

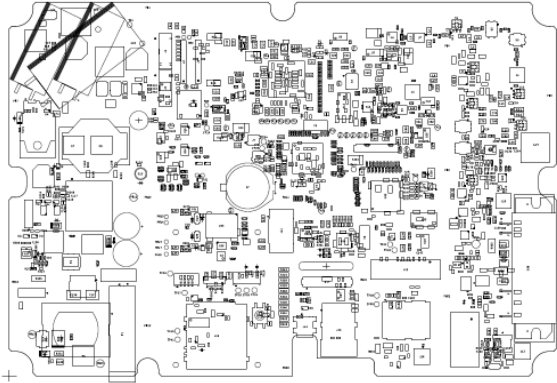
how we Help

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

We all do. So consider Fidus for electronic product development and consulting services.

Our PCB Layout team *hits the highs*- high-speed, high frequency, high complexity, high density, high layer counts, and high performance dielectrics! From simple standalone boards to super thick high-speed, mixed technology, back drilled backplanes; Fidus delivers.

Our PCB Layout design team's skills are readily complemented by Fidus' Hardware, Wireless, Signal Integrity, FPGA/DSP, Embedded Software, and Mechanical design expertise.



Fidus - an excellent choice

At Fidus Systems, we understand the unique challenges faced by technology companies - too many projects and too few engineering resources. With top engineering talent, multiple design centers and on-site staffing options, Fidus provides highly responsive engineering teams that are an extension of your development team to successfully bring products to market faster.

Recognized as a trusted design partner, Fidus is dedicated to meeting customer expectations, and developing long-term relationships with clients built on integrity, quality and open communications.

Fidus is pleased to provide customers with full end-to-end development solutions or more selective targeted engagements.

Fidus has delivered more than 2000 projects for 300+ clients, from Tier-1 multinationals to SMEs to start-ups. Fidus is headquartered in Ottawa, Canada with local design centers in Kitchener-Waterloo and San Jose.

design Expertise

- **Designations:** Our designers have CID/CID+/CID++ accreditation
- **High Density Interconnect (HDI):** Microvia, blind and buried vias, via-in-pad, fine-line, buried capacitance and resistance
- **High-speed:** 28Gbps+, DDR3/4/5 memory interfaces, etc.
- **RF/wireless/analog:** 24GHz+, including, 2.4GHz and 5GHz, printed antennas, other printed elements, sensitive signal handling
- **Impedance control:** Single ended, differential
- **PCB types:** Rigid, Flex, Rigid-Flex
- **PCB materials:** FR4, Polyimide, Megatron 4 & 6, high speed/low loss dielectrics, hybrid constructions (e.g. FR4/Rogers), RoHS
- **Layer counts:** 2 to 40+ layers
- **Layer stacks:** Custom layer stacks for signal integrity
- **Constraint driven placement and routing:** Net topology and scheduling, absolute and relative propagation delay matching, limiting parallelism to avoid crosstalk, package pin delays, phase matching and back drilling, etc.
- **Signal Integrity:** Pre- and post-route analysis and simulations to increase timing margins, reduce reflections, and reduce EMI
- **Power Integrity:** Capacitor placement, plane assignment, dielectric thickness, and simultaneous switching noise (SSN) optimizations, current carrying and thermal analysis/strategies
- **Layout/Mechanical integration:** Component interference checking
- **DFx:** Balancing cost, yield, and DFM/DFA/DFT

tools for High-end development

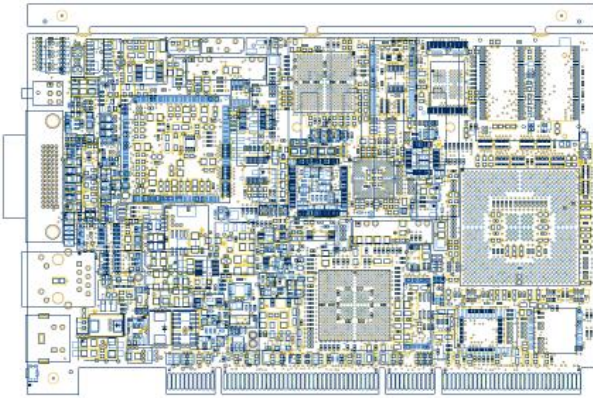
- **PCB Layout:** Cadence[®], Altium[®], Mentor[®], PADS
- **PCB Signal Integrity:** Agilent ADS, ANSYS HFSS[™], Cadence[®] Allegro PCB SI (SPECCTRAQuest), Cadence PSPICE[®], Synopsys HSPICE[®], Mentor Graphics HyperLynx[®]



