

MATE-AX

Miniaturized Coaxial Connector System

Enabling up to 9 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)

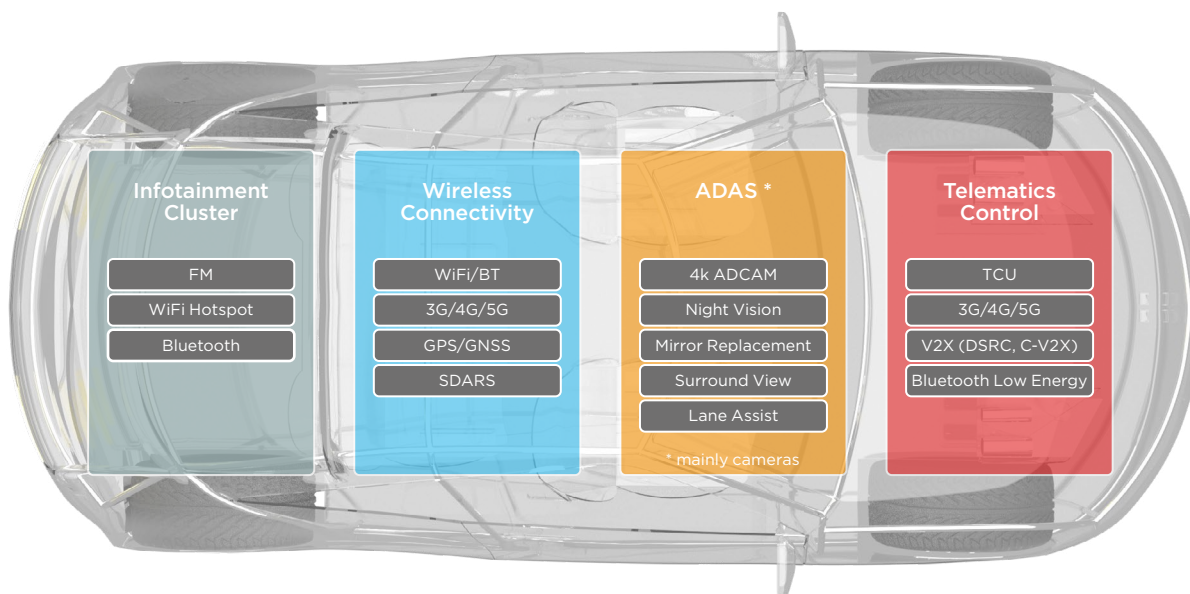
MATE-AX

Our MATE-AX automotive coax 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 delivers superior data rate performance of up to 9 GHz and up to 15 GHz with optimized designs.

MATE-AX offers higher packaging density, supporting up to 75% space reduction and 34% weight savings, compared to standard FAKRA connectors. MATE-AX is designed to enable modern electrical architectures with high pin-count suitability and a diverse range of headers. In addition, MATE-AX supports existing cables, enabling easy integration into existing architectures.

**Supports up to 9 GHz and up to 15 GHz
with optimized designs**

Example Applications



MATE-AX

Miniaturized Coaxial Connector System

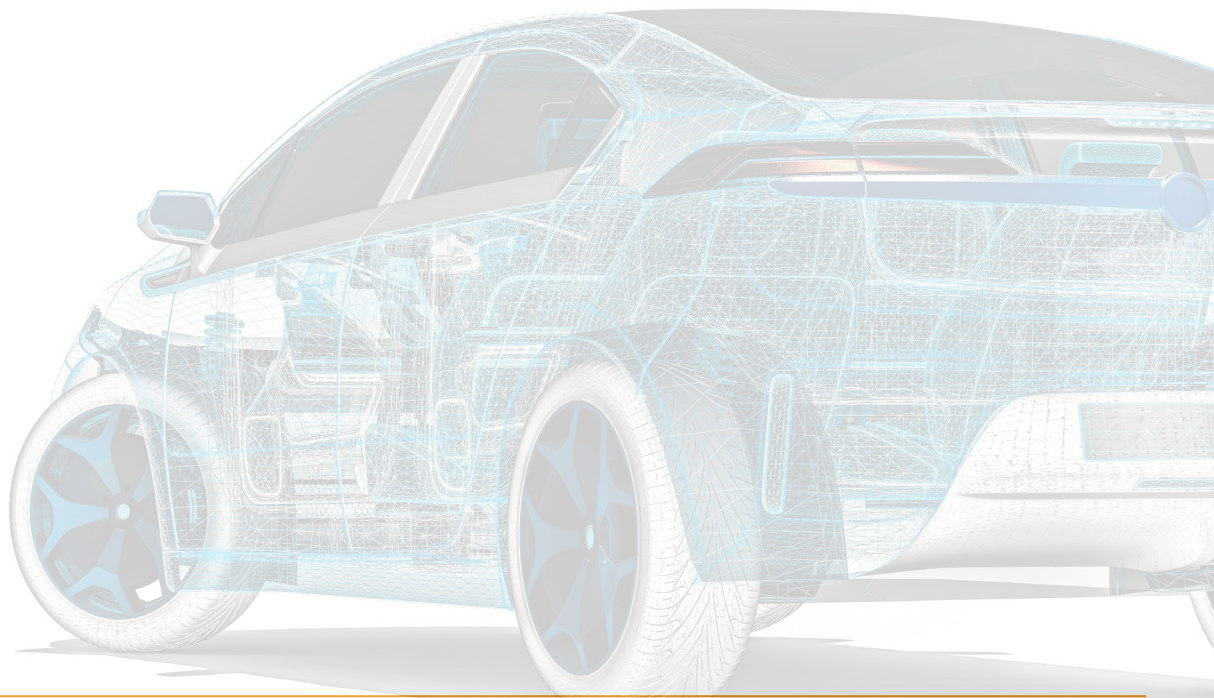
Enabling up to 9 GHz performance for automotive applications

