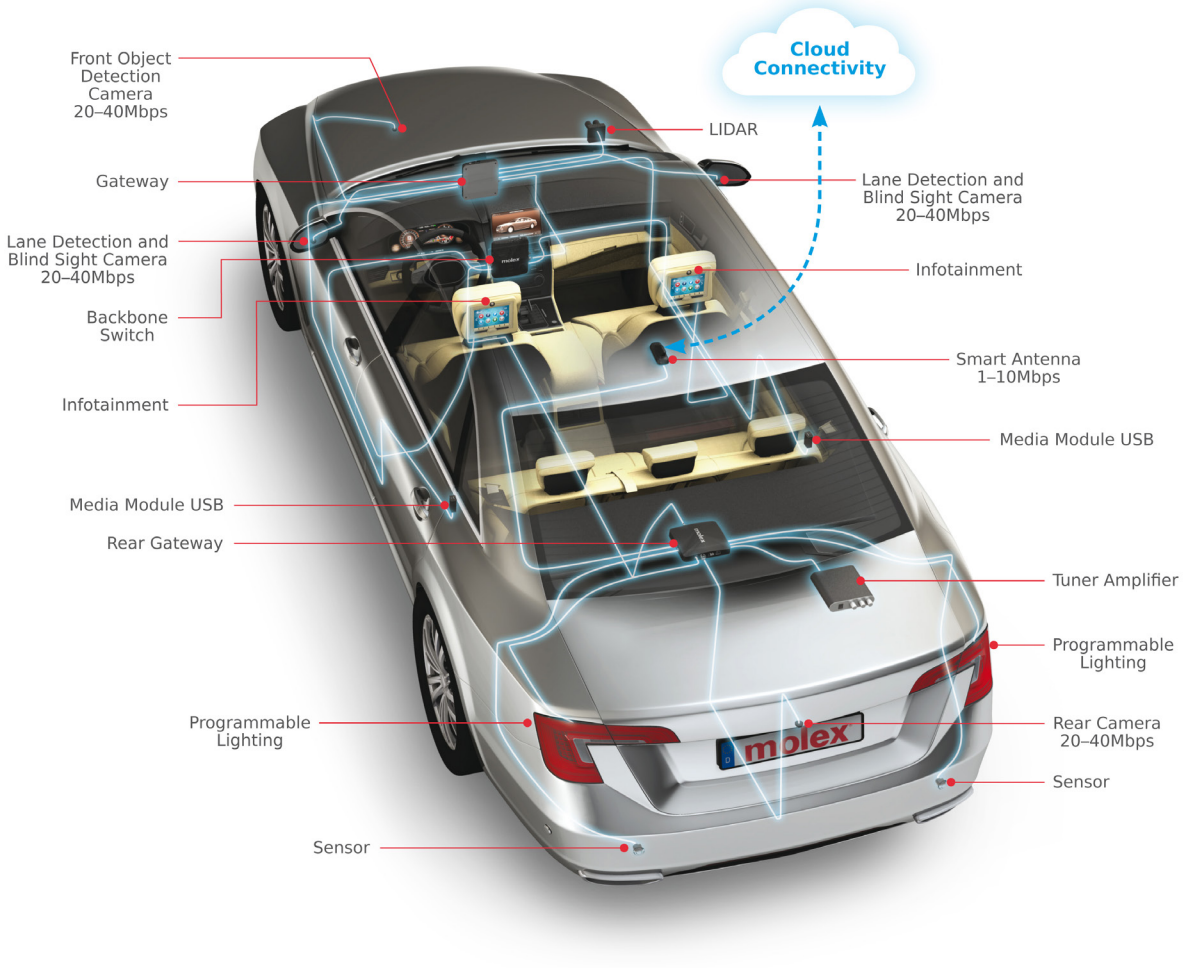
Markets

- Automotive
- Commercial vehicles
- Farm equipment
- Motorcycles
- All-terrain vehicles
- Watercraft
- Aircraft

Applications

- Infotainment
- Telematic devices
- Safety and collision avoidance cameras
- In-Vehicle applications
- Navigation systems
- Connected vehicle services
- Advanced Driver Assistance System (ADAS)



www.molex.com/connected-mobility

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