Updated: Aug. 8, 2018

MIST CENTER

Innovating more than Moore technologies for smart systems in the Internet of Things era.

RESEARCH CAPABILITIES

INTEGRATION

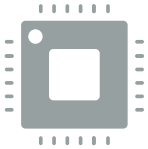
- Advanced Packaging/3D-IC
- Atomic Layer Deposition
- Flexible/Printed Electronics
- Functional Materials (Oxides, Magnetics, Ferroelectrics, Piezoelectrics, Multiferroics)
- Interposers
- Laser Machining
- Microfluidic Cooling
- Nanomaterial Integration
- Nanomaterial Synthesis
- Nontraditional Substrates (Polymers, Glass, Sapphire, Paper)
- System Integration
- Through Si/Glass/Sapphire Vias

SENSING

- Biosensors
- Chemical Sensors (Nanowire Gas, GaN)
- Harsh Environment Sensors
- Imaging
- MEMS/NEMS
- Microfluidics
- Micro Optical Systems
- Neural Interfaces
- Photonic/Infrared Sensors
- Physical Sensors (Acoustic, Inertial, Flow, Magnetic)
- Terahertz Sensors
- Thermal Sensors/Modeling

COMPUTING

- Device Simulation and Modeling
- Hardware for ML/AI
- IC Wearout and Recovery
- Low-Power Data Converters
- Low-Power Heterogeneous Devices
- Low-Power Logic/Memory (2D Nanodevices, Ferroelectric/ Ferromagnetic Devices)
- Mixed-Signal Design and Test
- Neuromorphic Computing
- Spatial Compute Architectures
- Wide-Bandgap Semiconductor Devices



WIRELESS

- Antennas
- Metamaterials
- Phononic Devices
- Photonic Devices and Circuits
- RF Circuits and Systems
- RF MEMS
- Terahertz Circuits

POWER

- Energy Harvesting
- Energy Storage
- Microscale Heat Exchange
- Power Electronics
- Power Semiconductor Devices
- Switched-Capacitor/Voltage Stacking
- Wireless Power Transfer

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UF UNIVERSITY of FLORIDA

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