

# Design Services Partner Profile

## Orthogone Technologies Inc Company Overview

Date : 03/23/2021

[www.orthogone.ca](http://www.orthogone.ca)

### Partner Details

Partner Tier: Certified  
 Headquarters Location: 2250 Alfred-Nobel Boulevard, Suite 500, Saint-Laurent, QC, Canada  
 Xilinx Alliance Partner Since: 10/15/2012

### Key Contact Info

Alexandre Raymond  
 araymond@orthogone.com

### Regions Served

|                                |     |                 |    |                   |
|--------------------------------|-----|-----------------|----|-------------------|
| <b>Supported Product Types</b> | Yes | Design Services | No | Embedded Products |
|                                | Yes | IP              | No | EDA Tools         |
|                                | No  | Boards          |    |                   |

### Engineering Service Types

|                        |  |                               |
|------------------------|--|-------------------------------|
| Yes                    | General Purpose Services                   | Preferred                     |
| Yes                    | Services in Support of Products Sold       |                               |
| Yes                    | Services Leading to Contract Manufacturing |                               |
| Maximum Service Scope: |  | Turnkey / full product design |

### Engagement Models Supported

|      |   |           |
|------|---|-----------|
| Yes  | SOW-Based Fixed Bid Projects                      | Preferred |
| Yes  | Time and Materials                                |           |
| Both | Captive Resources at Partner or Customer Premises |           |

### Xilinx Design Tool Experience

|     |        |     |         |
|-----|--------|-----|---------|
| Yes | Vivado | Yes | SDSoC   |
| No  | HLx    | No  | SDAccel |

### Industry Certifications Achieved

**Industry Certification Services Offered** CE, FCC, Other / Contact Partner, UL

### Government Clearances

Controlled Goods Program (Canada)

# Design Services Partner Profile

## Orthogone Technologies Inc Segment and Application Focus

|                 |                                   |  |   |
|-----------------|-----------------------------------|--|---|
| Secondary Focus | <b>Defense/Aerospace</b>          | No Focus<br>No Focus<br>No Focus<br>Secondary Focus<br>No Focus<br>No Focus<br>Secondary Focus<br>Secondary Focus<br>Primary Focus<br>No Focus | Homeland Security<br>Electronic Warfare<br>ISR<br>Space<br>Missiles & Munitions<br>Military Avionics<br>Commercial Avionics<br>SatComm<br>Wireless Milcom<br>Other A&D  |
| Primary Focus   | <b>Audio, Video, Broadcast</b>    | Secondary Focus<br>Primary Focus<br>Primary Focus<br>Primary Focus<br>Primary Focus<br>No Focus<br>Secondary Focus<br>No Focus<br>No Focus     | Encoders & Decoders<br>Monitors & Projection<br>Networking & Converters<br>Audio Systems<br>Video Processing Cards<br>Video Conferencing<br>Routers and Switches<br>Pro Cameras & Camcorders<br>Other Broadcast |
| Secondary Focus | <b>Automotive &amp; Transport</b> | Primary Focus<br>Primary Focus<br>Primary Focus<br>Primary Focus<br>Primary Focus  | Driver Assist - Camera<br>Driver Assist Radar/LIDAR<br>Driver Info/Infotainment<br>Automated Driving<br>Other Automotive  |
| Secondary Focus | <b>Consumer</b>                   | Primary Focus<br>No Focus<br>No Focus<br>No Focus  | Digital Display<br>Drones<br>Multifunction Printers<br>Other Consumer   |
| Primary Focus   | <b>Datacenter</b>                 | No Focus<br>Primary Focus<br>Primary Focus   | Storage<br>Compute<br>Networking  |
| Secondary Focus | <b>Industrial, Medical</b>        | No Focus<br>Secondary Focus<br>Primary Focus<br>Primary Focus<br>Primary Focus<br>No Focus<br>No Focus   | Motor Control<br>Industrial Networking<br>Surveillance<br>Machine Vision<br>Medical Imaging<br>Medical / Clinical<br>Other ISM  |

# Design Services Partner Profile



## Orthogone Technologies Inc Segment and Application Focus (continued)

|                 |                                      |   |  |
|-----------------|--------------------------------------|---|--|
| Secondary Focus | <b>Test &amp; Measurement</b>        | No Focus<br>Secondary Focus<br>No Focus<br>Secondary Focus<br>Secondary Focus<br>Secondary Focus                        | Simulation / Emulation<br>T & M Instrumentation<br>Semiconductor Test<br>Wired Communication Test<br>Wireless Communications Test<br>Other Test & Measurement                          |
| Primary Focus   | <b>Wired Comms &amp; Networks</b>    | Primary Focus<br>Secondary Focus<br>Primary Focus<br>No Focus<br>Primary Focus<br>No Focus<br>Primary Focus<br>No Focus | Access Equipment<br>Long Haul/Transport<br>Wired Mobile Backhaul<br>OTN<br>Enterprise Equipment<br>Ethernet Interlaken Connectivity<br>Packet Processing<br>Other Wired Communications |
| Primary Focus   | <b>Wireless Comms &amp; Networks</b> | Primary Focus<br>Primary Focus<br>Primary Focus<br>Primary Focus<br>No Focus  | Baseband<br>Wireless Backhaul<br>Connectivity & Switching<br>Radio<br>Other Wireless   |

