



S2 KONNECT

S2Konnnect N-3010
10/100/1000Base-T Adapter
PCI Express

User Manual

Copyright © S2Konnnect GmbH, 2010. All rights reserved.

This manual refers to the S2Konnnect N-3010Base-T Adapter, PCI Express. Contents are subject to change without notice.

Product and brand names are (registered) trademarks of their appropriate owners.

If you have comments on this documentation, please send to:

S2Konnnect GmbH
Siemensstrasse 23
76275 Ettlingen / Germany

visit our web site: <http://www.s2konnnect.com>

Conventions

The following conventions apply to this manual.

Warnings and Notes



Used to indicate a potentially hazardous situation which, if not avoided, could result in death or serious injury. Example: dangerous voltage.



Used to indicate a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. Example: electrostatic discharge.



Used for additional information and advice.

Table of Contents

Conventions	4
Warning Notes	4
Safety Precautions	7
Avoiding injuries - Avoiding damage	7
1 Introduction	8
2 System requirements	8
3 Installation of the Network Adapter	8
4 Connection of the Network Adapter	10
Transmission Distances	10
Connection to the Network	10
5 Hardware Features	11
Adapter Characteristics	11
LED Displays	12
6 Software Features	13
Operating System Support	13
High Performance	13
<i>TCP, UDP and IP Checksum Calculation</i>	13
<i>Jumbo Frames</i>	13
<i>TCP Segmentation (Large Send Off-Load)</i>	13
<i>Dynamic Interrupt Moderation</i>	13
Promiscuous Mode / Multicast Support	14
PXE / RPL Support	14
Boot Agent ROM	14
Advanced Power Management / Wake on LAN	15
Reliability	15
<i>Link Aggregation</i>	15
<i>Hot-Plug</i>	16
<i>Parity</i>	17
User Diagnostics (DOS and Windows)	17
7 Troubleshooting	18
8 Important Information	19
Technical Support	19
Returning an Adapter for Repair	19
Additional Documentation and Updates	19
Technical Specifications	20
Appendix A. License and Warranty Information	23
The Americas, Asia, Australia, New Zealand, Pacific	23
Europe	24
Deutschland, Schweiz, Österreich, Lichtenstein	25

Table of Figures

- Figure 1: Insertion of the adapter into the computer
- Figure 2: Connection of the RJ-45 cable/plug
- Figure 3: Location of the LEDs

Safety Precautions

To protect yourself from injuries and avoid damage of the device, always observe the following safety instructions when installing the network adapter.

Avoiding injuries



Electrical current!

Electrical current from power, phone, and communications cables can be hazardous. Never touch any electrical elements with bare hands.

To avoid potential shock hazards:

- Do not carry out any installation, maintenance, or (re)configuration work during a thunderstorm.
- Do not connect or disconnect any power cables during a thunderstorm.
- For installation into systems which are supporting Hot-Plug and will be not disconnected from electrical power system read the relevant documentation first.
- Do not connect the network adapter to a telephone line.



Electrical installations must comply with the safety regulations of the country in which they are operated.

Avoiding damage



Electrostatic discharge!

Electrostatic discharge may damage or destroy the Network adapter.

To avoid damaging the S2Konnnect N-3010 Network adapter observe the following:

- Switch off the computer.
- Disconnect the power cord from the power outlet.
- Remove the computer cover.
- Before installing the network adapter, put on an antistatic wrist strap (electrically conductive).
- Connect the wrist strap to the computer chassis
Do not connect the wrist straps to the ground terminal of the power supply!
Faulty wiring could make this terminal live and potentially lethal.
- When you are ready to install the network adapter, open the antistatic bag.
- Hold the antistatic packaging of the network adapter against the bracket of an expansion slot on your computer for at least two seconds.
This reduces the static charge in the packaging and in your body.
If you need to place the network adapter somewhere after removing it from the antistatic bag, make sure you place it on the antistatic bag and on a level surface.
Do not place the network adapter on the computer cover or on any other metal surface.
- Cautiously insert the adapter into the corresponding slot.
Do not touch any circuits on the network adapter or any of its port contacts.

