

The logo for ADVEOS, featuring the word in a bold, white, sans-serif font. The letter 'O' is a light blue color, while the other letters are white. The background is a gradient of blue with a white diagonal line and wavy patterns.

ADVEOS

Company Overview

April 2017

ADVEOS is a privately held, early stage fabless semiconductor design company founded in August 2015

ADVEOS core business value:

- Design & development of custom ASIC solutions for:
 - RF/mmWave wireless communications systems
 - X-Ray Imaging / Sensor signal conditioning
- Development and provision of analog/mixed signal Intellectual Property (IP) cores or components

Designed in all major foundries



CMOS (down to 16nm)
SiGe BiCMOS
Intel, TSMC nanoscale FinFETS

- Multiple levels of the design flow (from system level down to transistor level)
- More than 50 successful tapeouts - first pass success rate >90%
- Most of the chips in which the team has been involved are already in the market
- Strong academic background
 - A total of 62 papers in IEEE Journals and conferences

Turnkey ASIC model – Concept to Production

ADVEOS may facilitate end-to-end responsibility in order to deliver our customers solutions ready for the market



Analog / RF

- RF and mmWave Design (from 100 MHz to 90 GHz)
- Rx/Tx Front Ends, LO Distribution, Power Detectors, IF Amplifiers, Up-conversion Mixers, IF Amplifiers, Calibration Loops
- PLL System Design – Modelling (Integer-N, Fractional-N)
- PLL Circuits Design
- Charge Pumps, Dividers, PFDs, XOs, Prescalers
- LC-VCOs, Ring Oscillators, Injection-Locked Oscillators
- Coupled PLL Arrays, Coupled Oscillator Arrays for Phased-Arrays, Multi Phase Generation
- SerDes, CDRs
- Multi Gigabit High Speed Interface System
- RF Amplifiers

Analog / Baseband

- Custom CMOS Digital Design for SPIs
- Baseband Filters
- Digital-to-Analog Converter Design
- Basic Circuits
 - Bandgaps, Voltage Regulators, Biasing Circuits, etc.
- Readout Electronics for Capacitive and Resistive Sensors
 - Capacitance to Voltage Converters, Sigma-Delta Modulators, Instrumentation Amplifiers, RC Oscillators
- Readout Electronics for Hybrid X/Gamma-Ray Imager
 - Charge Amplifiers, Shapers, Peak Detectors, Time to Voltage Converters

Digital

- Digital – Mixed Signal ASIC Design
- Full Digital Design Flow (from specification to GDSII)
- RTL Design and Verification
- Synthesis
- Place and Route
- Post Synthesis, Post Layout and Mixed Signal Simulation
- Formal Verification
- FPGAs and DSPs

Circuit designs for numerous applications:

- mmWave mobile backhaul systems (100MHz to 90 GHz)
- Satellite Communications
- Radiation Hardened Readout Electronics for Sensor Applications
- Gamma / X-Ray imaging
- Mobile and femtocell
- Wi-Fi
- High Speed Data Centers
- Power Management for Mobile Applications
- HD Wireless Broadcast
- DVB-T Tuners

Thank you!

ADVEOS

www.adveos.com