FPGA DESIGN & ARCHITECTURE

FOR XILINX SILICON

A new FPGA design based on Xilinx silicon can supercharge your products, but the development process can be daunting.

System components, multi-core SoCs, IP, and toolsets...

It's a challenge to get it all done, but technology complexities don't have to slow you down.

ADAS MULTI-CAMERA

A pair of Xilinx Zynq UltraScale+ devices was used to process up to seven 12MP 12-bit video streams, and up to three 1MP 8-bit video streams simultaneously.

- All video streams ran at 30 fps and were received via MIPI CSI-2 and parallel interfaces.
- The video was filtered, color corrected, color space converted, and multiplexed over a PCIe 3.0 x8 link to the system for additional video processing.
- The un-processed video was sent via a PCIe 3.0 x4 link to the system for logging.

DEFENSE-CLASS NETWORKING

The DornerWorks MAF Endpoint FPGA IP was implemented on a system that detects and mitigates the threat of oncoming airborne explosive devices around the perimeter of military ground vehicles.

- Meets demands for MAPS.
- gPTP module with +/-8ns accuracy.
- Credit-based, strict-priority scheduling.

The IP was developed for Xilinx FPGAs. As part of the MAC IP, it enables support for multiple types of traffic over a common network to reduce costs.

RADAR PROCESSING

A major defense contractor, with FPGA engineering guidance from DornerWorks, developed a system that searches for and identifies moving targets with concealed explosive devices.

- Successfully reduced the size, weight, and power costs of an existing radar system on an AVNET MicroZed with a Zynq-7000 device.
- Optimized data throughput speeds.
- Integrated the customers' existing ADC capture logic to receive ADC samples.

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"DornerWorks is a professional, flexible, AND AN *ESSENTIAL* PART **OF OUR TEAM**"

FRUSTRATION-FREE FPGA DEVELOPMENT

SUPERCHARGE YOUR XILINX TECHNOLOGY

Whether you are building products for aerospace & defense or the medical market, you can get to market quickly and stand out from the competition with FPGA engineering services from DornerWorks.

Schedule a consultation with DornerWorks today so you can lead the market and get back to growing your business.

GET STARTED TODAY

Connect with us now. Together we will map out a plan that meets your product goals and helps you lead the market.

DEVELOP QUICKLY
RETAIN KNOWLEDGE

DornerWorks can help you understand crucial Xilinx tools so you can configure your FPGAs on your own.

DIVERSE & VERSATILE PLATFORMS

- Real-time video
- Time-synchronous networking
- Radio/RFSoC
- Machine learning
- DSP

MULTI-DISCIPLINE DESIGN PARTNER

- Turnkey solutions
- Design migration
- Algorithm implementation & acceleration
- Hypervisor-based separation
- Video processing IP
- Custom IP

XILINX ALLIANCE PROGRAM PREMIER

SCHEDULE A CONSULTATION

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