In general, observe the following:

- Never use force when working with the network adapter or the PCI Express bus.
- Do not allow anyone else to touch the network adapter.
- Avoid unnecessary movement since this can increase electrostatic charge.

1 Introduction

Thank you for purchasing a S2Konnnect product.

This document describes the installation of the network adapter card.

The N-3010 is a PCI Express adapter which must be installed in a PCI Express slot of the computer.

The adapter contains a Network chipset “Marvell 88E8057”

2 System requirements

Computer System:

The N-3010 adapter is a typical desktop adapter supporting high throughput of data.

You may utilize this adapter in any system supporting PCI Express bus with one Lane (PCIe x1).

Cable:

You must use minimum a Category 5 unshielded twisted pair cable for 100 MB/s or Gigabit (1000 MB/s) transfer rates.

3 Installation of the S2Konnnect N-3010 Network Adapter

The installation procedure in Hot-Plug systems may differ from the following. For Hot-Plug systems, read the corresponding documentation. Have the computer manual ready and if necessary, a key and screwdriver to open the cover and remove the bracket.

To install the adapter in the computer, proceed as follows:

1. Switch off the computer in which the network adapter is to be installed.
2. Disconnect the power cord from the power outlet.
Observe the safety instructions (see page 7)
3. Open the computer cover as described in your computer manual.
You may need a screwdriver or similar tool to remove the screws from the cover.
If you are installing a network adapter in a tower computer, we recommend to put the computer on its side in order to apply the correct force to insert the adapter into the PCI Express slot.
4. Consult the section in your computer manual that describes how to install expansion cards.
5. Locate a free PCI Express slot on the motherboard.



S2Konnnect PCI Express adapters can be installed in x1, x4, x8 and x16 slots.

6. Remove the bracket from the expansion slot (if applicable).
Follow the instruction in your computer manual.
7. Remove the network adapter from the antistatic bag.
Observe the safety instructions (see page 7).
8. Insert the network adapter into the PCI Express slot as described in your computer manual (also see figure 1 “Insertion of the adapter into the computer”).
Make sure the network adapter is correctly aligned with the PCI Express slot on the motherboard.
9. Push the network adapter down vertically into the slot until it is firmly seated.
10. If available, tighten the locking screw on the fixing bracket until the adapter is firmly connected to the computer cover (or to the attachment provided for expansion cards).
11. Replace the computer cover.
12. Replace and tighten all screws.
13. Reconnect the power supply.
Observe the safety instructions (see page 7)

