

Customer Service Notice

Product:

Date: 10/04/05

ATC5232 AdvancedTCA® Integrated Board Computer

Errata:

General

The ATC5232 base gigabit Ethernet ports are only rated at 40% of line rate due to the architecture of the board and the bandwidth limitations associated with its 66MHz PCI-X Bus. Furthermore, a 33MHz PMC card will cause the effective PCI-X bus bandwidth to drop, and subsequently the base gigabit Ethernet ports will run slower, as well.

Technical

The ATC5232 features two gigabit Ethernet ports for the AdvancedTCA® Base interface to the backplane. These interfaces are provided by an Intel 82546GB controller chip, which resides on a 64-bit/66MHz PCI-X bus. This PCI-X bus originates from the Intel 6300ESB I/O Controller Hub, and it services the ATC5232's PMC site in addition to the 82546GB. This bus is not capable of operating at any PCI clock frequency faster than 66MHz, and it will slow to 33MHz if the end user elects to install a PMC card that is only 33MHz-capable. DTI's network throughput testing has shown that the 82546GB can only achieve approximately 40% of the maximum frames per second that gigabit Ethernet theoretically promises. This is because the 82546GB is not on a faster bus. If the bus is slowed to 33MHz, throughput will be further degraded.

Severity:

Minor

Workaround:

None.

Solution:

There is no solution planned.