



Model 5261-LC

FEATURES

- 245 MB/sec (1.96 Gb) total throughput
- Up to 1,000,000 frames per second max transfer rate
- IEEE 1386 64-Bit Compact PCI PMC Mezzanine Card
- High performance PCI compliant bus-master DMA engine design
- Available with OEM Developer Kit CD

DRIVER SUPPORT FOR

- VxWorks, Tornado II
- Windows 2000, Windows XP Embedded
- Linux kernel versions 2.4 including Embedded Linux

AVAILABLE MODELS

5261-LC - 1-port fiber with LC connector option

5261-RJ - 1-port copper with CAT5 RJ-45's

EMBEDDED APPLICATIONS

- Digital Video Transmission
- Packet Voice, VoIP
- Protocol and media converters
- Switches and edge routers
- Network security and monitoring
- Test equipment
- Military and medical systems
- Digital imaging products

PRODUCT DESCRIPTION

COMPACT PCI SERIES - HIGH PERFORMANCE 1-PORT GIGABIT ETHERNET CONTROLLER CARD

DSS Network's GigMAC PMC Model 5261 is a single-port high performance gigabit ethernet fiber controller card for embedded applications in broadband telecommunication and data communications networks. Available in two model configurations, the fiber version provides one 1000 Base-X port over singlemode or multimode fiber optics while the copper version provides one 1000 Base-T port over CAT5 cabling. Both models provide full duplex wire speed operation and are fully IEEE 802.3 compliant.

The Model 5261's Compact PCI Mezzanine card design provides a plug-in daughter card solution allowing simple integration of a Gigabit Ethernet interface into a PMC site. Using a mezzanine card approach provides a simple space saving solution yielding maximum performance, scalability and flexibility.

The GigMAC PMC Model 5261 uses an advanced 4th generation, high-performance, low power Gigabit Ethernet chip from Intel. It has a 64-bit, 133/100/66 MHZ PCI bus interface interface and is capable of full speed bus-master DMA operations utilizing maximum PCI bandwidth. It typically operates in full-duplex mode, transferring frames at wire speed. Combined with our high-performance device drivers, it is capable of providing a total sustained throughput of 245 megabytes per second full duplex. As a PCI bus master, it operates on buffer descriptor lists, transferring Ethernet frames to and from main memory with low CPU management overhead. This mechanism yields maximum throughput while minimizing utilization of the host CPU.

Advanced features including TCP/UDP/IP checksum offload, jumbo frame support, priority queuing, VLAN support and busmaster descriptor list processing are implemented in silicon. These features coupled with advanced packet filtering and a powerful PCI DMA bus engine provide optimal performance while offloading the host processor.

DSS Networks is a direct manufacturer of Gigabit Ethernet solutions and we also develop our own high-performance device drivers for VxWorks, Linux and Windows XP Embedded. We have formed strategic partnerships with leading companies of Semiconductors and Embedded Systems technology so that we are able to provide robust, highly integrated solutions backed by industry-proven technology. We provide excellent customer service and technical support to our customers to help ensure your project using Gigabit Ethernet is a success.

The GigMAC PMC single port controller is an ideal solution for today's converged, bandwidth intensive, multi-protocol data and telecommunication networks. Applications include switches, edge routers, protocol and media gateways, digital video transmission, packet voice, network security and monitoring, test equipment, military and medical systems and digital imaging products.

The GigMAC PMC Model 5261 is available with an OEM developer kit CD containing VxWorks and Linux sample code, utilities, release notes, user manuals, integration guide and datasheets.