Features/Advantages

- Automotive grade robustness – terminals and housings designed to pass/exceed USCAR and OEM requirements.
- Higher bandwidth – applicable for 9 GHz and up to 15 GHz with optimized designs.
- 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 MATE-AX Female Housing	w/o CPA with CPA	0-2310137-1/-2/-3/-4/-9 2-2310137-1/-2/-3/-4/-9
		2 pos MATE-AX Female Housing	w/o CPA with CPA	0-2306868-1/-2/-3/-4/-9 2-2306868-1/-2/-3/-4/-9
		4 pos MATE-AX 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 MATE-AX Male Housing		0-/1-2310138-1/-2/-3/-4/-9
		2 pos MATE-AX Male Housing		0-2306498-1/-2/-3/4/-9
		4 pos MATE-AX Male Housing with Clip Slot		2-2298724-1/-2/-3/-4/-5/-6/-9
Sealed Connectors		1 pos MATE-AX Sealed Male Housing		0-2312193-1/-2/-9
		1 pos MATE-AX Sealed Female Housing		0-2312192-1/-2/-9
		4 pos MATE-AX Sealed Male Housing		0-2354440-1/-2/-9
		4pos MATE-AX 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

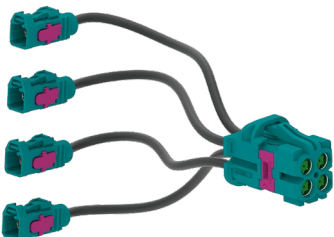
4 pos. female -
4 pos. female



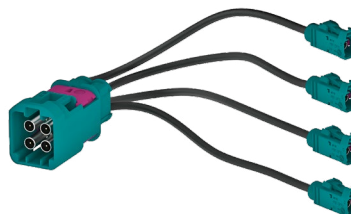
4 pos. male -
4 pos. female



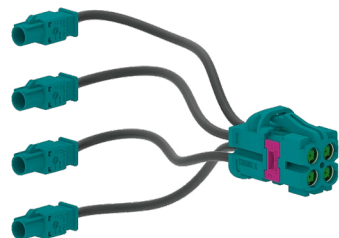
4x FAKRA female -
4 pos. female



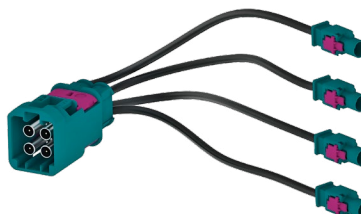
4 pos. male -
4x FAKRA female



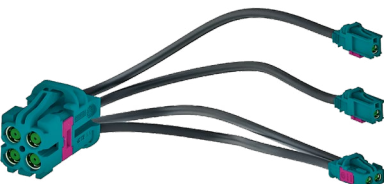
4x FAKRA male -
4 pos. female



4 pos. male -
4x FAKRA male



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

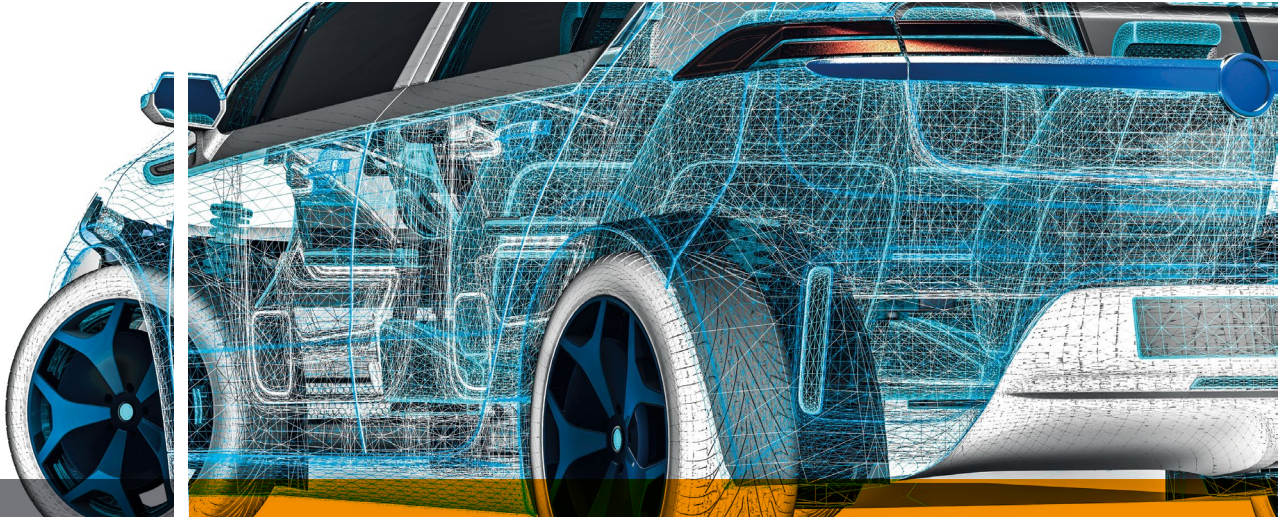


4 pos. female -
2x 1 pos. male -
2 pos. male



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1-1773981-7 | USL | Revision 08-2020b