

## Features

- Proven VME64 compliance
- Local bus interface support for a variety of processors: Intel 'x86; Motorola '680x0; and Texas Instruments 'TMS320Cx0.
- Internal write posting FIFOs to optimize bandwidth utilization
- Programmable, bi-directional DMA controller

*The SCV64 provides a high speed VME64 data path for use in high performance VMEbus applications*

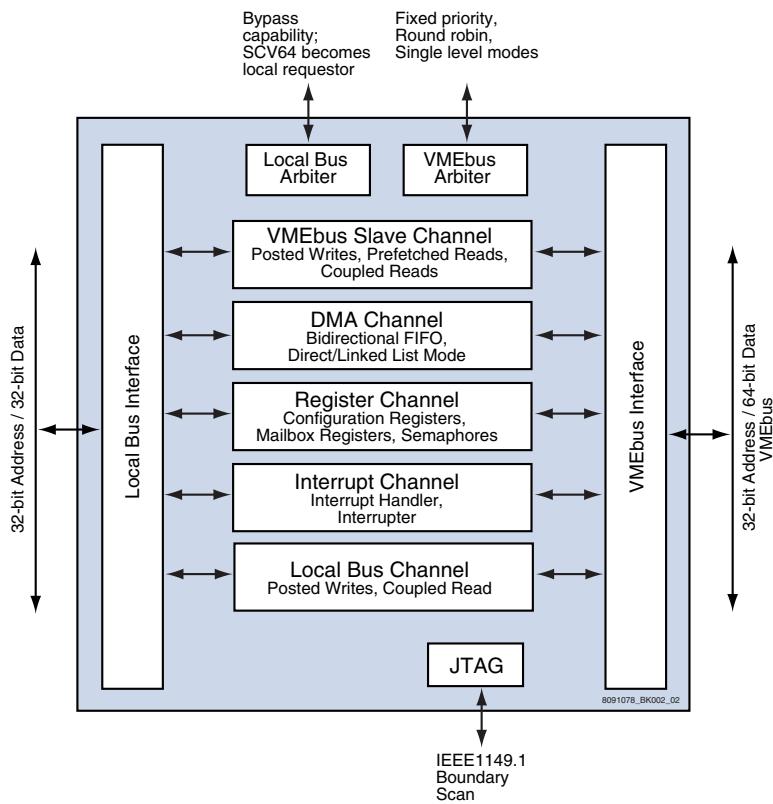
- Asynchronous VMEbus interface for maximum throughput
- 60 to 70 Mbytes per second transfer rates
- Complete suite of VMEbus address and data transfer modes
- Automatic initialization for slave-only applications (supports ability to use SCV64 without on-board intelligence)
- Flexible register set, programmable from both the local bus and VMEbus ports
- Full VMEbus system controller functionality

## The SCV64 Advantage

The Tundra SCV64 is the industry's leading high performance VME64-to-host processor interconnect. SCV64 is fully compliant with the VME64 bus standard and supports data transfer rates of up to 70 Mbytes per second.

The SCV64 architecture uses internal buffers to decouple data transfers between the VMEbus and local bus to compensate for mismatches in relative bus performance. This enables each bus to operate at its optimal rate, unimpeded by the other. The SCV64 is the choice for designs requiring high-performance interfaces because of its block (BLT) and multiple block (MBLT) transfer capability, integrated DMA controller, asynchronous VMEbus interface, and 40 MHz local bus operation.

**Figure 1: SCV64 Block Diagram**



## Benefits

- Industry proven design
- Reliable customer support with experience in hundreds of customer designs

*Tundra Semiconductor is the world leader in VME Interconnect technology.*

## Typical Applications

The SCV64 eases the development of VME Single Board Computers (SBCs) and I/O peripheral boards which target the following market segments:

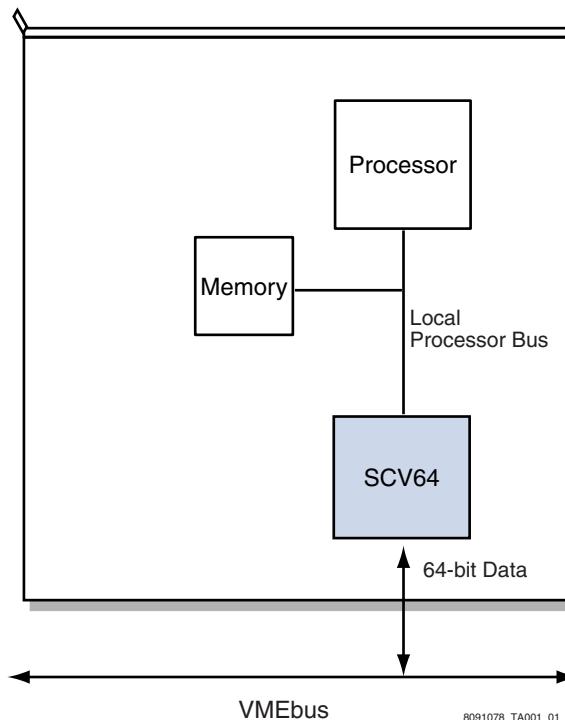
- Telecommunications
- Industrial Automation
- Medical
- Military
- Aerospace

## Typical Application: Single Board Computers

The SCV64 is widely used on VME-based Single Board Computers (SBC) that employ VME as the backplane bus, as shown in the accompanying diagram. These SBC cards support a variety of applications including telecom, datacom, medical, industrial, and military equipment.

The SCV64 high performance architecture seamlessly bridges the local bus and VME bus, and is the VME industry's standard for single board computer interconnect device.

**Figure 2: SCV64 In Single Board Computer Application**



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## Design Support Tools

Tundra understands your design challenges and works to help you overcome them. We are committed to making our products easy to use. A suite of Tundra Design Support Tools helps reduce your development time, risk, and cost. Tools include comprehensive device documentation, application notes, IBIS model, and BSDL files. Most are available through our website. We also provide an experienced technical applications engineering team. All help you evaluate our products, and assist in the development of your designs.

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