VSC205

VITESSE

LVD SCSI Enclosure Management Controller

SPECIFICATIONS:

▶ 160-pin PQFP Package

▶ External Flash and/or SRAM (60ns to 250ns)

▶ Two integrated 8K Byte User Data SRAMs

APPLICATION DIAGRAM:

APPLICATIONS:

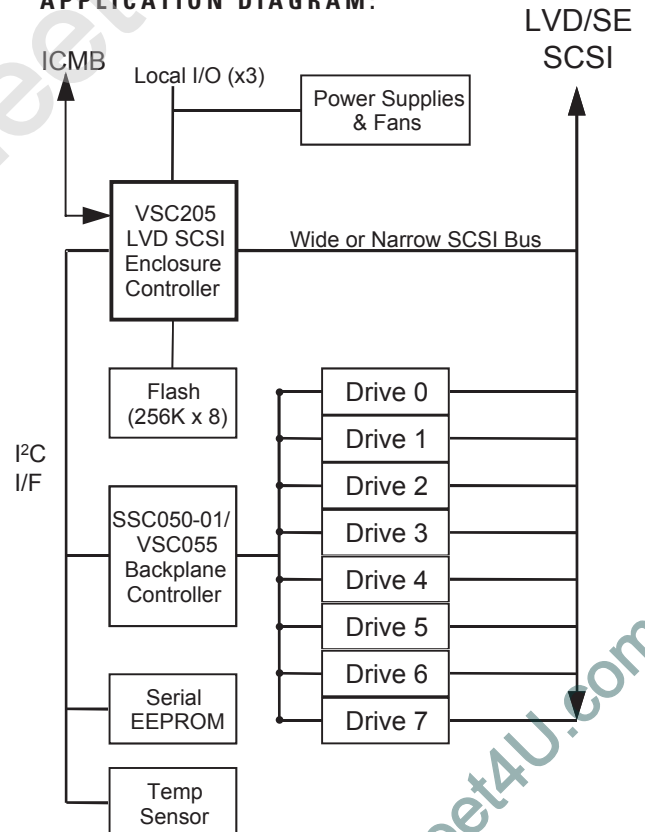▶ SCSI JBODs

▶ Disk Arrays

▶ RAID subsystems

▶ Servers

FEATURES:

▶ Device:
- Integrated SCSI Controller with LVD or Single Ended Operation Over a Wide SCSI Bus
- Target and Initiator Mode with Wide SCSI Arbitration and Selection Support
- Disconnect and Reselect Support Minimizing SCSI Bus Connect Time
- Three I²C Serial Interface Controllers
- 32-bit, 40Mhz RISC CPU w/debug Port
- IPMI 1.x Compatible
- RS-232 Monitor Port
- Four External 1MB Address Ranges
- Up to 28 Programmable General Purpose I/Os

▶ Software Development Kit (SDK):
- Modular Architecture to Support Migration to Other I/O Technologies and Protocols
- Extensive Peripheral Device Library
- Sample Personality Module Source Code

VSC205

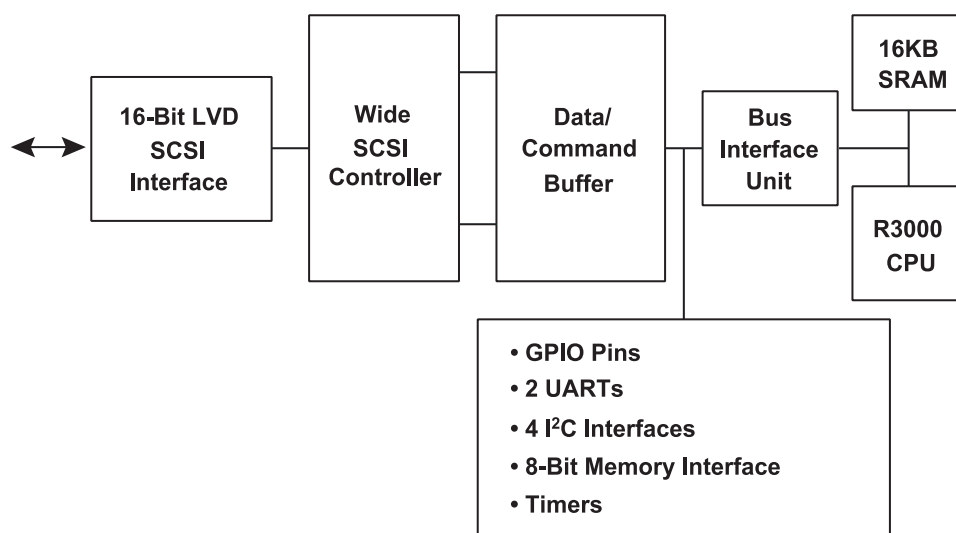## LVD SCSI Enclosure Management Controller

GENERAL DESCRIPTION:

The VSC205 is a SCSI enclosure management controller for peripheral storage applications. This device supports in- and out-of-band management strategies. The VSC205 implements in-band SES and SAF-TE enclosure management via the integrated SCSI interface. Out-of-band solutions are possible using IPMI (Intelligent Platform Management Interface), RS-232, 10/100 Ethernet, or through a customer unique approach. JBOD disk array and RAID subsystem developers are provided a common hardware and software platform, which supports all subsystem diagnostic and enclosure management strategies. The VSC205 may be used as the master controller of an I^{2}C serial interface communicating with scalable slave backplane controllers such as the Vitesse VSC055 and other industry standard I^{2}C devices.

BLOCK DIAGRAM:

Block diagram: 16-Bit LVD SCSI Interface → Wide SCSI Controller → Data/Command Buffer → Bus Interface Unit → 16KB SRAM / R3000 CPU.

- GPIO Pins
- 2 UARTs
- 4 I^{2}C Interfaces
- 8-Bit Memory Interface
- Timers