

# 3D GLASS MODULES



ED2 Corporation is an emerging technology company located in Tucson, Arizona, USA.

With decades of research and development into the use of glass as a substrate for electronics, ED2's 3D glass modules are creating paradigm-shifting technology in a variety of markets, including wireless telecom (5G and beyond), space & satcom, medical devices, and radar.

ED2's glass modules offer the highest level of integration with superior electrical performance, ranging from 1 to 100 GHz. The resulting product is cost-efficient, maximizes volume, and is scalable.

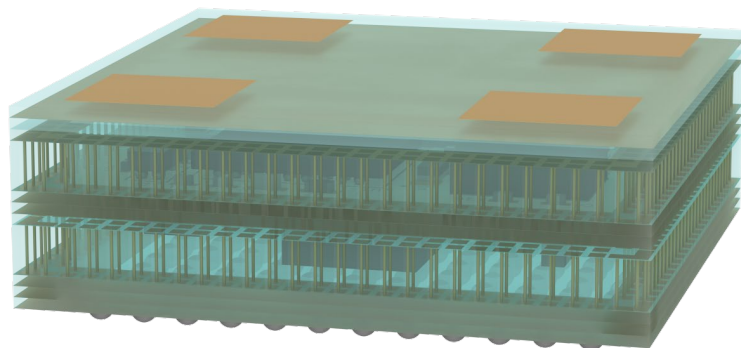
## Features

- Up to 100GHz
- Smallest feature size (<20 $\mu$  lines and spaces)
- High Q lumped components
- Low loss tangent
- Naturally hermetic
- Wafer-level process
- RAD hard

## Scalable Manufacturing

- 8-inch (200mm) glass wafer fabrication, using standard semiconductor processing equipment.
- Thousands of die on single wafer, chip-scale package from 16mm<sup>2</sup> down to <1mm<sup>2</sup>.
- Roadmap to "System-on-Glass." Integrate passives and other structures directly on glass with switches to create ultra-miniaturized RF subsystems.

## Advanced Glass Packaging Technology™

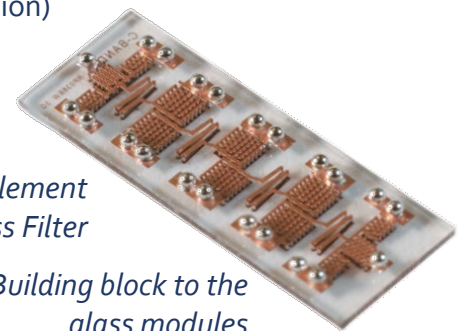


*ED2 mmWave Phased Array Antenna module*

ED2 can redesign an existing PCB-based module into a 3D glass package to reduce size and improve performance.

## Benefits

- Reuse of functions
- Reduce board complexity to reduce cost
- Reduce discrete parts
- Common footprint
- Reduce overall size (volume)
- Leads to system-on-a-chip (higher level of integration)



*Lumped element  
Bandpass Filter*

*Building block to the  
glass modules*



Made in USA