

# SBE®

## Single port Gigabit Ethernet copper PCI adapter

lanPCI-1GC



### Highlights

- ▶ Single auto-negotiating 10/100/1000 Ethernet ports
- ▶ Optional two or four port version available
- ▶ PCI 2.2 33/66 MHz and 32/64-bit bus interface
- ▶ Link and activity LEDs
- ▶ Drivers for Linux, Solaris, and Windows
- ▶ VLAN tag filtering, insertion and removal
- ▶ Jumbo frame support, transmit and receive
- ▶ IP/TCP/UDP hardware checksum calculation and verification
- ▶ Full compliance to IEEE 802.3z, 802.3x, 802.1p and 802.1q
- ▶ Failover and Trunking support

### lanPCI-1GC

SBE's single port Gigabit Ethernet controller is designed to be a high-performance, low cost, LAN connectivity solutions for any system or networking device utilizing the PCI standard bus architecture. This PCI 2.2 compliant adapter is ideal for servers and workstations that require more bandwidth than provided by 10/100 Base-T Ethernet; single Gigabit Ethernet is now affordable for every network. Instantly improve application response by simply installing SBE's single Gigabit Ethernet 1000 Base-T PCI host adapter into your existing Ethernet network. Full-duplex capability provides simultaneous transmission and reception for maximum performance. An independent MAC address is assigned to the controller channel, which provides support for Ethernet trunking across multiple connections. Backpanel LEDs indicate full status including: 1000/100/10 megabit mode and full-duplex mode. Efficient DMA operation maximizes PCI bandwidth utilization. The lanPCI-1GC is capable of utilizing maximum PCI bandwidth in 32/64-bit and 33/66 MHz PCI buses.

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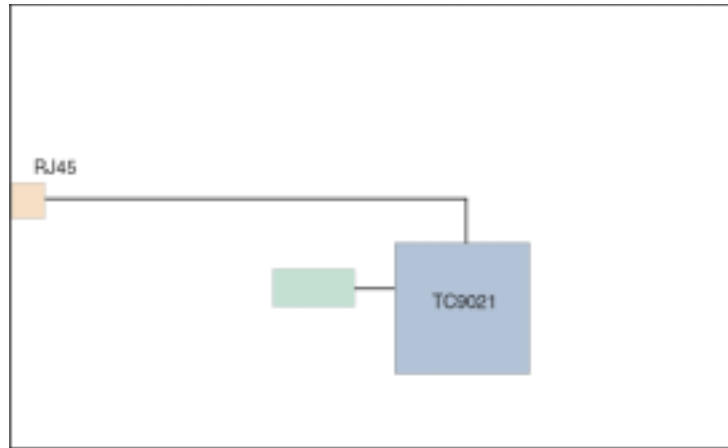
## Single port RJ45 Gigabit Ethernet PCI adapter



### GigaTrunk Failover Driver

SBE has developed GigaTrunk failover software for its PCI Gigabit Ethernet Controllers. Users can depend on up to (N) independent ports to reliably fail over to the available ports. GTF software has the capability to load balance the outgoing packets from the lanPCI-1GC or lanPCI-2GCF Gigabit Ethernet NICs. GTF fully supports static load balancing and failure recovery within a user defined trunk. It efficiently distributes traffic across the aggregated links. In the event of a link failure, the software will automatically redistribute outgoing loads across the remaining links. User may define one or more ports on SBE NIC as the failure over port(s). In addition, GTF provides a single, logical Media Access Control (MAC) address. Since GTF has the ability to share a single MAC addresses; there is no need to assign individual MAC addresses to each port. Setup polices are based on destination and source IP address. GTF provides the capability to set load distribution path for the single, dual

## lanPCI-1GC Architecture



## Specifications

<b>Form Factor</b>	Short form PCI (Single RJ45 copper ports)
<b>Ethernet Controller</b>	1 x Tamarack TC9021 IEEE 802.3z, IEEE 802.3x IEEE 802.1p, 802.1Q VLAN
<b>PCI</b>	32/64-bit, 33/66MHz PCI 2.2, 3.3V PCI signaling
<b>Power Requirements</b>	12.5 W
<b>Dimensions</b>	6.875" (175mm) L x 4.205" (107mm) H
<b>Environmental</b>	
<i>Temperature</i>	Operating -5 to 60°C (23 to 140°F) Storage -40 to 70°C (-40 to 158°F)
<i>Humidity</i>	Operating 5 to 90% non-condensing Storage 0 to 95% non-condensing
<b>Full Duplex Support</b>	Yes, auto-negotiating
<b>Jumbo Frame Size</b>	8 KB per channel
<b>DMA Burst Transfer Rate</b>	Up to 528 MB/sec using 16/32/64 Byte bursts
<b>On-Board Memory</b>	16 KB transmit / 32 KB receive
<b>Drivers</b>	Linux kernel 2.2 or higher Solaris 7 or later (age, GTF) Windows 2000, NT, XP

## Configurations

Model #	NIC Type
lanPCI-4GC	Quad port RJ45 Gigabit Ethernet PCI
lanPCI-2GC	Dual port RJ45 Gigabit Ethernet PCI
lanPCI-1GC	Single port RJ45 Gigabit Ethernet PCI
lanPCI-2GCF	Dual port RJ45/Optical Gigabit Ethernet PCI



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