ALLIANCE PROGRAM
PREMIER MEMBER

bringing you Xilinx premier

As Xilinx Premier, Fidus receives exclusive training, certification, and early-access to tools, IP, and new silicon. By invitation, Fidus was *the* inaugural Xilinx Premier Design Services member in North America. So what does this mean? It means that when you hire Fidus, you know that Fidus is on the forefront of Xilinx's roadmap, experienced in the most advanced tool flows, and is top of mind within the Xilinx support network.



Locations

Ottawa Design Center

and Headquarters

375 Terry Fox Dr.
Ottawa, ON K2H 1E6 Canada
Tel: +1(613) 595-0507
Fax: +1(613) 595-1811

Kitchener-Waterloo design center

180 King Street South, Suite 505
Waterloo, ON N2J 1P8 Canada
Tel: +1(519) 576-0060

San Jose design center

927 Corporate Way
Fremont, CA 94539-6118 USA
Tel: +1(408) 217-1928

Contact Us

Central/Eastern North America

Cameron Redmond
Cell: +1 (519) 635-6835
cameron.redmond@fidus.com

Silicon Valley

Tony Andrews
Cell: +1 (408) 314-9991
tony.andrews@fidus.com

Southern California/Pacific North West

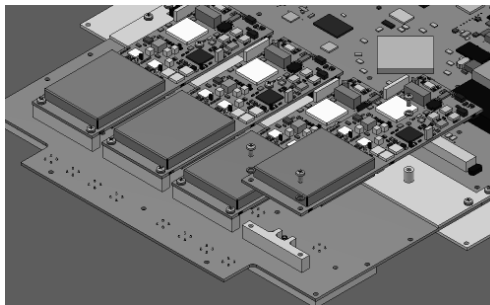
Bruce Ridley
Cell: +1 (206) 818-4701
bruce.ridley@fidus.com

Outside of North America

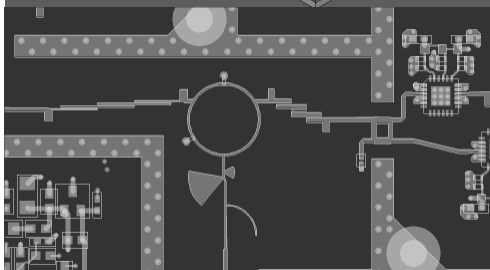
michael.wakim@fidus.com

www.fidus.com

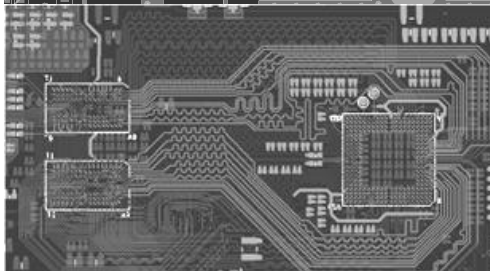
Examples of our work



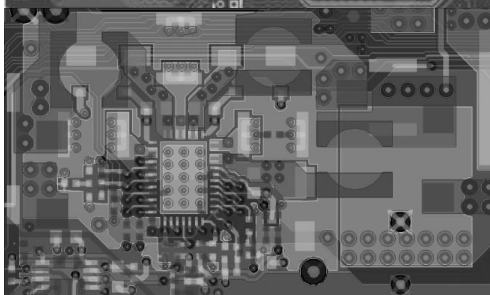
Full CCA
and mechanical integration



RF/Wireless design
and routing



High-speed memory layout
DDR3/4/5, EMI, etc.



Conscientious
power placement, fan-out,
and routing