Xilinx is the leading provider of programmable logic devices to the automotive industry with market-specific targeted design platforms and services that go beyond silicon to enable faster time-to-market and innovative custom design solutions at lower overall cost.

**The Xilinx Advantage**
- Flexible engagement models to balance design, resource, and business requirements
- Certified automotive design services and IP with access to the latest FPGA advancements for high quality design solutions
- Available expertise in video/graphics, image processing/recognition, networking and connectivity
- Ultimate design flexibility, reliability, and price-performance

**Custom Design Services**
Creating highly differentiated products is an imperative faced by all automotive electronics manufacturers while advances in semiconductor technology are exploding the development costs of conventional ASIC and ASSP devices. Xilinx automotive platforms and design services offer the benefits of a market-specific tailored package which can be quickly customized or scaled to meet individual customer and project needs.

**Targeted Design Platforms**
All customers have access to the full range of Xilinx Targeted Design Platforms with advanced FPGA silicon and design tools, Xilinx and third-party intellectual property (IP) cores and software tools, development boards, and reference designs. The comprehensive IP portfolio spans general purpose, domain-focused, and application specific offerings for automotive system development.

"After exhaustive evaluations of existing solutions, we decided to use XYLON’s logicBRICKS™ IP cores and design services for our Graphical FPGA design. Their flexible design services, excellent support and an extensive knowledge about FPGA-based display controllers showed us that it was the right decision."

DIPL. ING. MATTHIAS KOERBER
ENGINEERING GROUP MANAGER, DISPLAYS
DELPHI-GRUNDIG
GRUNDIG CAR INTERMEDIA SYSTEM GmbH
Design It Your Way

Xilinx offers a variety of design engagement models that match the flexibility of our FPGAs. Services range from simple IP licensing agreements, design optimization and integration, to full turnkey design solutions. Tailor an approach that best matches your organization’s skill and resource levels, customization needs, product schedules, and business goals.

Best-in-Class Design Services and IP

For automotive system design applications, Xilinx works closely with its world-class network of third-party design service and IP providers. These companies are specialists in their fields with skilled teams of engineering professionals dedicated to delivering the best solutions in the marketplace.

Members of the extensive Xilinx design ecosystem are held to high standards and a shared commitment to on-time delivery and quality. They are given unprecedented access to Xilinx technology and expertise, and operate using a common set of programs and terms including the SignOnce IP license.

Xilinx also collaborates with leaders in key automotive segments and industry standard organizations to ensure that all products and services meet the most rigorous standard requirements.

For FPGA design projects, Xilinx in-house engineering services enable you to quickly ramp up FPGA knowledge and design expertise. Titanium Dedicated Engineering provides experienced on-site FPGA engineering resources to help close critical issues. Titanium Engineers can provide the expertise needed, with enormous experience from multiple, focused engagements in such key areas as: embedded support, digital signal processing, general debug, general tool usage, performance-optimization, timing closure, triple modular redundancy support and PlanAhead™ floorplanning.

Contact your local Xilinx sales representative to create a custom solutions service for your needs.

Our Extensive Network of Design Support Vendors Includes:

Digital Design Corporation is a USA-based craftsman organization committed to providing best-in-class design services and IP for the automotive industry. DDC architects, designs, and implements FPGAs and ASICs, associated circuits and software, and the systems which encompass them. DDC will take on whole projects, entire chips, or become members of a project team. The DDC team specializes in and has considerable IP in video/image processing and communications, particularly in the areas of driver assist, camera applications, and specialty video processing.

Premier Alliance member XYLON is a leading provider of FPGA-based development systems for the industrial, medical and automotive markets. It provides optimized IP cores, from its LogicBRICKS library, interfaces and services that improve designer’s effectiveness and lower overall production costs.

XYLON has designed and delivered more than 30 video and communication-related Xilinx FPGA designs in automotive and industrial field. It is acknowledged and recognized by European, Asian and USA customers for its competence and high design standards that ensure efficient video applications, Xilinx works closely with its world-class network of third-party design service and IP providers. These companies are specialists in their fields with skilled teams of engineering professionals dedicated to delivering the best solutions in the marketplace.

Members of the extensive Xilinx design ecosystem are held to high standards and a shared commitment to on-time delivery and quality. They are given unprecedented access to Xilinx technology and expertise, and operate using a common set of programs and terms including the SignOnce IP license.

Xilinx also collaborates with leaders in key automotive segments and industry standard organizations to ensure that all products and services meet the most rigorous standard requirements.

For FPGA design projects, Xilinx in-house engineering services enable you to quickly ramp up FPGA knowledge and design expertise. Titanium Dedicated Engineering provides experienced on-site FPGA engineering resources to help close critical issues. Titanium Engineers can provide the expertise needed, with enormous experience from multiple, focused engagements in such key areas as: embedded support, digital signal processing, general debug, general tool usage, performance-optimization, timing closure, triple modular redundancy support and PlanAhead™ floorplanning.

Contact your local Xilinx sales representative to create a custom solutions service for your needs.

Our Extensive Network of Design Support Vendors Includes:

Digital Design Corporation is a USA-based craftsman organization committed to providing best-in-class design services and IP for the automotive industry. DDC architects, designs, and implements FPGAs and ASICs, associated circuits and software, and the systems which encompass them. DDC will take on whole projects, entire chips, or become members of a project team. The DDC team specializes in and has considerable IP in video/image processing and communications, particularly in the areas of driver assist, camera applications, and specialty video processing.