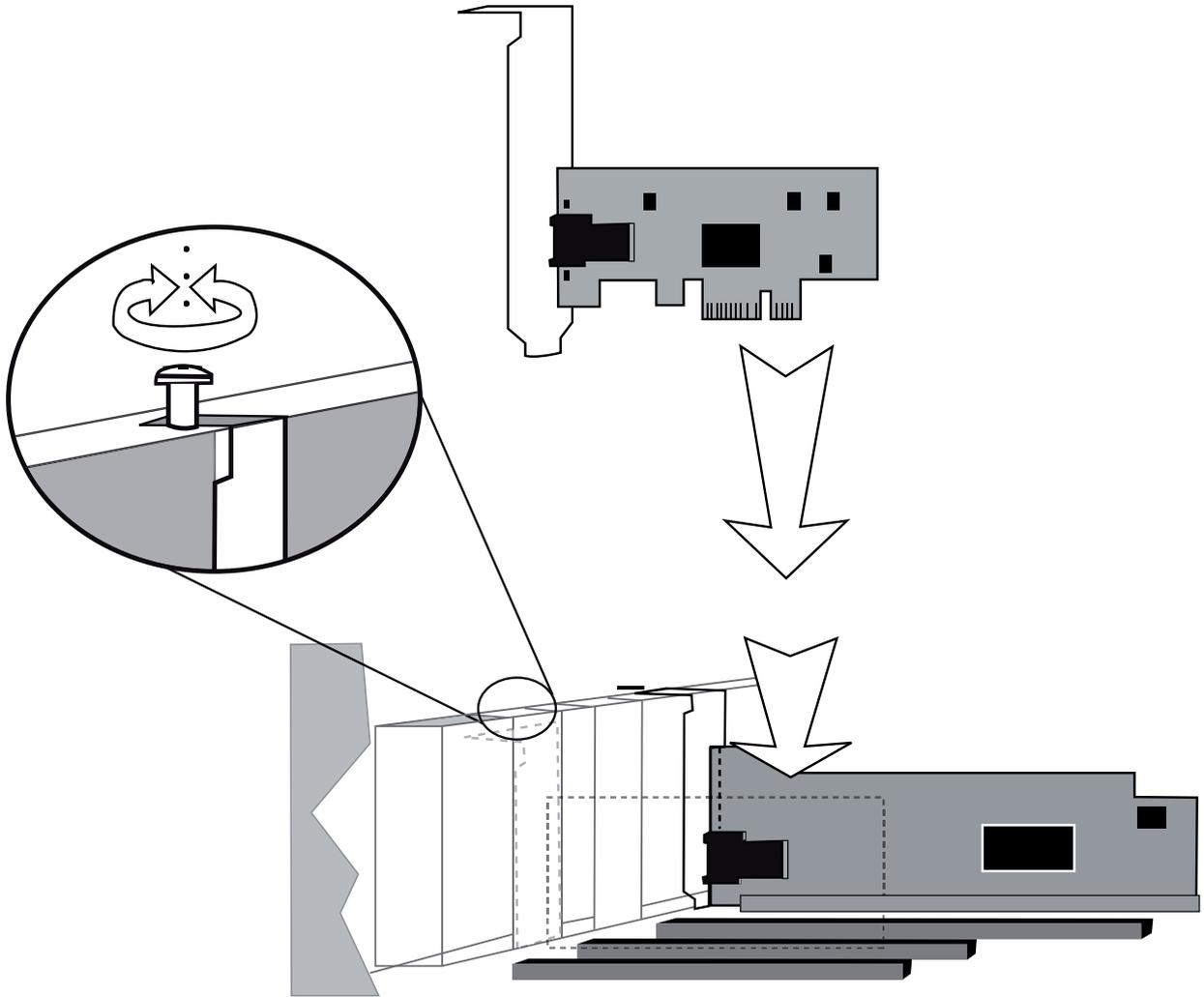


Figure 1. Insertion of the adapter into the computer

4 Connection of the Network Adapter

This chapter describes the physical connection of the S2Kconnect N-3010 Network Adapter to a network.

Transmission Distances

The maximum transmission distance for the S2Kconnect N-3010 - 10/100/1000Base-T adapter, is 100m, you have to use a Category 5 unshielded twisted pair cable or better.

Connection to the Network

Observe the safety instructions given on page 7.

In order to connect the adapter to the network, proceed as follows:

1. If necessary, configure the port on the switch to which the network adapter is to be connected (also see the switch manual).
2. If possible, disconnect the switch and the computer from the power supply.
3. At one end of the cable connect the RJ-45 connector to the port on the switch.
4. At the other end of the cable connect the connector to the port on the network adapter. (see figure 2. "Connection of the RJ-45 cable/plug").
The port type (e.g. 1000Base-T) on the network device and that on the switch must be identical.

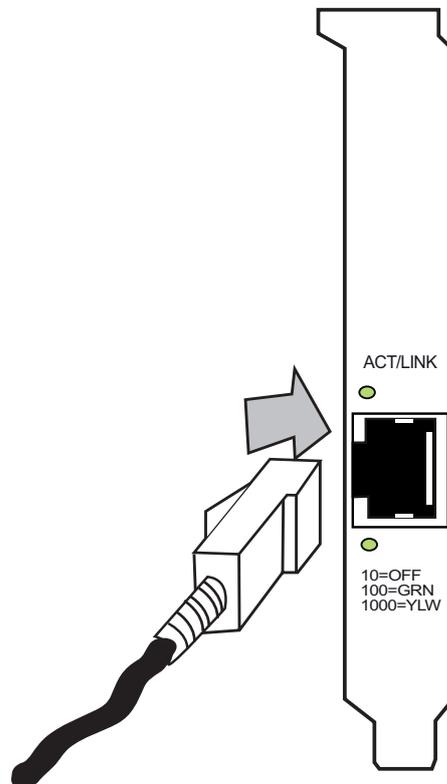


Figure 2. Connection of the RJ-45 cable/plug

5. Turn on the computer and the Switch.
6. Check the green link LED to find out if the cable is connected correctly. If the LED is on or blinking, the connection is established and active. Otherwise you have to check the network adapter more closely.



