

VIA

VX11/H

Media System Processor



Chipset

Created using 40nm advanced process technology, the VIA VX11 is a highly integrated media system processor supporting DDR3 memory up to 1333 MHz and offers a power-efficient DX11-enabled multimedia platform with true USB 3.0 support to deliver outstanding graphics performance. It also supports Blu-ray (VX11H with HDCP only) and HD video along with a suite of video enhancements.

Highlights

- 533 to 1066MHz front side bus
- Supports DDR3 1333 SDRAM controller
- Integrated Chromotion™ 5.0 DX11 2D/3D graphics & video processor, High Definition video decoder, Blu-ray ready
- Supports VGA, DisplayPort™ and HDMI™ connectivity options
- Integrated single-channel LVDS transmitter, one 4-lane PCIe port and two 1-lane PCIe ports
- Supports up to three USB 3.0 ports and one USB 3.0 device port (shared with one of the USB 3.0 ports) and six USB 2.0 ports
- Compliant with SDIO 3.0 and supports four UART ports, SPI, RTC, LPC, SMBus, and two SATA 2.0 ports
- ACPI and comprehensive power management
- Supports OpenGL 3.2

Key Features

Supported Processors

- VIA QuadCore and Multi-core processors
- 533-1066MHz FSB speed

Memory Controller

- DDR3 1333 SDRAM memory with maximum memory capacity of 16GB
- 1/2/4Gb(x8/x16) memory devices, and up to two memory slots

Storage Interface

- Two SATA 2.0 ports with AHCI 1.3 support
- A card reader interface with support for MMC, MS Pro HG, and SDHC/SDXC

Peripheral Interface

- One 4-lane & two 1-lane PCIe ports, or one 2-lane & four 1-lane PCIe ports
- Supports up to three USB 3.0 ports and one USB 3.0 device port (shared with one of the USB 3.0 ports) and six USB 2.0 ports
- Supports one SDIO port, four UART ports, SPI, LPT, and SMBus/GPIO interfaces

Integrated 3D/2D Video Processor

- VIA Chromotion™ 5.0 DX11 3D engine
- 128-bit 2D engine with hardware rotation capability
- High Definition video post processor for scaling and quality enhancement

High Definition Video Codec

- Blu-ray ready, MPEG2, WMV9/VC1, and H.264 video decode acceleration
- H.264 video encoder
- OpenGL™ 3.2

Display Interface

- Three 10-bit 350MHz RAMDACs
- Supports VGA, DisplayPort™ and HDMI™ connectivity options
- DVP port and panel interface – single-channel LVDS
- A DVP interface is provided for connection to the external display transmitter chip for certain customized applications
- Maximum supported resolution - CRT: 2048x1536, single-channel LVDS: 1366x768, HDMI: 1920x1200 and DisplayPort: 2560x1600
- DuoView⁺

Video Capture Port

- Supports CCIR656/CCIR601 input
- Supports parallel and serial transport stream input

High Definition Audio Interface

- Supports up to 32-bit sample depth at 192KHz sampling rate
- Supports three audio Codecs and eight audio streams

Supported Software Standards

- Integrated DirectX 11 compliant graphics processor and Hi-Def Video/Audio capabilities
- Windows 8, Windows 7, Windows XP and Linux

Power Management

- ACPI and PCI Bus power management compliant
- Extensive chip power management

Package

- Flip-chip Ball Grid Array (FCBGA)
- Package size: 33mm x 33mm

TDP Power

- TDP max: 5.8 W

VX11/H Block Diagram

