

LAN Bypass Introduction

What is LAN Bypass Function

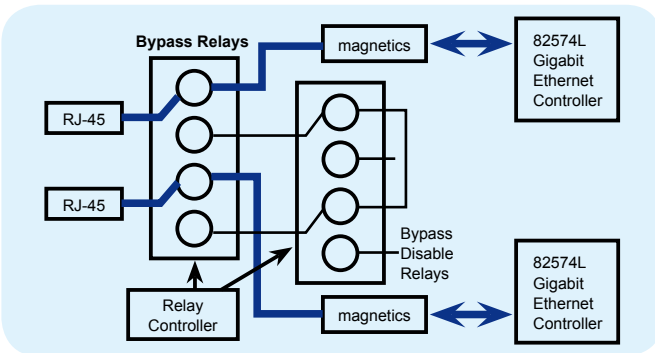
LAN Bypass feature removes a single point of failure so that essential business communication can continue while a network failure is diagnosed and resolved. In the event of a power, hardware or software failure. Hardware Bypass will automatically activate, allowing network traffic to continue. Traffic between the LAN and WAN is allowed without interruption.

Bypass Function Relay Modes

The bypass function uses relays to route each of the two LAN ports pairs in either "bypass" mode or "normal" mode.

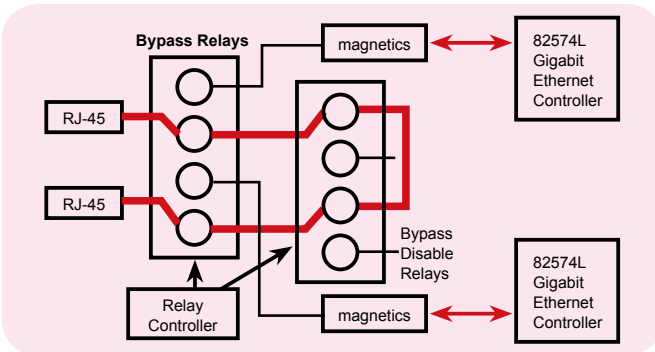
A In "normal" operation the magnetics are connected to the RJ-45s.

Relay settings for "normal" operation:



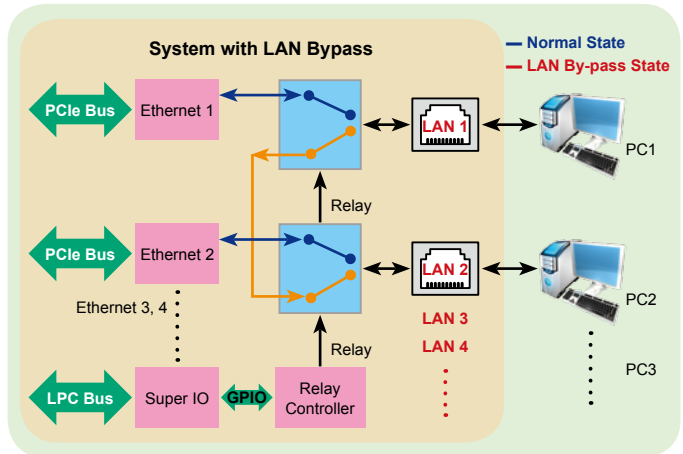
B In "bypass" operation the RJ-45s are connected together such that they form a piece of wire.

Relay settings for "bypass" operation:



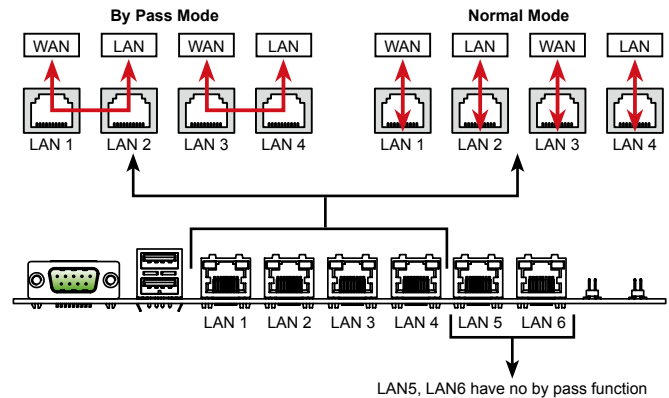
Bypass Function Block Diagram

The bypass function block diagram shown below depicts the block diagram for one pair of Local and Remote ports of the 4-port 10Base-T/100Base-TX/1000Base-T Ethernet board with bypass.