As soon as the connection to the network is established, the installation of the network adapter is complete. Keep this manual with your computer manual for future reference.

The network adapter will not be fully operational until suitable drivers are loaded. See how to install drivers for the operating system of your choice. Refer to drivers "Read me" or manuals for driver installation.

You will find a list of available drivers at: <http://www.marvell.com>

- > SUPPORT >
- > CHOOSE A PLATFORM >
- > SEARCH >
- > ACCEPT AND SUBMIT >
- > DOWNLOAD THE ARCHIVE ON A ZIP FILE

The chipset you have to select is: "88E8057"

5 Hardware Features

The S2Kconnect N-3010-10/100/1000Base-T Adapter, PCI Express constitutes a follow-up model of the SK-9E21D Adapter family. It is compliant to the PCI Express 1.0a standard and supports a PCI Express single lane (x1).

For information about other S2Kconnect network products, refer to the product overview on our web site: <http://www.s2kconnect.com>.

Adapter Characteristics

The following table lists the characteristics of the S2Kconnect N-3010-10/100/1000Base-T Adapter, PCI Express.

	S2Kconnect N-3010 10/100/1000Base-T Adapter PCI Express
LAN interface	10/100/1000Base-T
Port	Single port
Connector	RJ-45
Media	Copper
Cable Type	Cat5

The type of port on the network adapter must be identical with that on the switch.

LED Displays

Once the driver has been installed, the adapter is operational. The current status and speed are indicated by the LEDs.

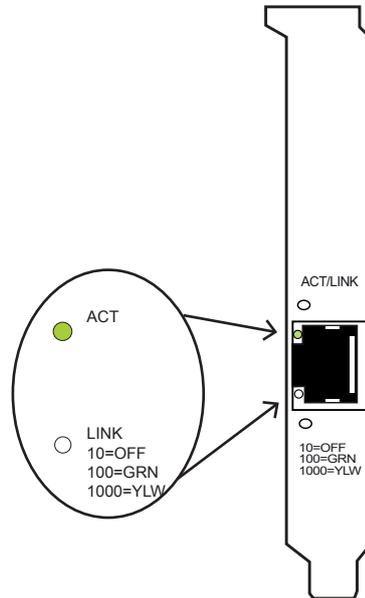


Figure 3. Location of the LEDs

The LEDs of the S2Konnnect N-3010 - 10/100/1000Base-T Adapter, PCI Express have the following meaning:

Marking on bracket	Color	Status	Description
ACT	green	Blinking	Link up and Receiving/Transmitting
10/100/1000	green yellow	OFF ON ON	Speed 10 Mbit/s Speed 100 Mbit/s Speed 1000 Mbit/s

Link at 10 Mbit/s is shown only if ACTIVITY.

6 Software Features

Operating System Support

The drivers for the S2Konnnect N-3010-10/100/1000Base-T Adapters, PCI Express support the following operating systems:

- Windows NT 4.0, Windows 98 Second Edition, Windows Millennium Edition, Windows 7, Windows 2000, Windows XP, Windows Server 2003, Server 2008 and Windows Vista on 32-bit systems
- Linux kernel 2.4.13 and higher stable versions
- Novell NetWare 5.x and Novell Netware 6.x
- Novell Netware Client32 and Novell NetWare VLM Client for DOS¹
- Sun Solaris 10 on 32-bit systems (x86) and 64-bit systems (x64)
- FreeBSD 6.0 on Intel x86 systems

The latest version of all available network drivers can be downloaded from the Marvell web site (see section “Driver download”).

High Performance

The S2Konnnect N-3010-10/100/1000Base-T Adapters, are high performance and highly reliable adapters. They use the new PCI Express technology that offers increased bandwidth and extended capabilities over the conventional PCI bus.

