

# Design Services Partner Profile



## Xylon d.o.o. Company Overview

Date : 05/17/2018

www.logicbricks.com

### Partner Details

Partner Tier: Premier  
Headquarters Location: Fallerovo Setaliste 22,Zagreb,,Croatia  
Xilinx Alliance Partner Since: 4/11/2000

### Key Contact Info

Roko Soldat  
roko.soldat@logicbricks.com

### Regions Served

APAC, Africa, Central and South America, Eastern Europe and Russia, India, Japan, Middle East, North America Central, North America East, North America West, Western Europe

### Supported Product Types

Yes	Design Services	Yes	Embedded Products
Yes	IP	No	EDA Tools
Yes	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
Yes	HLx	No	SDAccel

### Industry Certifications Achieved

ISO 9001

### Industry Certification Services Offered

### Government Clearances

None

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## Xylon d.o.o. Segment and Application Focus

Primary Focus	<b>Defense/Aerospace</b>	<ul style="list-style-type: none"> <li>No Focus</li> <li>No Focus</li> <li>Primary Focus</li> <li>Secondary Focus</li> <li>No Focus</li> <li>Primary Focus</li> <li>No Focus</li> <li>No Focus</li> <li>No Focus</li> <li>Primary Focus</li> </ul>	<ul style="list-style-type: none"> <li>Homeland Security</li> <li>Electronic Warfare</li> <li>ISR</li> <li>Space</li> <li>Missiles &amp; Munitions</li> <li>Military Avionics</li> <li>Commercial Avionics</li> <li>SatComm</li> <li>Wireless Milcom</li> <li>Other A&amp;D</li> </ul>
Secondary Focus	<b>Audio, Video, Broadcast</b>	<ul style="list-style-type: none"> <li>Secondary Focus</li> <li>Primary Focus</li> <li>Primary Focus</li> <li>Secondary Focus</li> <li>No Focus</li> <li>Secondary Focus</li> <li>No Focus</li> <li>Primary Focus</li> <li>No Focus</li> </ul>	<ul style="list-style-type: none"> <li>Encoders &amp; Decoders</li> <li>Monitors &amp; Projection</li> <li>Networking &amp; Converters</li> <li>Audio Systems</li> <li>Video Processing Cards</li> <li>Video Conferencing</li> <li>Routers and Switches</li> <li>Pro Cameras &amp; Camcorders</li> <li>Other Broadcast</li> </ul>
Primary Focus	<b>Automotive &amp; Transport</b>	<ul style="list-style-type: none"> <li>Primary Focus</li> <li>Secondary Focus</li> <li>Secondary Focus</li> <li>Primary Focus</li> <li>Primary Focus</li> </ul>	<ul style="list-style-type: none"> <li>Driver Assist - Camera</li> <li>Driver Assist Radar/LIDAR</li> <li>Driver Info/Infotainment</li> <li>Automated Driving</li> <li>Other Automotive</li> </ul>
Secondary Focus	<b>Consumer</b>	<ul style="list-style-type: none"> <li>Secondary Focus</li> <li>Secondary Focus</li> <li>Secondary Focus</li> <li>No Focus</li> </ul>	<ul style="list-style-type: none"> <li>Digital Display</li> <li>Drones</li> <li>Multifunction Printers</li> <li>Other Consumer</li> </ul>
No Focus	<b>Datacenter</b>	<ul style="list-style-type: none"> <li>No Focus</li> <li>No Focus</li> <li>No Focus</li> </ul>	<ul style="list-style-type: none"> <li>Storage</li> <li>Compute</li> <li>Networking</li> </ul>
Primary Focus	<b>Industrial, Medical</b>	<ul style="list-style-type: none"> <li>No Focus</li> <li>No Focus</li> <li>Primary Focus</li> <li>Primary Focus</li> <li>Primary Focus</li> <li>Primary Focus</li> <li>Primary Focus</li> <li>Secondary Focus</li> </ul>	<ul style="list-style-type: none"> <li>Motor Control</li> <li>Industrial Networking</li> <li>Surveillance</li> <li>Machine Vision</li> <li>Medical Imaging</li> <li>Medical / Clinical</li> <li>Other ISM</li> </ul>

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## Xylon d.o.o. Segment and Application Focus (continued)

Secondary Focus	<b>Test &amp; Measurement</b>	<ul style="list-style-type: none"> <li>Secondary Focus</li> <li>Primary Focus</li> <li>Secondary Focus</li> <li>No Focus</li> <li>No Focus</li> <li>No Focus</li> </ul>	<ul style="list-style-type: none"> <li>Simulation / Emulation</li> <li>T &amp; M Instrumentation</li> <li>Semiconductor Test</li> <li>Wired Communication Test</li> <li>Wireless Communications Test</li> <li>Other Test &amp; Measurement</li> </ul>
No Focus	<b>Wired Comms &amp; Networks</b>	<ul style="list-style-type: none"> <li>No Focus</li> <li>No Focus</li> <li>No Focus</li> <li>No Focus</li> <li>No Focus</li> <li>No Focus</li> <li>No Focus</li> <li>No Focus</li> </ul>	<ul style="list-style-type: none"> <li>Access Equipment</li> <li>Long Haul/Transport</li> <li>Wired Mobile Backhaul</li> <li>OTN</li> <li>Enterprise Equipment</li> <li>Ethernet Interlaken Connectivity</li> <li>Packet Processing</li> <li>Other Wired Communications</li> </ul>
No Focus	<b>Wireless Comms &amp; Networks</b>	<ul style="list-style-type: none"> <li>No Focus</li> <li>No Focus</li> <li>No Focus</li> <li>No Focus</li> <li>No Focus</li> </ul>	<ul style="list-style-type: none"> <li>Baseband</li> <li>Wireless Backhaul</li> <li>Connectivity &amp; Switching</li> <li>Radio</li> <li>Other Wireless</li> </ul>