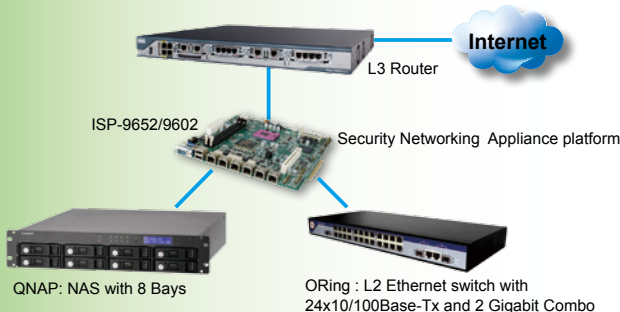
Best choice from iEi

iEi ISP series product is a PCIe LAN bypass adapter card. It has a LAN bypass feature that, in the event of a system hang, power down, hardware or software failure, Hardware Bypass will automatically activate allowing network traffic to continue. The bypass feature can be controlled by software, or by a watchdog timer configurable for 1-16 second operation. The adapter card can be migrated with concurrent network appliance platforms for network security applications and embedded box solutions.

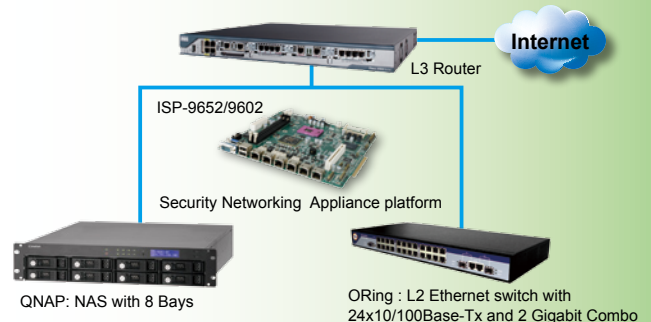


Application

- **Security Networking Appliance platform:** firewall, virtual private network (VPN), IDS/IPS, content filtering, UTM, network management, network security capabilities

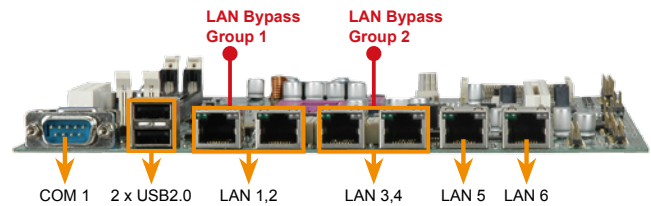
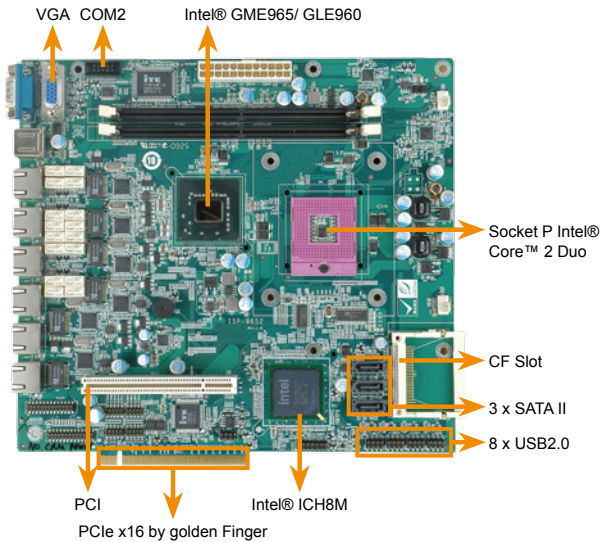


- The LAN Bypass feature could assure the connection to Internet, if the networking appliance platform fails.



