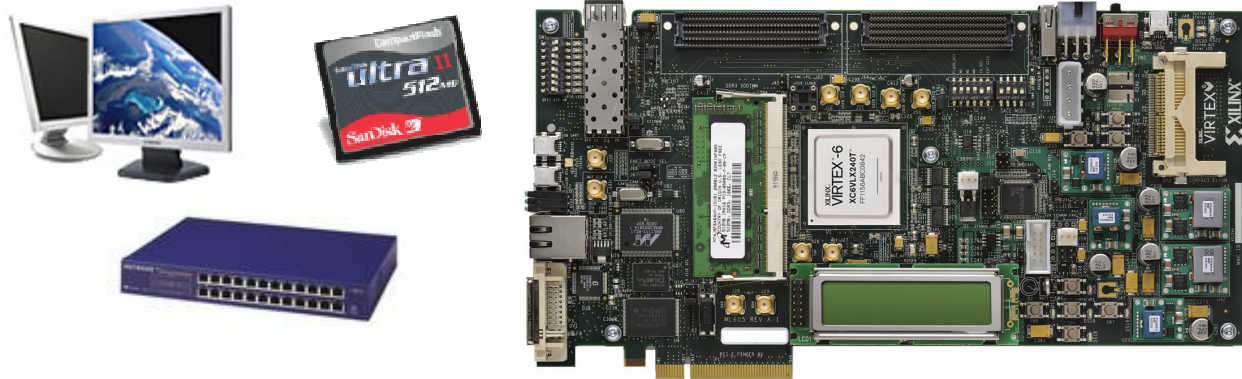


Viper Development Platform

Evaluation and Software Development



The Trilinear Viper Development Platform offers customers a versatile and cost-effective method for evaluating and testing the full suite Trilinear Intellectual Property cores. Using the integrated Compact Flash system, multiple cores may be evaluated using a single system. Video output is provided via the ADC/DVI ports on the board while input video requires the use of a daughter card that attaches to the FMC HPC/LPC connectors. This card also offers additional output capabilities, including Displayport, for maximum flexibility.

Each Viper system includes a host processor and peripheral suite running a flash-based ROM monitor that loads at power-up. The ROM monitor has facilities to accommodate downloading application code developed using GCC and the included Viper SDK. This allows for simultaneous hardware and software evaluation efforts.

Integrated Host Processor

- 32-bit RISC processor
- Embedded ROM monitor
- Up to 150MHz operation
- Internal AMBA 2.0 bus system

Built-In ROM Monitor

- Detects integrated IP at run time
- Applications built using GCC may be downloaded using the serial port or Ethernet
- Includes traditional shell commands

DDR-3 Memory System

- 512 MB PC4200
- 533 MHz Data Rate
- Peak bandwidth of 4.3 GB / sec

Integrated 2D Accelerator

- Trilinear T211A Accelerator core
- 133MHz operation
- Includes polygon fill, BitBLT, rotate BLT, scaled BLT, block fill and vector drawing

Onboard DVI Interface and LCD Controller

- Programmable display timing controller
- Display path supports multiple color depth

Support Functions

- UART, Timers, GPIO
- PS/2 Controller
- Strata Flash Controller, 32 MB
- IIC Master
- Character LCD Interface

Xilinx ml605 Based System

- Xilinx Virtex-6 LX240T
- Compact Flash card programming interface for rapid field upgrades

Built in Networking

- Integrated Trilinear Ethernet MAC core optimized for video streaming applications
- 10 / 100 / 1G operation
- Marvell Ethernet PHY

