

MATE-AX

MINIATURIZED COAXIAL CONNECTOR SYSTEM

Enabling up to 15 GHz performance for automotive applications



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RF Connectivity Solution Drivers

A growth in ADAS technologies and applications requiring wireless connectivity is leading to an increase in the number of sensors, cameras and antennas within vehicles. These components receive and transmit large data volumes at high frequency over coaxial cables.

At the same time, an increase in the number of electronic devices and components within vehicles is reducing available space and driving the need for component miniaturization and weight reduction.

Up to 75% space reduction

Up to 34% weight reduction

(4x 1pos. FAKRA vs. 4pos. MATE-AX)

MATE-AX Miniaturized Coaxial Connector System

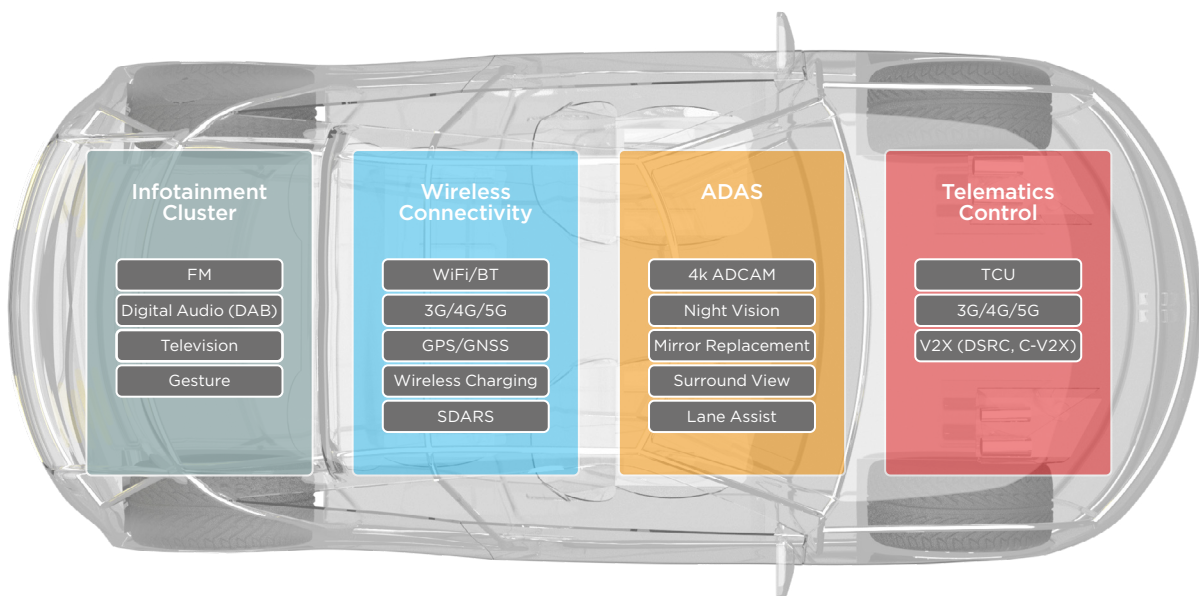
Our MATE-AX automotive connector system provides a miniaturized solution for high frequency data transmission. This highly robust, EMI-resistant, coaxial connector system for analog signal and digital data transport.

The MATE-AX connector system offers higher packaging density, supporting up to 75% space reduction and 34% weight savings, compared to standard FAKRA connectors. The MATE-AX connector system is designed to enable modern electrical architectures with high pin-count suitability and a diverse range of headers.

In addition, the MATE-AX connector system supports existing cables, enabling easy integration into existing architectures.

Supports up to 15 GHz / 24 Gbps

Example Applications



MATE-AX

Miniaturized Coaxial Connector System

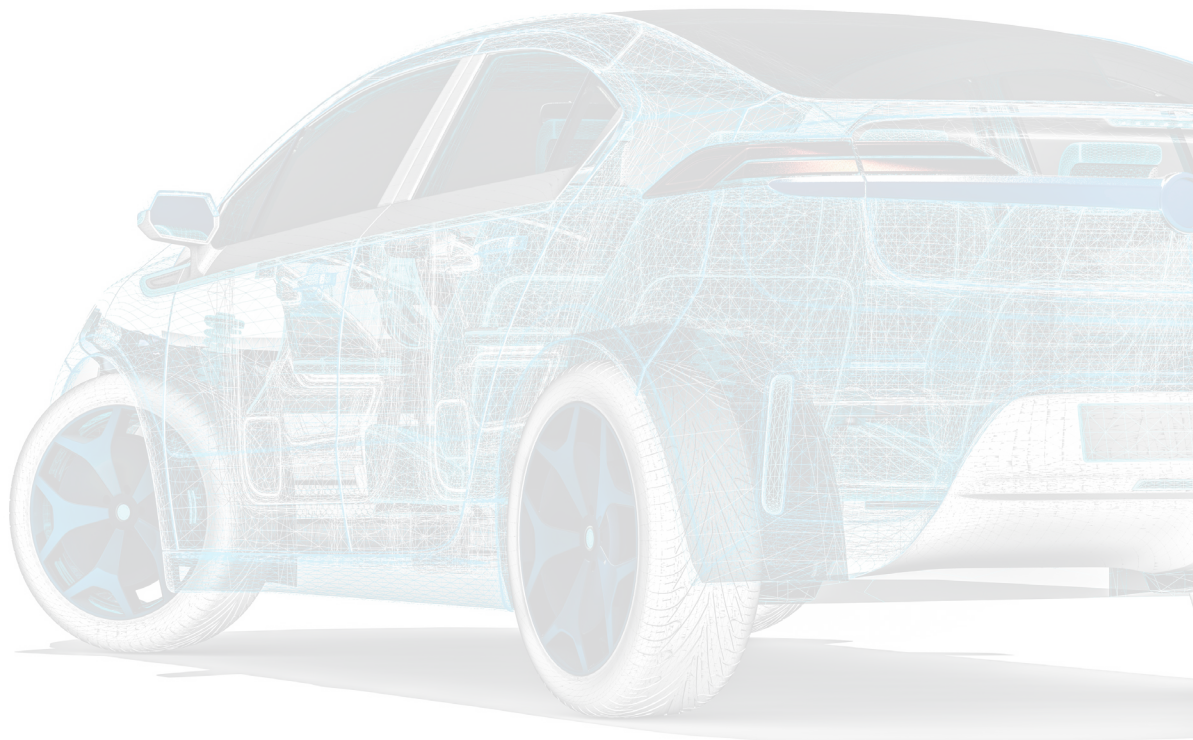
Enabling up to 15 GHz performance for automotive applications

