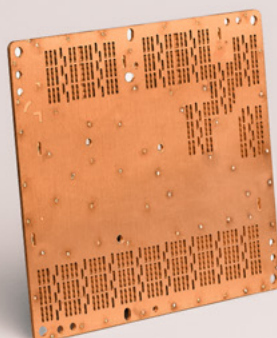


Gapwaves Antenna Designed for Infineon's 8T/8R CARKIT



OVERVIEW

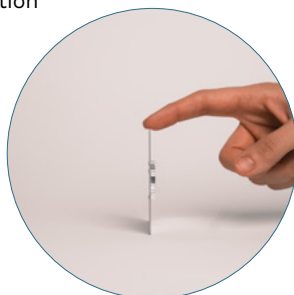
The Gapwaves Antenna designed for Infineon's 8T/8R CARKIT is a **high-performance waveguide antenna** designed for radar systems in automotive and industrial applications. Built on Gapwaves' patented Multi-Layer Waveguide (MLW) technology, it combines high performance with a **compact form factor**. Thanks to its ready-to-use design, it offers a **short time to market** with **no development time required**.

KEY FEATURES

- **Low loss = high efficiency**
- **Cost-efficient**
- **Short time-to-market**, ready-to-use for mid- and high-volume production
- **Full band coverage**
- **<1 mm antenna thickness**

APPLICATIONS

- Automotive
- Industrial
- Smart City
- Last mile delivery
- ITS
- Mobility



GAPWAVES TECHNOLOGY

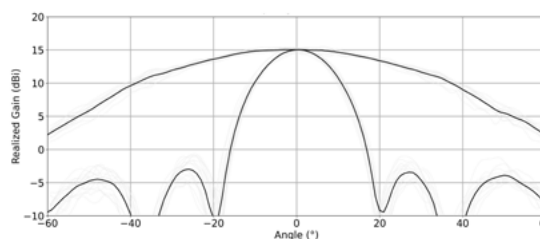
The innovation in our solutions lies in the patented Gapwaves waveguide technology based on an Artificial Magnetic Conductor (AMC) surface that enables propagation of electromagnetic waves in contactless artificial waveguide structures. This is the key to designing high performance waveguide antenna structures with a high degree of flexibility using well-established, high-volume production processes.

ABOUT GAPWAVES

Gapwaves develops wireless solutions based on unique and patented waveguide technology for millimetre-wave applications. Our products are primarily used in antennas for radar systems enabling autonomous driving and advanced safety solutions within the automotive industry. Through collaborations with leading players in the sector, we contribute to the development of safer and more efficient transport systems. The technology is cost-efficient, combines high performance with a compact design and is also suitable for industrial automation, telecommunications, smart cities, and civil-military applications – areas where precision and reliability are crucial. Gapwaves was founded in 2011 from research at Chalmers University of Technology.

SPECIFICATIONS

Dimensions	70x80 mm
Thickness	0.95 mm (without spacer), 4.3 mm (with spacer)
Frequency (GHz)	76-81
Channels	8 (TX), 8 (RX)
Gain (dBi)	15
HPBW in EL.	+/-8°
HPBW in Az.	+/-27°
Return loss (dB)	10
FoV (3dB)	54°, 16°
FoV (10dB)	100°, 26°
Polarization	Horizontal
Interface	Infineon CTRX8188 transceiver
Stack-up	3 copper layers + spacer



CUSTOMER SPECIFIC ADAPTATION

This antenna can be customised for different mounting options to fit your specific application needs. Contact us to know more.

AVAILABLE IN INFINEON CARKIT

The Gapwaves Antenna designed for Infineon's 8T/8R CARKIT is available for purchase through Infineon Technologies, providing a complete solution for radar development and testing. To know more, contact Infineon Technologies.

Contact us

sales@gapwaves.com

www.gapwaves.com