



# CA91C078A - SCV64™:

## The High Performance VME64 Bus Bridge

Product Feature Sheet

### Features

- Proven VME64 compliance
- Local bus interface support for a variety of processors: Intel's x86 and ix60; Motorola's 680x0; and Texas Instruments' TMS320Cx0
- Integral write posting FIFOs to optimize bandwidth utilization
- Programmable bi-directional DMA controller
- Asynchronous VMEbus interface for maximum throughput
- 60 to 70 MB per second transfer rates
- Complete suite of VMEbus address and data transfer modes
- Automatic initialization for slave-only applications (supports ability to tap SCV64 without on-board intelligence)
- Flexible register set, programmable from both the local bus and VMEbus ports
- Full VMEbus system controller functionality
- Operating temperature for commercial applications: 0 °C to 70 °C
- Operating temperature for industrial applications: -40 °C to 85 °C

### Device Overview

The industry-proven VME64-to-host bus bridge supports the latest generation of VME applications.

SCV64 is a VME64-to-host processor bridge that supports data transfer rates of up to 70 MB per second. SCV64 uses internal FIFOs to decouple data transfers between the VMEbus and local bus to compensate for mismatches in relative bus performance. This allows each bus to operate at its optimal rate, unobstructed by the other.

Block transfer capability (both BLT and MBLT), an integral DMA controller, an asynchronous VMEbus interface, and 40 MHz local bus operation ensure that the SCV64 is the choice for designs requiring high-performance interfaces.

### Absolute Maximum Ratings:

DC Supply Voltage	-0.5 to 7 V
Input Voltage ( $V_{IN}$ )	-1.5V to $V_{DD}$ +1.5 V
DC current Drain per pin Any single Input or Output	100 mA
DC current Drain per pin Any paralleled outputs	100 mA
DC Current Drain $V_{DD}$ and $V_{SS}$ pins	75 mA
Storage Temperature $T_{STG}$	-65 °C to + 150 °C

### Benefits

- Cost-effective, industry-proven VME64-to-host bus bridge
- Supports the latest generation of VME applications

### Typical Applications

- Control systems (military and commercial)
- Application accelerators
- Video graphics
- Communication systems
- DSP systems such as medical imaging

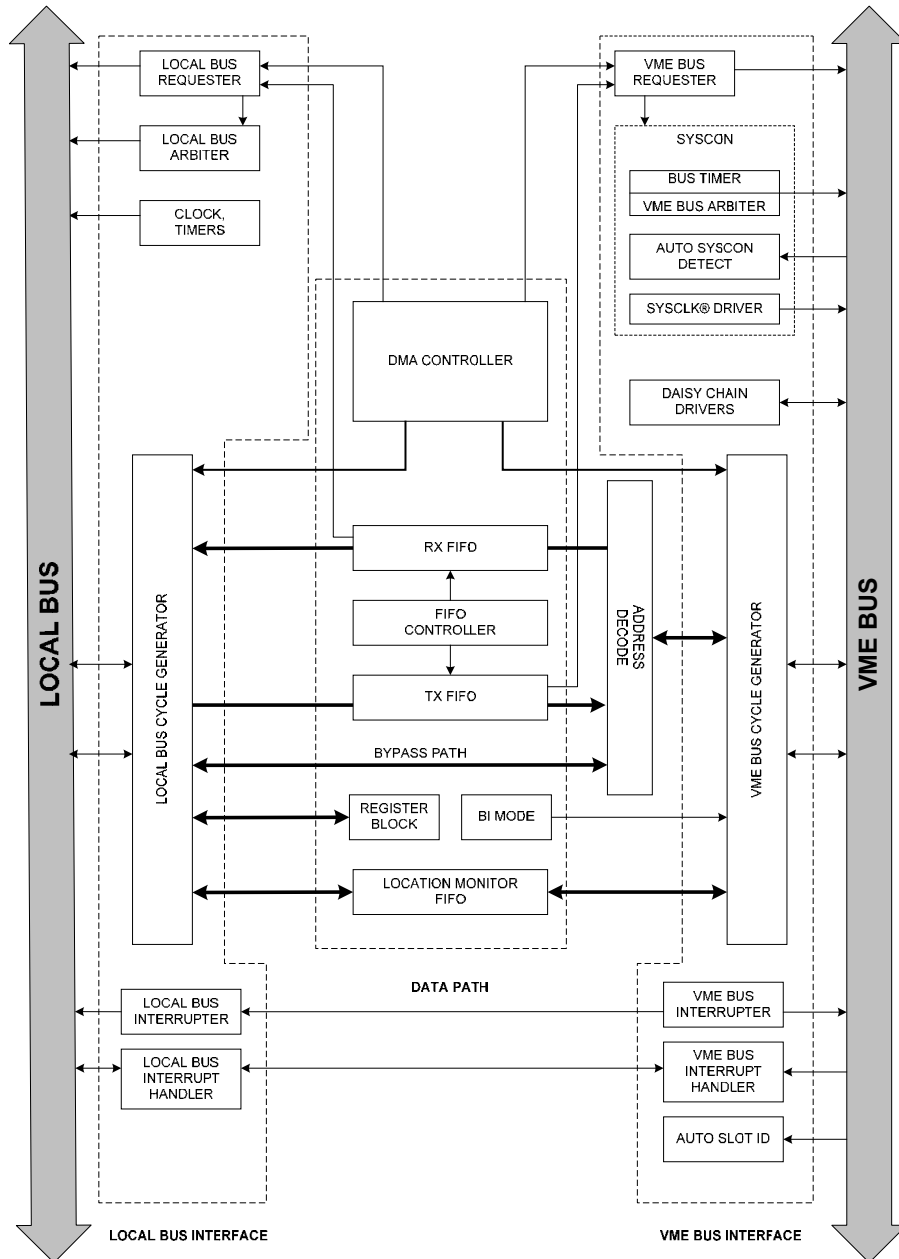
### Packaging

- 304 Pin PBGA 27X 27mm, 1 mm pitch
- Adapter plate available to support the 304 PQFP form factor for existing designs



# SCV64™: The High Performance VME64 Bus Bridge

## Functional Block Diagram



## SCV64 in Single Board Computer Application

