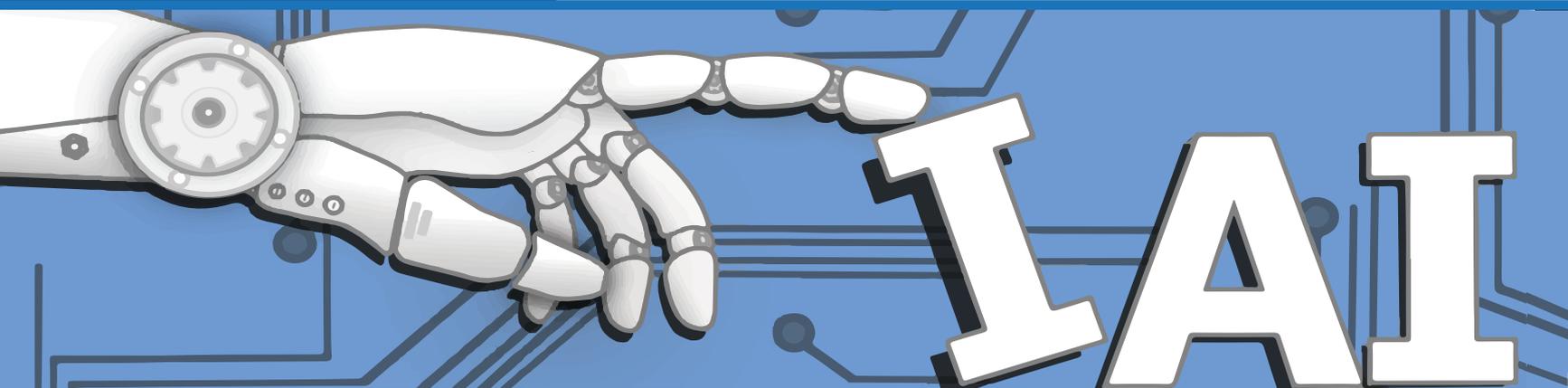


Intelligent Automation, Inc.

Corporate Overview



WHAT CAN WE INVENT FOR YOU?

Intelligent Automation, Inc. (IAI) is a technology innovation company specializing in providing advanced technology solutions and R&D services to federal agencies, and corporations. Our researchers and scientists pursue innovation across

a broad range of fields, and are always looking for new challenges. We will apply our R&D experience to your problem by leveraging our collection of products and knowledge cultivated from past and active research programs.

Core Capabilities



Electro Optics
Sensor Systems



Patient Health Data
Wearables



Big Data
Social Media Analytics



RF Design
RF Testing



Network Design
Cyber Security



Artificial Intelligence
Machine Learning



AR/VR Training
Assesments



Robotics
Automation



Aviation Data Analysis
Traffic Data Analysis



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Recent Products



Actionable Insights from Analytics



The Smart Way to Feel Better™



Intelligent Aviation Inspection™



RF Testing and Emulation™

About IAI

Founded in 1987, IAI is a woman-owned small business that solves challenging science and technology problems through a research institution inspired R&D process.

With the exploratory spirit of a university research lab and the practicality of a seasoned product development company, we push the boundaries of technology, creating the cutting edge every day.

The IAI team thrives on the pursuit of knowledge. More than 75% of IAI's technical staff hold advanced degrees. 50% hold Doctorates.

Program Transitions

- Future Combat Systems
- NAVEODTECHDIV AEODRS
- Joint Service Small Arms
- NASA Airspace Concept Evaluation System
- NASA ECOSAR
- Joint Strike Fighter
- Centers for Disease Control CIMS
- NAVAIR Scalable Network Access Protocol

Awards

- National Tibbetts Awards and Administrator's Awards from SBA
- Northrop Grumman Supplier Excellence Award
- Raytheon Supplier of the Year
- NASA's Space Act Software Release Award

IDIQ Contract Vehicles

- Air Force: ACT
- Army: TAOSS, D31, STES, CICERO
- FAA: e-FAST, SE2020, SE2025
- NASA: HHPIC, BPA
- Navy: Seaport-E, Medical Omnibus III, PMA-281, NRL ITD SB

Our Clients and Partners



Advanced Transceiver Platforms

Modular RF Hardware For Massive MIMO and Radar Applications

Powered by
nextRF



IAI's Advanced Transceiver Platforms provide powerful building blocks for RF designers to implement next-gen RF systems such as radar, test systems, electronic warfare (EW), and phased-array antenna systems. These platforms integrate high-end processors such as Xilinx RF system on chip (RFSoc) to provide a small form factor software-defined transceiver.

Deployable

High performance hardware in deployable packages supports military communications, electronic warfare (EW), unmanned aircraft systems (UAS), and radar.

Synchronized

Transceivers are phase synchronized across multiple front-ends to support massive MIMO, phased-array, and 5G applications.

Single Module Complete SDR

Powerful RFSoc-based system provides complete SDR which supports massive MIMO and phased-array applications.

Interchangeable Processor and RF modules

In addition to single module system approach, customers can mix and match processors and RF modules to fit their needs.



