



VSC452

Super Baseboard Management Controller with Integrated VGA Controller

Provides Everything Required to Monitor Operational Aspects of High-Performance Servers

This product is Not Recommended for New Designs. Some versions may be No Longer Available or being discontinued and subject to Last Time Buy, after which new orders can not be placed.

Description

The VSC452 is a highly integrated baseboard management system-on-chip that provides a cost-effective solution for baseboard management in high-performance servers. The VSC452 integrates a limited set of super I/O functions with a fully featured BMC, including a hardware-based acceleration engine, USB functions, Ethernet MACs, and a video compression engine. The device, along with a minimum number of additional components, can be configured to support all baseboard management functions and a limited number of super I/O functions while retaining the flexibility to support a significantly expanded system through various peripheral interfaces. The integrated video processor and digital video compression engine enable the VSC452 to provide robust remote KVM over IP. External component requirements are limited to a real-time clock, memory devices, and I²C peripherals dedicated to system management functions.

Key Features

- IPMI 2.0-Compliant Baseboard Management Controller (BMC) Includes:
 - MIPS Microprocessor Core
 - Master/Slave Mode, Multimaster-Capable, I²C Serial Interfaces (IPMB)
 - General-Purpose UARTs with Modem and RS-485 Control
 - User-Defineable GPIO with Up to 80 External Interrupts
 - Programmable Timers
 - Pulse-Width Modulator (PWM) Outputs and Fan Tach Inputs
 - Analog-to-Digital Converter (ADC)
 - Flexible Interface to Parallel, SPI™, or NAND Flash Memory
- Integrated Video Graphics Controller
- Video Compression Engine with Video Input and DDR2 Video Buffer Interface
- Encryption/Decryption Engines

- Virtual Media Storage Mechanism Using the USB and Ethernet Ports
- Enterprise-Class Software and Video Compression Supported by Third-Party Partners
- Ethernet MAC for Remote Management
- PCIe® and USB Interfaces

Applications/Uses

- Console Redirect with KVM Over IP
- Mouse and Keyboard Emulation Over USB
- Remote Power Management
- Serial Over LAN
- Virtual Storage Through USB and Ethernet

Part Number

VSC452XHW-05W	Package	PBGA-HS; 484Pin; 533.6mm ²
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VSC452XHW-04W	Package	PBGA-HS; 484Pin; 533.6mm ²