TCP, UDP and IP Checksum Calculation

The S2Konnnect N-3010 10/100/1000Base-T adapters support the calculation of TCP, UDP, and IP checksums. These calculations are integrated in the hardware of the Gigabit Ethernet adapters. The checksums are calculated without time loss by the MAC controller for both receive and transmit path. This improves the overall performance of the system and shifts these CPU-intensive tasks away from the host CPU.

Jumbo Frames

The S2Konnnect N-3010-10/100/1000Base-T adapter, supports 9014 Byte Jumbo frames. They are tested according to the prevailing standard and switches on the market.

TCP Segmentation (Large Send Off-Load)

TCP Segmentation that is handled by the S2Konnnect N-3010-10/100/1000Base-T adapter, reduces CPU load significantly. This provides high throughput for superior network performance and improves application response.

Dynamic Interrupt Moderation

If the network is running at Gigabit speed and small packets are being transferred, there may in extreme cases be more than 100,000 interrupts per second. To reduce the load on the CPU, the Gigabit Ethernet adapters can use Interrupt Moderation to group these interrupts so that several data packets can be handled per interrupt.

For more information, refer to the White Paper “SK-NET GE Gigabit Ethernet Server Adapter”, which can be found on the “SysKonnnect” web site.

Promiscuous Mode / Multicast Support

The S2Konnnect N-3010-10/100/1000Base-T Adapters, supports Promiscuous Mode for analyzers. Promiscuous mode means that all traffic received by the adapter is passed to the CPU and not only packets addressed to it. By default, the promiscuous mode is turned off. In addition, the adapters supports multicast (frames can be sent to more than one destination) for special applications, which use multicast addresses.

PXE / RPL Support

The S2Konnnect N-3010-10/100/1000Base-T adapter, supports both the standard PXE 2.1 (Pre-Boot eXecution Environment) and the protocol RPL (Remote Program Load). This allows networked computers that are not yet loaded with an operating system to be configured and booted remotely by an administrator. PXE and RPL grant the advantage that client machines do not necessarily need an operating system or a hard disk and that they can be rebooted remotely in the event of hardware or software failures.

Boot Agent ROM

The Boot Agent ROM for S2Konnnect N-3010-10/100/1000Base-T adapter, comprises the boot protocols PXE and RPL, allowing the user to choose between both protocols during every boot. In addition, it includes a setup program where the user can define several default boot options.

Advanced Power Management / Wake on LAN

The S2Konnnect N-3010-10/100/1000Base-T Adapters, support power management as defined in the PCI Bus Power Management Interface Specification V1.1 and Network Device Class Power Management Reference Specification V2.0. The power management features are implemented according to the Advanced Configuration and Power Interface (ACPI) Specification V2.0.

The S2Konnnect N-3010 Adapters utilize an auxiliary power supply to keep some parts running. This setting enables the network device to "Wake on LAN".

The Wake on LAN functionality uses three mechanisms to create a wake-up event:

- **pattern match**
Incoming packets are compared to up to seven patterns stored in a pattern matching table. A match causes a wake-up event.
- **Magic Packet™**
The incoming data stream is searched for a so-called magic packet frame that consists of 6 bytes of OxFF followed by 16 iterations of the adapter's MAC address, If this sequence is found, a wake-up event is created.
- **link change**

Any change of the link status from "link down" to "link up" will cause a wake-up event.

Wake on LAN is supported by Windows 98 SE, Windows Me, Windows 2000, Windows XP, Windows Server 2003, and Windows Vista/Windows 7. For information on other operating systems supporting Wake on LAN, check the appropriate readme(s) on the Marvell web site.

Reliability

The S2Konnnect N-3010-10/100/1000Base-T adapter, PCI Express come with a variety of reliability features, They aim at maintaining a connection as long as possible. This is reached by redundant or grouped links (link aggregation),

The driver functions help to monitor the health of adapters and their ports enabling pro-active network management. The reliability features are described in the following sections.

Link Aggregation

Link aggregation or Trunking is a method of combining physical network links into a single logical link for increased bandwidth. With link aggregation, it is possible to increase the capacity and availability of the communications channel between devices (both switches and end stations) using existing Fast Ethernet and Gigabit Ethernet technology. Two or more Gigabit Ethernet connections are combined into a team in order to increase the bandwidth capability and to create resilient and redundant links. A set of multiple parallel physical links between two devices is grouped together to form a single logical link. Link aggregation offers an efficient and low-cost solution to increase bandwidth between server and switch. Another advantage it provides is that if a connection fails completely, the remaining links can take over the traffic and thus replace the broken line.