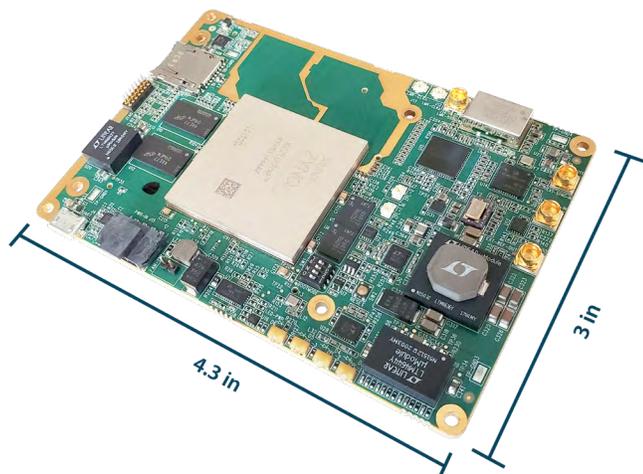
Single Module Complete Radio for Wideband MIMO



A product of Intelligent Automation, Inc.
The information contained is subject to change without notice.

Single Module Complete Radio

- Small Form-Factor (SFF) Transmit-Receive (Tx/Rx) Module
- Based on Xilinx RFSoc Gen-1 and Gen-3 technologies
- RF front-panel plugs directly into antenna panel or expansion RF front-ends (cabling optional)



PARAMETERS	SINGLE MODULE RADIO SPECIFICATIONS
Dimensions	4.3" x 4.3" x 0.8" (open frame, no enclosure) 4.8" x 4.5" x 2" (with fan-cooled metal enclosure)
RF Capability	Xilinx RFSoc Gen-1 Technology • 8-Ch Tx, 6.554 Gbps each, 4 GHz BW • 8-CH Rx, 4.096 Gbps each, 4 GHz BW
User Interfaces	Dual SFP+, Ext/Int Ref. Clock Input, User SD Card Slot, USB-UART, USB JTAG, Gigabit Ethernet, Debug and Status LEDs
RF Interfaces	• 8 x 8 Tx - Rx on High-Isolation Samtec Isorate connectors • Samtec LSHM for GPIO/Clock/Power
DC Power	12V DC Typical

Compact Radio

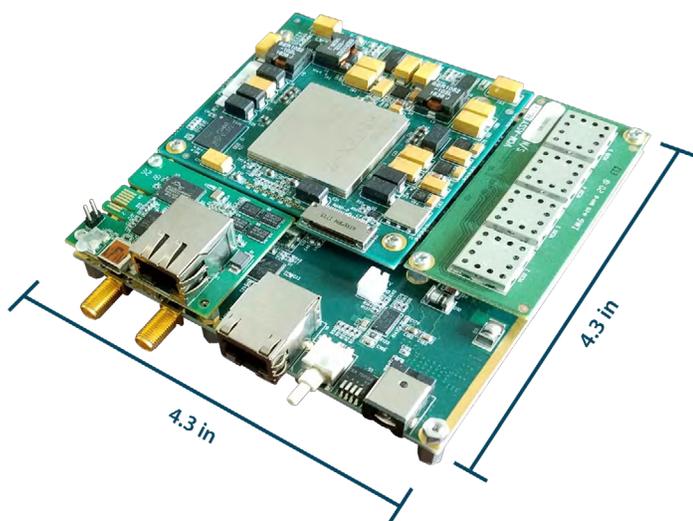
- Small Form-Factor SDR or Tx/Rx Module
- Modular Processor, Clocking, Configuration, and RF front-end options
- Supports industry standard FMC+ RF front-end options

Processor Module Options:

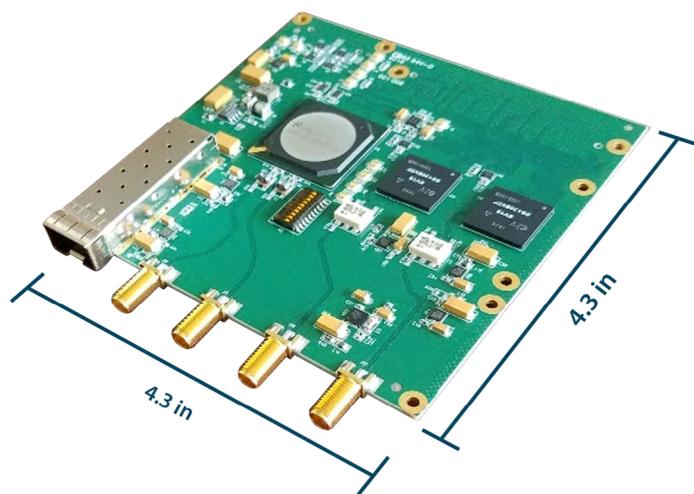
- Xilinx Kintex-7 FPGA
- Xilinx Kintex UltraScale FPGA

RF Front-end Options:

- Dual Tx and Rx , 1.5 Gbps/channel, 3 GHz BW
- Single Channel Tx and Rx, 3 Gbps, 3GHz BW



Complete Radio, Full stack



Single channel Tx-Rx, 3 Gbps RF front-end