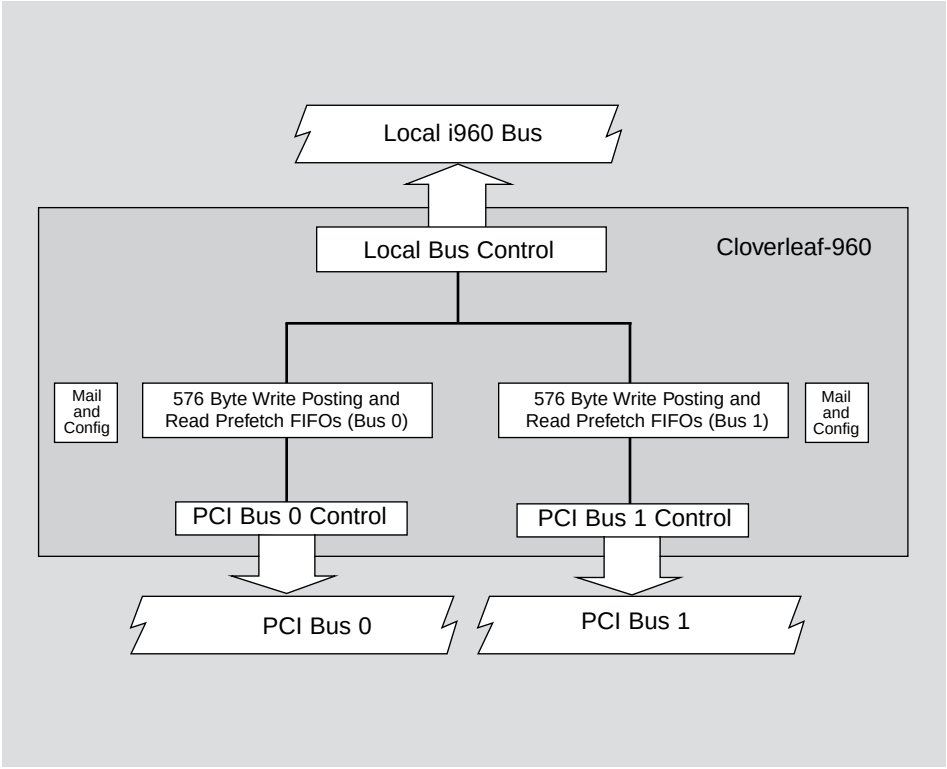
Cloverleaf-960 Local Bus to Dual PCI Bridge Controller

- Glueless Interface to the i960® Processor and the PCI Buses
- Fully Compliant With PCI 2.0 Specification
- Over 1 Kbyte of Programmable FIFO Storage With *Dynamic Bandwidth Allocation**
- Four Channel DMA Controller With Chaining
- Bidirectional Mailbox Registers
- Address Space Remapping Capability
- PCI-to-PCI Bridging of Memory and I/O Transfers
- Support For Real Mode DOS "Holes"
- 0.6 Micron CMOS Technology in a 240-Pin PQFP
- Ideal For PCI Based Intelligent Add-in Cards or Systems Requiring Many PCI Peripherals



The Cloverleaf-960 family of dual PCI bridges builds on V3 Corporation's successful line of i960 CPU-to-PCI bridges, the V96xPBC. Many i960 processor applications require more than one PCI interface. The Cloverleaf-960 family delivers two independent i960 CPU-to-PCI bridges in a single component.

The Cloverleaf-960 family is ideal for several types of applications. PCI based add-in cards, for example, need a PCI interface to the host slot, as well as an interface to on-board peripherals. Large embedded systems can benefit from Cloverleaf-960's ability to control up to 18 PCI loads.

The V96xPBC supports independent interface speeds, allowing each PCI bus to run at the full 33 MHz frequency, regardless of processor clock rate. The unique *Dynamic Bandwidth Allocation** feature of the dual 576 FIFOs (> 1Kbyte total) allows the designer to dynamically adjust the "draining" and "falling" of the read and write FIFOs to most efficiently meet the requirements of the data streams. Inclusion of this large FIFO array insures that high-speed peripherals – such as ATM and 100 Mbit Ethernet adapters – won't overrun the bridge's buffering capabilities.

The integrated DMA controllers provide a total of four channels. Each DMA channel can perform transfers from PCI-to-Local, Local-to-PCI or primary PCI to secondary PCI. Mailbox registers are provided for each bridge and are accessible from all interfaces.

Cloverleaf-960 is available in speeds up to 40 MHz, packaged in a 240-pin PQFP, and is fabricated on a 0.6 micron process assuring the lowest power and highest reliability possible.

PROCESSORS SUPPORTED:
V960DPC: i960 SA/SB Processors
V961DPC: i960 JA/JF/JD Processors
V962DPC: i960 CA/CF/
HA/HD/HT Processors

AVAILABILITY:
Q1 '96

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