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## Design Competencies

<b>System Architecture</b>	Primary Focus	UFDM certified, HW/SW partitioning, soft-CPU's and SoC/MPSoC CPU's, optimizations on size and timings, system modeling
<b>RF and Analog Design</b>	Secondary Focus	Power supplies, eventual ADCs, PHYs (i.e. MIPI), power supply monitors, video front-ends with operational amplifiers
<b>FPGA Design and Integration</b>	Primary Focus	Xylon works exclusively with Xilinx devices since 1995. We have used almost all FPGA and SoC families, starting from the XC3000.
<b>FPGA Timing Closure</b>	Primary Focus	Familiar with all Xilinx design guidelines for timing constraining, static timing analysis, and all techniques to achieve and timing goals.
<b>FPGA Design Optimization</b>	Primary Focus	Familiar with all techniques and coding styles (including partial reconfiguration) that assure the best optimization and timing closure results in different families.
<b>Signal Integrity Design and Analysis</b>	Secondary Focus	With Xilinx developed a proprietary Gbps multimedia serial link (VLINK) that works through an ordinary differential pair. Experienced with FPD-Link II, FPD-Link III, APIX, APIX2, Ethernet, MIPI, HiSpi, SATA, MOST....
	Inhouse or Subcontracted: Inhouse Typical Serial Speed: 3	
<b>PCB Design &amp; Layout</b>	Primary Focus	Able to produce complex PCBs: BGA IC footprints, Gbps lines, up to 20 layers...Connections to different Mfg. Do PCB designs for customers within proof-of-concept and demo projects, as well as small volume Xylon HW products.
	Inhouse or Subcontracted: Inhouse	
<b>Industrial and Mechanical Design</b>	Secondary Focus	Xylon can design small mechanical products in order to complete in-house or customer developed electronics.
	Inhouse or Subcontracted: Both	
<b>Industry Certification and Compliance Testing</b>	Secondary Focus	Preparation of Xylon products for CE and FCC conformance testings.
	Inhouse or Subcontracted: Subcontracted	
<b>Quality and Reliability Testing</b>	Secondary Focus	Experienced in using Xilinx Soft Error Mitigation (SEM) IP core and some other Xilinx functional safety tools.
	Inhouse or Subcontracted: Inhouse	
<b>Contract Manufacturing</b>	Secondary Focus	Xylon has developed a number of different Xilinx-based development boards, FMC cards, camera modules and also can manufacture different add-on cards (mostly FMC) to support customer prototyping needs. Supported Xilinx TDPs,
	Inhouse or Subcontracted: Subcontracted Max Quantities Supported: 1000s	

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<p><b>Digital Signal Processing</b></p> <p><b>Experience:</b></p>	<p>Primary Focus</p> <p>MicroBlaze, Zynq SoC and Zynq UltraScale MPSoC</p>	<p>Specialists for video and computer vision, DSP, algorithm development and optimizations for use in Xilinx devices.</p>
<p><b>Embedded Processors</b></p> <p><b>Experience:</b></p>	<p>Primary Focus</p> <p>PicoBlaze, MicroBlaze, Zynq, PowerPC, MIPS</p>	<p>Experienced with Xilinx soft-CPU's, PowerPC and ARM processing systems, as well as with many other embedded SoCs (Intel, MIPS, ARM...)</p>
<p><b>Embedded Porting / BSP Extension</b></p> <p>OS and RTOS Design Experience:</p>	<p>Secondary Focus</p> <p>Android, Linux, QNX, Windows Embedded</p>	<p>Xylon provides software drivers for logicBRICKS IP cores and can develop software applications for different operating systems.</p>
<p><b>Embedded Application Development</b></p>	<p>Primary Focus</p>	<p>Xylon is capable to develop embedded applications for WEC OS, Linux OS, no-OS or RTOS.</p>
<p><b>Image Sensor Fusion</b></p> <p>Homo or Heterogeneous:</p> <p>Sensor Types Design Experience:</p>	<p>Primary Focus</p> <p>Both</p> <p>Accelerometer, Compass, GPS / Position, Gyro, Inclinometer, Other / Contact Partner, Thermal, Tilt, Video (SD, HD)</p>	<p>Complete automotive surround view system solution. Customers are major OEMs and Tier1s. Heterogeneous video/thermal sensor fusion demo. Heterogeneous video/IMU units (accelerometer, gyroscope and magnetometer).</p>
<p><b>Computer Vision</b></p>	<p>Primary Focus</p>	<p>Xylon provides solutions for face detection and tracking, emotions, gender and age estimators, driver monitoring systems, objects detections and recognition...</p>
<p><b>Machine Learning</b></p> <p>Framework Experience:</p> <p>Network Model Experience:</p>	<p>Primary Focus</p> <p>Caffe</p> <p>AlexNet, FCN, GoogLeNet, ResNet, SSD, SqueezeNet, VGG</p>	<p>Xylon is an active member of the reVISION ecosystem, and works with the complete stack.</p>