Link aggregation also provides load balancing where the processing and communications activity is distributed across several links so that no single link is overwhelmed.

By taking multiple LAN connections and treating them as a unified, aggregated link, practical benefits can be achieved in many applications.

Link aggregation provides the following important benefits:

- higher link availability
- increased link capacity
- improvements are obtained using existing hardware (no upgrading to higher-capacity link technology is necessary)

Demanding applications running in high-performance environments like servers in enterprises, web servers, and intra net servers gain particularly from the high-bandwidth and duplex capabilities of link aggregation.

All S2Kconnect Gigabit Ethernet Adapters support link aggregation according to the IEEE standard 802.3ad. At the moment, Marvell provides a link aggregation driver for Windows 2000, Windows XP, Windows Server 2003, and Windows Vista, Windows 7. The drivers for Linux are able to support link aggregation according to the IEEE standard 802.3ad by installing third party open source modules. For details, refer to the corresponding readme file. In the future, link aggregation support according to IEEE 802.3ad will be implemented in S2Kconnect drivers for other operating systems as well. For driver updates, refer to Marvell web site: <http://www.marvell.com>.

For more information on link aggregation, refer to the White Paper “Link Aggregation according to IEEE 802.3ad”, which can be found on SysKconnect web site.

Hot-Plug

As a member of the PCI Special Interest Group, Marvell has a long experience in the standardization of the insertion and removal of PCI computer cards during normal operation. The S2Kconnect N-3010 Adapters provide native Hot-Plug Support according to the PCI Express 1.0a and Advanced Configuration and Power Interface Specification Revision V2.0. Hot-Plug enables the replacement of failed devices in a running system.

The following conditions have to be met in order for Hot-Plug to work on S2Kconnect Gigabit Ethernet Adapters:

- The target system has PCI Express Hot-Plug slots, i.e., the power can be switched on and off under the control of the operating system.
- The adapter is installed in one of the PCI Express Hot-Plug slots.
- The operating system supports PCI Express Hot-Plug on the target system.

The drivers for the following operating systems support PCI Express Hot-Plug:

- Windows 2000, Windows XP, Windows Server 2003, and Windows Vista, Windows 7.
- NetWare 4.20 and higher.
- Solaris 7 and higher.

Parity

The integrity of data that pass from the network through the system and back to the network is monitored by generating and checking parity information on all available data paths. All data errors are detected immediately and can be reported.

User Diagnostics (DOS and Windows)

The user diagnostics programs (available for DOS and Windows) provide users, system administrators, and engineers with profound tools to analyze the network adapter and check adapter-specific data.

7 Troubleshooting

Problem	What to do
Another expansion card fails to work after the network adapter has been installed	<p>Make sure all cables are connected to the correct expansion cards.</p> <p>Make sure the expansion cards are correctly inserted. Check if any internal connections in the computer have been disengaged or have been damaged during the installation of the network adapter.</p> <p>Check for resource conflicts in the computer. Check PCI Express configuration and resource allocation.</p>
The computer does not detect the network adapter	<p>Make sure the adapter is properly seated in the computer.</p> <p>Try installing the adapter in a different PCI Express slot.</p>
The computer adapter fails during a normal operation	<p>Load or install the driver again.</p>
Loopback test is successful but link LED does not light (no connection)	<p>Check the connections and try another switch port if necessary.</p> <p>Is the switch port configured correctly?</p> <p>Is the network driver loaded?</p> <p>Is the maximum transmission distance exceeded (see section "Transmission Distances")?</p>
LED for transmitting/receiving data packets (ACT) is not illuminated	<p>Make sure the network driver is loaded.</p> <p>Is there any network overload?</p> <p>Is the switch port configured correctly?</p> <p>Is the maximum transmission distance exceeded (see page 10)?</p> <p>If you have any other S2Kconnect adapter installed, compare your setup with this adapter.</p>

If the problem persists, you can analyze the status of the network adapter with the aid of the LEDs and the diagnostics programs.

