



## Press Release

### Contact:

Sherry Hess  
Vice President of Marketing, AWR Group, NI  
(310) 726-3000  
sherry.hess@ni.com

## 3D Glass Solutions Releases Industry's First Integrated Passive Devices PDK Specifically for NI AWR Software

**EL SEGUNDO, Calif. – June 11, 2018** – [3D Glass Solutions](#) (3DGS) announces the release of an industry-first, glass-based RF integrated passive devices (IPDs) process design kit (PDK) specifically for [NI AWR Design Environment](#) customers. Developed in collaboration with NI AWR software experts, the 3D Glass Solutions IPD PDK enables the design of high-performance components for internet of things (IoT), LTE, 5G and satellite communications. These components are realized by using low-insertion loss matching networks and RF filters with a small footprint (less than two millimeters by two millimeters) and high-current handling.

Implemented in the PDK are electrical models and layout cells (Pcells) that work with the 3D Glass Solutions parameterized extraction flow for AXIEM 3D planar and Analyst™ 3D finite element method (FEM) electromagnetic (EM) simulators within Microwave Office circuit design software. The PDK also supports NI AWR software iNet™ automated net routing technology for intelligent and automated net routing, design-rule checking (DRC) and connectivity check/highlight.

“Chip-to-board and chip-to-chip interconnects are a common cause of unwanted parasitic losses in lumped-element devices,” said Jeb Flemming, 3D Glass Solutions CTO. “IPD technology significantly reduces these losses by embedding capacitors, inductors, filters, baluns and combiners into a single monolithic microwave integrated circuit (MMIC), providing electronic devices with a reduced footprint, reduced energy consumption and improved RF performance. Our advanced 3D routing of RF signals on top, through and on the bottom of the glass IPD improve performance by distancing RF components and minimizing unwanted parasitic losses.”

“Our collaboration with 3D Glass Solutions to develop the IPD PDK for the NI AWR Design Environment platform continues our commitment to deliver solutions that enhance the microwave design process,” said Sherry Hess, vice president of marketing at AWR Group, NI. “The 3DGS PDK allows customers to explore product development on glass for smaller and more energy-efficient products.”

## Availability

The 3D Glass Solutions PDK release for the NI AWR Design Environment platform is available immediately directly from 3D Glass Solutions. Contact [PDK\\_support@3dglasssolutions.com](mailto:PDK_support@3dglasssolutions.com) to request the PDK. Up-to-date NI AWR software and licenses are required.

## About NI AWR Software

The [NI AWR Design Environment](#) software platform includes RF/microwave electronic design automation (EDA) tools such as Visual System Simulator™ system design software, Microwave Office/Analog Office microwave/RF circuit design software and AXIEM and Analyst EM analysis software. The NI AWR software product portfolio also includes AntSyn™ antenna design and synthesis software and AWR Connected™ third-party solutions. Collectively, these products empower design engineers to dramatically reduce development time and cost for components, circuits, systems and subsystems employed in wireless, high-speed wired, broadband, aerospace and defense and electro-optical applications. More information is available at [ni.com/awr](http://ni.com/awr).

## About National Instruments

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