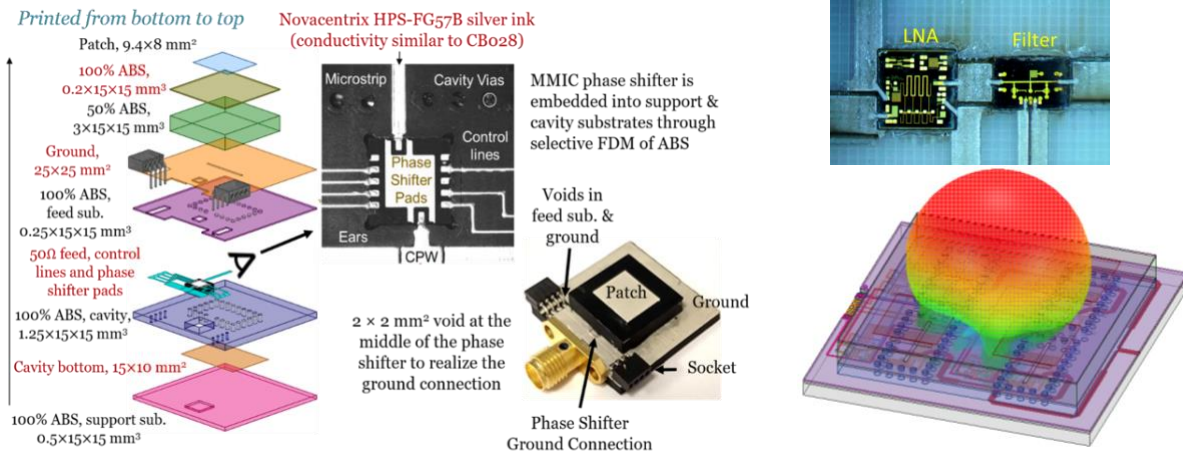


LASER-ENHANCED DIRECT PRINT ADDITIVE MANUFACTURING (LE-DPAM) ENABLED 3D HYBRID IC ELECTRONICS PACKAGING FOR PHASED ANTENNA ARRAYS



Professors Jing Wang (PI) and Gokhan Mumcu (Co-PI) awarded a 3-year Army Research Lab (ARL) grant for \$262,314. The project is entitled “Laser-Enhanced Direct Print Additive Manufacturing (LE-DPAM) Enabled 3D Hybrid IC Electronics Packaging for Phased Antenna Arrays”. This 3-year funded research program will 1) advance LE-DPAM technique towards 3D integration of beamformer ICs with antenna elements; 2) utilize design flexibilities of LE-DPAM to maximize antenna array performance; 3) demonstrate/characterize operational antenna subarrays and arrays manufactured with LE-DPAM with operational frequency band selected within 10 – 30 GHz.

The 3-year research work is sponsored by US Army Research Laboratories (ARL), which will include mentorship from ARL researchers through bi-weekly meetings and potential site visits. The research program will involve at least one graduate student researcher assistant. The research work will be carried out with the state-of-the-art additive manufacturing and RF device/antenna characterization facilities of the Center for Wireless and Microwave Information Systems (WAMI Center).

The qualified student please send an email to PIs (jingw@usf.edu and mumcu@usf.edu) and include your CV/resume as an attachment along with any prior research experiences (if any).