8 Important Information

Technical Support

If you encounter any problems, read the relevant section of the manual. If you cannot solve your problems, consult our technical support.

If you contact our technical support engineers, have the following information ready:

- adapter type
- driver version
- operating system
- configuration of your computer
- type of cabling

Our support team can be reached following the instructions on our website.

Please go to: <http://www.s2kconnect.com>, contact section.

Returning an Adapter for Repair

If you want to return a faulty product to S2Kconnect, follow these steps:

1. Contact us by phone, fax, or e-mail.
We will send you an RMA (Return Material Authorization) form by fax or e-mail.
2. Complete the form.
3. Return the form to us.
We will send you a unique reference number and inform you if the product is still under warranty.
4. Send us the faulty product packed in an antistatic bag, with a copy of the completed form enclosed in its original packaging (or comparable packaging).
5. Write the reference number issued by S2Kconnect clearly visible on the outer packaging.



S2Kconnect cannot accept any returned product without an RMA number on the outer packaging. The warranty does not apply to products that have been damaged by electrostatic discharge or inadequate packaging

Additional Documentation and Updates

S2Kconnect maintains a site on the World Wide Web where you can find the latest information on our product range and our customer support services. The latest drivers are provided on the Marvell web site.

To download the latest drivers from our web site, proceed as follows:

1. Visit the web site: <http://www.marvell.com>
2. Click the **DOWNLOAD CENTER** button.
3. In the field "Product", select the desired adapter. You need to know the chipset, see p. 11.
4. In the field "Type", select **DRIVER**.
5. In the field "System", select the desired operating system.
6. Click **SEARCH**.

A list of all available drivers matching your search is displayed.

7. In the outer right column of the line containing the desired driver, click **DOWNLOAD**.



N-3010 - 10/100/1000Base-T Adapter, PCI Express x1, 1 x RJ-45

Product Highlights

- Compatible to SysKonnnect SK-9E21D
- PCI Low Profile (bracket included)
- WoL support and Smart Power Down
- TCP Segmentation Offload (large send)

Features

- Parity check on all data path
- TCP, UDP, and IP checksum generation and checking on chip
- Jumbo Frame support
- Dynamic Interrupt Moderation
- Advanced Power Management (ACPI)
- Hardware VLAN TAG removal and insertion
- PCIe x1 with 2,5 GHz signalling
- Active state power management (L0s/L1) support
- Descriptor bursting and caching
- Auto MDI/MDIX crossover at all speeds
- Integrated auto-negotiation state machine
- Wake on Link

Standard Compliance

- IEEE 802.3u (Ethernet and Fast Ethernet)
- IEEE 802.3ab and IEEE 802.3z (Gigabit Ethernet)
- IEEE 802.3ad (Link Aggregation)
- IEEE 802.3x (Flow control and Auto-negotiation)
- IEEE 802.1p (Quality of Service)
- IEEE 802.1q and IEEE 802.3ac (VLAN and VLAN tagging)



N-3010 - 10/100/1000Base-T Adapter, PCI Express x1, 1 x RJ-45

Driver

- X86 : Windows 7, Windows Vista, Windows XP, Windows 2000, Windows 2003 (.Net), NT4, Windows98 SE, ME
- x64 : Windows 7, Windows Vista, Windows XP, Windows 2003 (.Net)
- Solaris : SPARC 32:7,8,9
- Solaris : Intel X86:8,9,10
- Solaris : X64:10
- Linux : X86:Kernel 2.2, Kernel 2.4, Kernel 2.6
- NetWare : X86:4.2, 5.x, 6.x, DOS ODI
- Mac OS X : 10.2, 10.3, 10.4
- FreeBSD : X86:5.1, 5.2, 5.3, 5.4, 6.0

Boot Options

- Standard PXE 2.1 (Pre-Boot eXecution Environment)
- RPL (Remote Program Load)

