

NOKIA DEMONSTRATES RECORD WIRELESS DATA TRANSFER FOR D-BAND TRANSCEIVERS USING 3DGS TECHNOLOGY

ADAS/6G Radio on glass

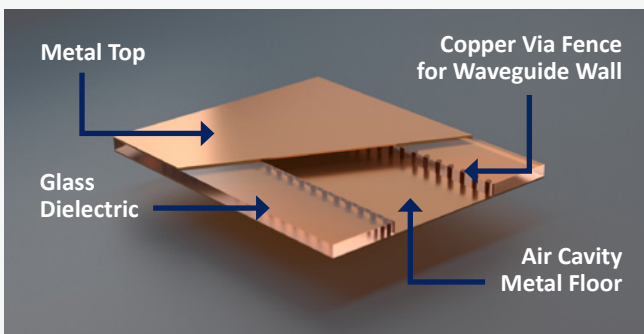
3D Glass Solutions (3DGS) has developed a patented ultra-low-loss empty Substrate Integrated Waveguide (eSIW) technology for high frequency Antenna-in-Package (AiP) and Radio-on-Glass (RoG) applications between 60 and 300GHz. This technology integrates all the necessary elements for a full RF Front-End into a single device, making it ideal for Automotive Radar 5G, and 6G applications.

To demonstrate this high-performance technology, 3DGS has partnered with Nokia Bell Labs to create a 64-element 79GHz antenna for ADAS applications and a novel 64-element TxRx D-Band (150GHz) Transceiver.

Radio on Glass (RoG) Building Blocks

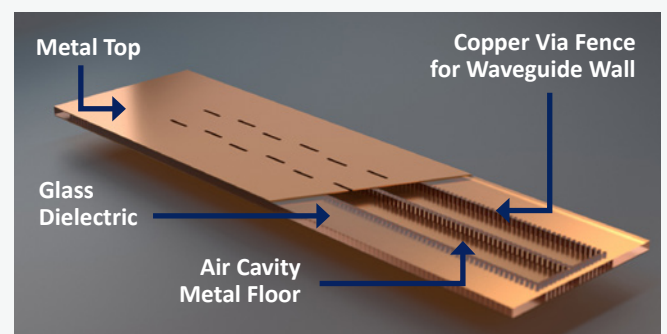
3D Glass Solutions' APEX® Glass enables the design and fabrication of highly precise electronic devices, with dielectric properties close to air, resulting in extremely low signal loss and systems-level integration for next generation RF Front Ends.

TRANSMISSION LINE



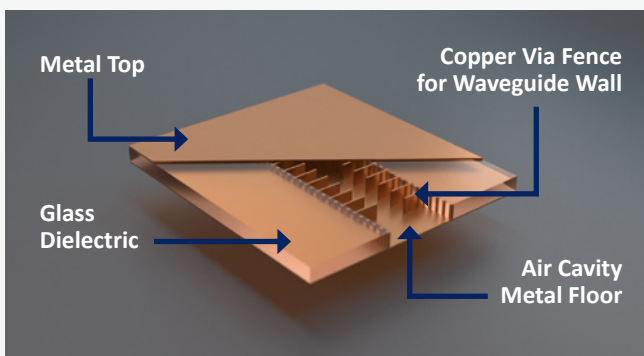
Create low loss (<0.2dB/cm) transmission for redistribution

ANTENNA



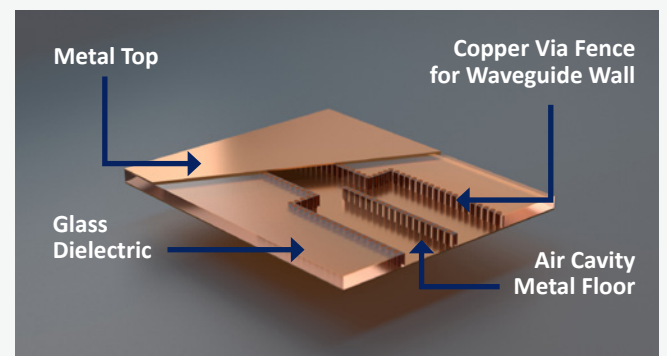
Create low loss slot antennas with high gain and high fractional band width