# Design Services Partner Profile

## Design Competencies

|  |                           |   |
|--|---------------------------|---|
| <b>System Architecture</b>                           | Primary Focus             | Expertise in wireless/wired infrastructure, LiDAR sub-system, embedded vision, display interfaces, IoT  |
| <b>RF and Analog Design</b>                          | Primary Focus             | RF: Microwave backhaul & small cells design (baseband to antenna). WiFi/BT Modules, 4G Modules, GPS/GNSS chip/module.<br>Analog: Power Supply design, clock gen. and distribution (DAC/ADC), laser driver, photodiode array, etc. |
| <b>FPGA Design and Integration</b>                   | Primary Focus             | FPGA IP Cores FPGA Architecture, Design, Verification (UVM-Based), Test & Integration   |
| <b>FPGA Timing Closure</b>                           | Primary Focus             | Timing closure  |
| <b>FPGA Design Optimization</b>                      | Primary Focus             | Area reduction: e.g. Time-slice techniques. Low-power consumption (e.g. SFP+ module, low-power memory controller, etc.)   |
| <b>Signal Integrity Design and Analysis</b>          | Primary Focus             | SerDes Links (jitter link budget, IBIS-AMI, crosstalk, etc.)<br>DDR-3/4 Memory simulations (timing closure, signal integrity)   |
|  | Inhouse or Subcontracted: | Inhouse   |
|  | Typical Serial Speed:     | 1025  |
| <b>PCB Design &amp; Layout</b>                       | Primary Focus             | High-speed layout. High-Density Interconnect (ball pitch down to 0.4mm). RF, Analog, high-speed digital, etc.   |
|  | Inhouse or Subcontracted: | Both  |
| <b>Industrial and Mechanical Design</b>              | Secondary Focus           | Design partner (industrial design and mechanical engineering)   |
|  | Inhouse or Subcontracted: | Subcontracted   |
| <b>Industry Certification and Compliance Testing</b> | Secondary Focus           | Generally provide pre-certification design services (e.g. EMI/EMC, UL, CE, FCC, HDMI, etc.)   |
|  | Inhouse or Subcontracted: | Both  |
| <b>Quality and Reliability Testing</b>               | Secondary Focus           | MTTF, MTBF Analysis, HALT Testing (partners)  |
|  | Inhouse or Subcontracted: | Subcontracted   |
| <b>Contract Manufacturing</b>                        | Secondary Focus           | NPI (CM partner)  |
|  | Inhouse or Subcontracted: | Subcontracted   |
|  | Max Quantities Supported: | None  |
| <b>Digital Signal Processing</b>                     | Primary Focus             | Audio DSP, Radar applications   |
|  | <b>Experience:</b>        | TI OMAP, Myriad (Intel), CSR (QualComm)   |
| <b>Embedded Processors</b>                           | Primary Focus             | Micro-controller, Micro-processor (processing, multi-media), FPGA embedded, General Purpose Processor   |
|  | <b>Experience:</b>        | TI, QualComm 8xx, NXP i.MX-   |



# Design Services Partner Profile

6/7/8, Renesas  
R-CAR

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|   |  |  |
|---|--|--|
| <b>Embedded Porting /<br/>BSP Extension</b>               | Primary Focus  | BSP, Embedded OS/RTOS development and porting.   |
| OS and RTOS Design Experience:                            | Android, FreeRTOS, Linux, QNX, ThreadX, Windows Embedded |  |
| <b>Embedded Application<br/>Development</b>               | Primary Focus  | API and Device drivers, communication stacks (Ethernet, TCP/IP, PCIe, USB, etc.), security frameworks, etc.              |
| <b>Image Sensor Fusion</b>                                | No Focus   |  |
| Homo or Heterogeneous:<br>Sensor Types Design Experience: |  |  |
| <b>Computer Vision</b>                                    | Primary Focus  | Automotive LiDAR, frame grabbers, image sensors and cameras, medical imaging application, (ultra high resolution sensor) |
| <b>Machine Learning</b>                                   | Secondary Focus  | Image classification   |
| Framework Experience:<br>Network Model Experience:        |  |  |

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