Features/Advantages

- Automotive grade robustness – terminals and housings designed for automotive environment.
- High performance
- Supports up to 15 GHz /24 Gbps
- Flexible integration - based on existing wires.
- Up to 75% space reduction
- Cost efficient design - aligned for automotive coaxial needs.
- Flexible portfolio – contains a range of connector sizes.

Market Compatibility

- MIPI
- ASA (Automotive SerDes Alliance)
- GMSL2/3
- FPD-Link III/IV
- APIX3



**MATE-AX
Portfolio**

		Description	TE PN
		1 pos MATE-AX Header	0-/2-2310558-1/-2/-3/-4/-9
		2 pos MATE-AX Header	0- /1-2306368-1/-2/-3/-4/-9
		4 pos MATE-AX Header	EMEA version CN version 0- /1-2304168-1 /-2/-3/-4/-5/-6/-9 0- /1-2321775-1 /-2/-3/-4/-5/-6/-9
		1 pos Female Housing	w/o CPA with CPA 0-2310137-1/-2/-3/-4/-9 2-2310137-1/-2/-3/-4/-9
		2 pos Female Housing	w/o CPA with CPA 0-2306868-1/-2/-3/-4/-9 2-2306868-1/-2/-3/-4/-9
		4 pos Female Housing	w/o CPA with CPA 1) 0-2298721-1/-2/-3/-4/-5/-6/-9 2-2298721-1/-2/-3/-4/-5/-6/-9
		1 pos Male Housing	0-/1-2310138-1/-2/-3/-4/-9
		2 pos Male Housing	0-2306498-1/-2/-3/4/-9
		4 pos Male Housing with Clip Slot	2-2298724-1/-2/-3/-4/-5/-6/-9
Sealed Connectors		1 pos sealed Male Housing	0-2312193-1/-2/-9
		1 pos sealed Female Housing	0-2312192-1/-2/-9
		4 pos sealed Male Housing	0-2354440-1/-2/-9
		4pos sealed Female Housing	0-2354439-1/-2/-9

1) will launch soon

* xxx-1 Code A / xxx-2 Code B / xxx-9 Code Z.
Refer C-Drawings for further codings

MATE-AX Cable Assembly (Example)

Possible configurations: Cable RTK031 - RG174

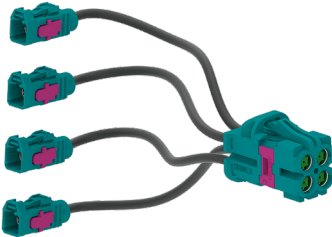
4 pos. female -
4 pos. female



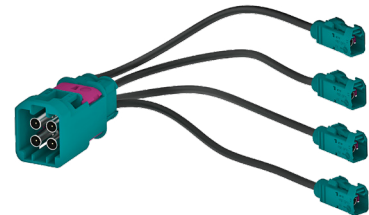
4 pos. male -
4 pos. female



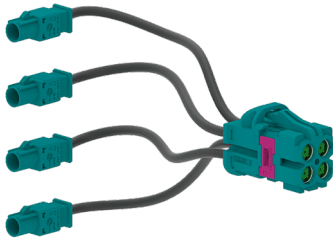
4x FAKRA female
- 4 pos. female



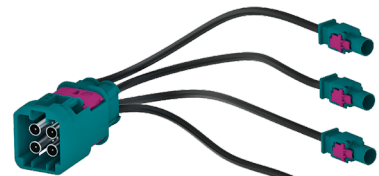
4 pos. male -
4x FAKRA female



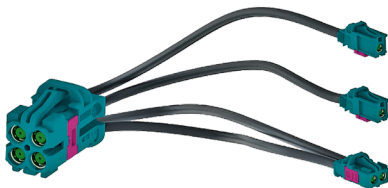
4x FAKRA male -
4 pos. female



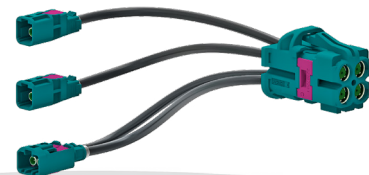
4 pos. male -
4x FAKRA male



4 pos. female -
2x 1 pos. female -
2 pos. female



4 pos. female -
2x 1 pos. male -
2 pos. male



**For further information
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