ISP-9652/9602

Socket P for 6 Intel GbE Lan motherboard with Dual group Lan-Bypass function, 2 COM/VGA, USB2.0, SATAII



FSB800

Dual DDR2 667

Gigabit Ethernet PCIe

NI-SPEED CERTIFIED USB

SERIAL ATA 3Gb/s

Features

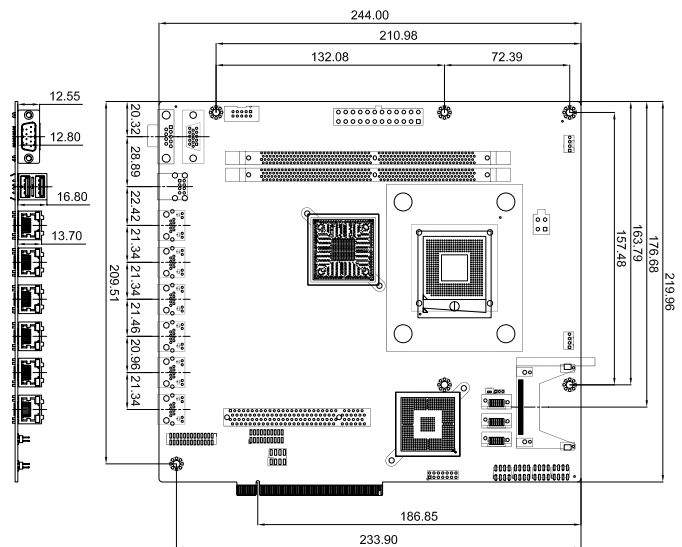
One Key Recovery

1. Support 6 Intel® 10/100/1000 LAN ports
2. Quad Gigabit port with LAN By-pass function
3. Supports WatchDog Timer function for LAN by-pass enabling
4. IEI One Key Recovery solution allows you to create rapid OS backup and recovery

Specifications

- ◆ CPU
 - Socket P Intel® Core™ 2 Duo Processor with 800MHz FSB
 - Socket P Intel® Celeron® M Processor with 533MHz FSB
- ◆ System Chipset
 - Intel® GLE960 + ICH8M for ISP-9602
 - Intel® GME965 + ICH8M for ISP-9652
- ◆ FSB
 - 800 / 533 MHz for ISP-9652
 - 533MHz for ISP-9602
- ◆ Memory
 - Two 240-pins 533 MHz Dual Channel DDR2 SDRAM DIMM Supported max. 2GB for ISP-9602
 - Two 240-pins 667/533 MHz Dual Channel DDR2 SDRAM DIMM Supported max. 4GB for ISP-9652
- ◆ BIOS
 - AMI BIOS
- ◆ Graphic Engineer
 - Intel® GMA X3100
 - Graphics core speed is 400 MHz for ISP-9602
 - Graphics core speed is 500 MHz for ISP-9652
- ◆ Display Output
 - Analog CRT by VGA
- ◆ Ethernets
 - LAN1~6: Intel® PCIe GbE Controller 82574L
 - 4 x LAN By-Pass Function (with Relay Control):
 - » By-Pass Group 1: LAN1/ LAN2
 - » By-Pass Group 2: LAN3/ LAN4
- ◆ Embedded Controller
 - ITE IT8512E
- ◆ I/O Interface
 - 2 x RS-232
 - 3 x SATA II
 - 1 x CF Type II
 - 10 x USB 2.0
- ◆ Super I/O
 - ITE IT8718F
- ◆ Expansion
 - PCIe x16 to PCB Golden Finger (For ISP-9652)
 - PCI Slot
- ◆ WatchDog Timer
 - Software Programmable supports 1~255 sec. System reset by Super I/O
- ◆ Power Supply
 - ATX Power
- ◆ FAN Connector
 - 1 x 4-pin CPU FAN
 - 1 x 4-pin SYS FAN
- ◆ Humidity
 - 5%~95%, Non-condensing
- ◆ Temperature
 - Operating: 0°C~60°C

Dimensions (mm)



Packing List

- 1 x ISP-9602/9652-R10 single board computer
- 3 x SATA cable (P/N:32000-062800-RS)
- 1 x Mini Jumper Pack
- 1 x Utility CD
- 1 x QIG

Ordering Information

Part No.	Description
ISP-9652-R10	Socket P Intel® Core™2 Duo MB, GME965 with 800MHz FSB, VGA, CF, 6 Intel® GbE Lan with Dual group Lan-Bypass function, USB2.0, SATAII, RoHS
ISP-9602-R10	Socket P Intel® Celeron® M MB, GLE960 with 533MHz FSB, VGA, CF, 6 Intel® GbE Lan with Dual group Lan-Bypass function, USB2.0, SATAII, RoHS
19800-000114-RS	RS-232 cable
CB-USB14-RS	Quad port USB cable
CF-479B-RS	CPU Cooler
32100-088600-RS	SATA Power Cable