IRIS FILTER



Create low loss filters and matching elements using waveguide iris filters

SPLITTER



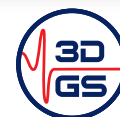
Create low loss splitters and combiners



1-505-916-5590



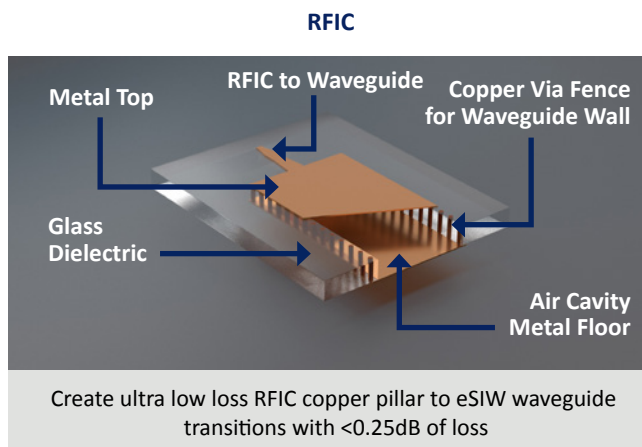
3DGSinc.com



Enabling the GHz Generation

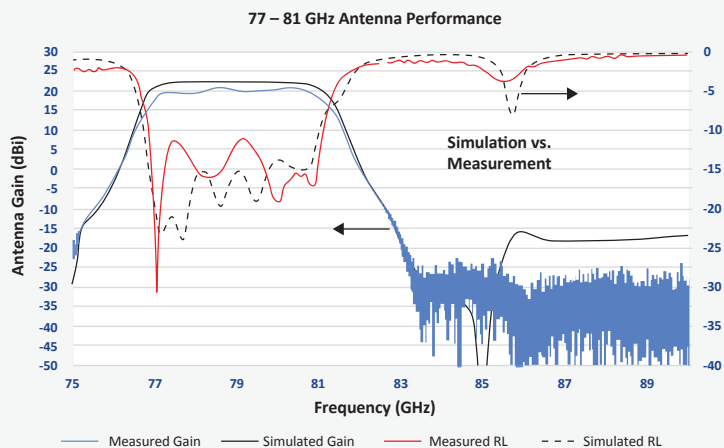
NOKIA DEMONSTRATES RECORD WIRELESS DATA TRANSFER FOR D-BAND TRANSCEIVERS USING 3DGS TECHNOLOGY

Radio on Glass (RoG) Building Blocks – Continued



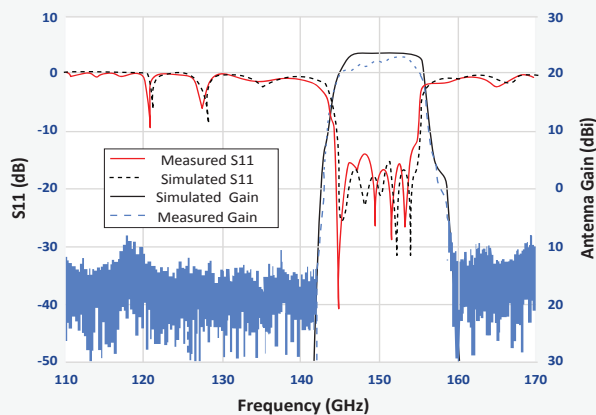
ADAS Antenna

Measured and simulated S11 and gain of a 79GHz ADAS antenna developed with 3DGS' eSIW technology



6G Antenna

Measured and simulated S11 and gain of a 150GHz 6G antenna developed with 3DGS' eSIW technology



A Scalable, Cost-Effective, Process for your Product

3DGS has developed a detailed product development kit to support customers who want to leverage 3DGS unique eSIW architecture for their product design.

The development kit provides known good design parameters to build custom products in a cost-effective process that can easily scale to meet your market demand.

Contact us today to learn more



1-505-916-5590



3DGSinc.com



Enabling the GHz Generation