



Electronic Product Development

high-speed, high complexity MECHANICAL DESIGN

2016

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.

Fidus offers specialized mechanical design capabilities directed at electronic product enclosures (indoors and outdoors!), board level thermal analysis, and structural finite element analysis. With early prototype CNC and 3D printing capabilities, Fidus can usually assess fit in-house.

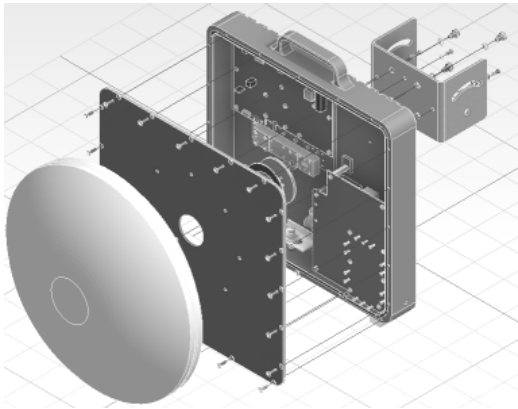
Our mechanical design team's skills are readily complemented by Fidus' Hardware, Wireless, PCB Layout, Signal Integrity, FPGA/DSP, and Embedded Software expertise.

design Expertise

- **Materials:** Plastics, metals, resins, etc.
- **Processes:** Injection molding, bent metal, machining, casting, extruding
- **Environments:** Indoor, outdoor, pole mount, marine
- **Thermal CFD/FEA:** Convective and conductive solutions for steady state or time dependent thermal challenges
- **Structural FEA:** Designing for strength and minimal weight
- **Circuit Board Modeling:** Bidirectional seamless integration between PCB Layout and Mechanical CAD using bidirectional IDF translator
- **EMC Enclosures:** Designs for both CISPR and FCC compliance (conducted and emitted)
- **Concept-to-Production:** Process knowledge and strategies to support customers from concept to prototype to volume
- **Cabling/Connectorization:** Ingress/egress for harsh environments
- **Marketing Collateral:** Photo real concept images

tools for High-end development

- **SolidWorks®:** 3D system design of electromechanical parts and assemblies, motion studies of complex linkages and moving parts, and cable routing
- **SolidWorks® Simulation:** For thermal FEA, structural FEA, mechanisms and moving parts, and computational fluid dynamics
- **CircuitWorks™:** A bidirectional ECAD translator that facilitates PCB import into the Mechanical CAD system for modeling, interference checking, and documentation
- **Autodesk Inventor®:** 3D system design of electromechanical parts and assemblies, motion studies of complex linkages and moving parts, and cable routing
- Experience completing mechanical designs utilizing Pro/ENGINEER®



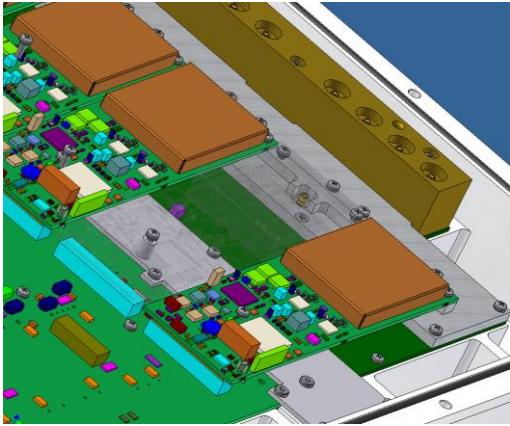
Fidus - an excellent choice

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.



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

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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

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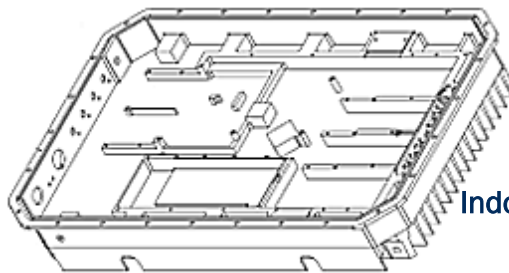
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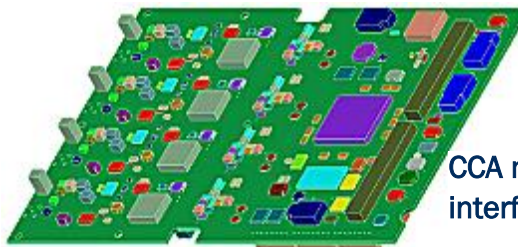
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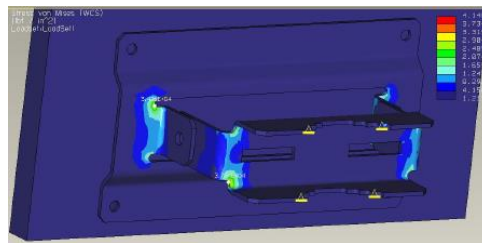
Examples of our work



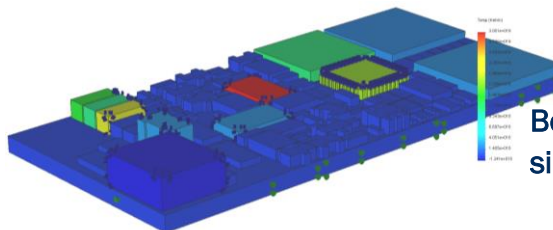
Indoor/outdoor chassis design



CCA modeling and interference checking



Structural FEA



Board level thermal simulations and solutions