How we help

Do you want to: Increase your revenue? Reduce your costs? Increase your speed and flexibility? Focus on your core competency?

Consider Fidus for electronic product development and consulting services.

Fidus’ wireless/RF designers draw on their diverse backgrounds and rely on the best high frequency design tools available, to help you achieve your goals. Fidus not only provides the expertise, but you also get to leverage our capital investment in RF tools and equipment. Our Wireless design team’s skills are readily complemented by Fidus’ Hardware, PCB Layout, Signal Integrity, FPGA/DSP, Embedded Software, and Mechanical design expertise.

Design expertise

- **Antennas (printed/ceramic/discrete):** Wi-Fi/WLAN (802.11), Bluetooth®, GPS, HDTV (UHF/VHF), mmWave, RFID, ZigBee®, Power Meters, and many others...
- **Analog, discrete design:** Filters, couplers, detectors, passive equalizers, switches, mixers, etc...
- **Direct conversion:** Direct up/down conversion utilizing high-speed ADCs and DACs
- **Modulators, demodulators:** FSK, GMSK, QAM/QPSK, OFDM, CDMA
- **Power amplifiers:** High linearity, high efficiency, tight spectral mask amplifiers using GaAs, LDMOS, and GaN devices; in Class A, AB, and C operation
- **Receivers:** High sensitivity, large dynamic range AGC loops, low noise high-linearity LNAs, clock and carrier recovery, adaptive equalizers
- **References:** Low phase noise PLLs/Synthesizers, DDS sources, OCKO/TCXO/VCXO, low jitter sources, clock cleaners
- **Specific Absorption Rate (SAR) Computation:** RFID, cell phones
- **Optical:** Transceiver design up to 28Gbps

Tools for high end development

- **Wireless/RF design tools:** Agilent ADS, ANSYS HFSS™, Cadence®, HSPICE®, MATLAB® and Simulink®, Mentor Graphics®
- **RF Laboratory Equipment:** Agilent Network Analyzer, Agilent Vector RF/Signal Generator, Agilent PXA Signal Analyzer, Agilent Digital Signal Analyzer, HP Signal Generators, Electronic Loads, Spectrum Analyzers, Multi-channel high-speed oscilloscopes to 40 GS/s
- **Miscellaneous:** AIS Test Generators and COTS Transponders and Receivers
Examples of our work

About Fidus

Fidus Systems, founded in 2001, specializes in leading-edge electronic product development with offices in Ottawa and Waterloo Ontario, and San Jose, California. Our hardware, software, FPGA and signal integrity teams architect, design and deliver next-generation products for clients in emerging technology markets. We build long-term relationships by consistently exceeding expectations.

Ottawa • Waterloo • San Jose