Premier Alliance member XYLON is a leading provider of FPGA-based development systems for the industrial, medical and automotive markets. It provides optimized IP cores, from its LogicBRICKS library, interfaces and services that improve designer’s effectiveness and lower overall production costs.

XYLON has designed and delivered more than 30 video and communication-related Xilinx FPGA designs in automotive and industrial field. It is acknowledged and recognized by European, Asian and USA customers for its competence and high design standards that ensure efficient video applications, Xilinx works closely with its world-class network of third-party design service and IP providers. These companies are specialists in their fields with skilled teams of engineering professionals dedicated to delivering the best solutions in the marketplace.

Members of the extensive Xilinx design ecosystem are held to high standards and a shared commitment to on-time delivery and quality. They are given unprecedented access to Xilinx technology and expertise, and operate using a common set of programs and terms including the SignOnce IP license.

Xilinx also collaborates with leaders in key automotive segments and industry standard organizations to ensure that all products and services meet the most rigorous standard requirements.

For FPGA design projects, Xilinx in-house engineering services enable you to quickly ramp up FPGA knowledge and design expertise. Titanium Dedicated Engineering provides experienced on-site FPGA engineering resources to help close critical issues. Titanium Engineers can provide the expertise needed, with enormous experience from multiple, focused engagements in such key areas as: embedded support, digital signal processing, general debug, general tool usage, performance-optimization, timing closure, triple modular redundancy support and PlanAhead™ floorplanning.

Contact your local Xilinx sales representative to create a custom solutions service for your needs.

Our Extensive Network of Design Support Vendors Includes:

Digital Design Corporation is a USA-based craftsman organization committed to providing best-in-class design services and IP for the automotive industry. DDC architects, designs, and implements FPGAs and ASICs, associated circuits and software, and the systems which encompass them. DDC will take on whole projects, entire chips, or become members of a project team. The DDC team specializes in and has considerable IP in video/image processing and communications, particularly in the areas of driver assist, camera applications, and specialty video processing.

Premier Alliance member XYLON is a leading provider of FPGA-based development systems for the industrial, medical and automotive markets. It provides optimized IP cores, from its LogicBRICKS library, interfaces and services that improve designer’s effectiveness and lower overall production costs.

XYLON has designed and delivered more than 30 video and communication-related Xilinx FPGA designs in automotive and industrial field. It is acknowledged and recognized by European, Asian and USA customers for its competence and high design standards that ensure efficient video applications, Xilinx works closely with its world-class network of third-party design service and IP providers. These companies are specialists in their fields with skilled teams of engineering professionals dedicated to delivering the best solutions in the marketplace.

Members of the extensive Xilinx design ecosystem are held to high standards and a shared commitment to on-time delivery and quality. They are given unprecedented access to Xilinx technology and expertise, and operate using a common set of programs and terms including the SignOnce IP license.

Xilinx also collaborates with leaders in key automotive segments and industry standard organizations to ensure that all products and services meet the most rigorous standard requirements.

For FPGA design projects, Xilinx in-house engineering services enable you to quickly ramp up FPGA knowledge and design expertise. Titanium Dedicated Engineering provides experienced on-site FPGA engineering resources to help close critical issues. Titanium Engineers can provide the expertise needed, with enormous experience from multiple, focused engagements in such key areas as: embedded support, digital signal processing, general debug, general tool usage, performance-optimization, timing closure, triple modular redundancy support and PlanAhead™ floorplanning.

Contact your local Xilinx sales representative to create a custom solutions service for your needs.

Our Extensive Network of Design Support Vendors Includes:
Samples of Available IP and Platforms

COMMODITY IP

BASIC INTERFACE & CONTROL:
- UART, SPI, I2C, GPIO
- Stepper Motor Control
- Memory Controllers

BASIC SIGNAL PROCESSING:
- FFT / 2D FFT / IFFT
- Convolution/Correlation
- FIR / Adaptive / 2D Filtering

EMBEDDED PROCESSING & CONNECTIVITY:
- 32-bit RISC CPU
- Interrupt Controllers
- DMA
- PCI, PCIe, SDIO, USB, Ethernet

DOMAIN AND AUTOMOTIVE-SPECIFIC IP

VIDEO & GRAPHICS:
- 2D graphics accelerator
- Multi-layer video controller
- Versatile video input
- Picture enhancement

IMAGE PROCESSING & RECOGNITION:
- Motion estimation for image stabilization
- Edge detection
- Lens distortion correction

IN-VEHICLE NETWORKING & CONNECTIVITY:
- MOST
- CAN
- APIX

TARGET DESIGN PLATFORMS AND DEMONSTRATION DESIGNS

INFOTAINMENT:
- Host companion chip development platform
- Embedded GUI development platform
- Multimedia display development platform

DRIVER INFORMATION:
- Hybrid Cluster design platform with analog and digital display
- Fully reconfigurable cluster demo

DRIVER ASSISTANCE:
- Four camera processing with panoramic stitching demo
- Lane departure warning pre-processor design
- Optical flow IP demo

© Copyright 2011 Xilinx, Inc. XILINX, the Xilinx logo, Virtex, Spartan, ISE and other designated brands included herein are trademarks of Xilinx in the United States and other countries. All other trademarks are the property of their respective owners.