Additional Software

- Marvell Virtual Cable Tester VCT

Safety Standard

- CSA, CB, CE

EMC

- CE
- FCC



N-3010 - 10/100/1000Base-T Adapter, PCI Express x1, 1 x RJ-45

Environment Specifications

- Storage: -20°C to +70°C, 30% to 80% rel. humidity (non-condensing)
- Operating: -0°C to +50°C, 10% to 95% rel. humidity (non-condensing)

ROHs

- Compliant with EN 2002/95/EU

Power Consumption

- @ +3.3V / VCC max. 2.3 W
- @ 3.3V (aux): max 375 mA

Dimension

- 86.36 mm x 55.32 mm

Weight

- Weight : Unit 64 g; Packet 148 g

Warranty

- 2 Years

Green Feature

- Advanced Power Management

Order Numbers

- 100-000-100-001

© Copyright 2010 S2Kconnect

All rights reserved. All brand and product names are trademarks or registered trademarks of their respective holders. Specifications are subject to change without notice.

Germany

S2Kconnect GmbH
Siemensstrasse 23
D-76275 Ettlingen
Phone: +49 7243 3435725
Fax: +49 7243 3435723
E-mail: sales@s2kconnect.de

www.s2kconnect.com

Appendix A. License and Warranty Information

The Americas, Asia, Australia, New Zealand, Pacific

Dear Customer,

if you acquired your S2Kconnect product in the UNITED STATES, CANADA or any other country in the AMERICAS, ASIA, AUSTRALIA, NEW ZEALAND, PACIFIC, the following license and purchase agreement applies to you.

This is a legal agreement between you, the end user and S2Kconnect Incorporated in Ettlingen/Federal Republic of Germany.

S2Kconnect GmbH. License and Purchase Agreement

By opening the sealed disk package and taking possession of the hardware, you are agreeing to be bound by the terms of this Agreement. If you do not agree to the terms of this Agreement, promptly return the unopened and unused disk package and hardware with the accompanying items (including all written materials and other accessories) to the place of purchase for a full refund.

Grant of Software License

This S2Kconnect GmbH License Agreement (License) permits you to use one copy of the S2Kconnect GmbH software product acquired with this License ("SOFTWARE") on any single computer, provided the SOFTWARE is in use on only one computer at any time. If you have multiple Licenses for the SOFTWARE, then at any time, you may have as many copies of the SOFTWARE in use as you have Licenses. The SOFTWARE is "in use" on a computer when it is loaded into the temporary memory (i.e. RAM) or installed into the permanent memory (e.g. hard disk or other storage device) of that computer, except that a copy installed on a network server for the sole purpose of distribution to other computers is not "in use". If the anticipated number of users of the SOFTWARE will exceed the number of applicable Licenses, then you must have a reasonable mechanism or process in place to assure that the number of persons using the SOFTWARE concurrently does not exceed the number of Licenses. If the SOFTWARE is permanently installed on the hard disk or other storage device of a computer (other than a network server) and one person uses that computer more than 80% of the time it is in use, then that person may also use the SOFTWARE on a portable or home computer.

Copyright

The SOFTWARE is owned by S2Kconnect GmbH or its suppliers and is protected against copying by copyright laws, international treaty provisions and other national laws.

If the SOFTWARE is not copy protected you may either make one copy of the SOFTWARE solely for backup or archival purposes, or transfer the SOFTWARE to a single hard disk provided you keep the original solely for backup or archival purposes.

You may not copy the Product Manual(s) or written materials accompanying the SOFTWARE or HARDWARE.

Other Restrictions

You may not rent or lease the SOFTWARE or HARDWARE, but you may transfer your rights under this S2Kconnect GmbH License and Purchase Agreement on a permanent basis provided you transfer all copies of the SOFTWARE and all written materials, and the recipient agrees to the terms of this Agreement.

You may not reverse engineer, decompile or disassemble the SOFTWARE. Any transfer must include the most recent update and all prior versions.

Hardware

S2Kconnect GmbH warrants, that the hardware will be delivered free from defect and in working condition. S2Kconnect GmbH does not assume liability for nor warrant damage to the hardware after delivery. S2Kconnect also does not warrant total applicability for specific applications or customer network environments.

Limited Warranty for Hardware and Software

Limited Warranty

S2Kconnect warrants that the SOFTWARE will perform substantially in accordance with the accompanying Product Manual(s) for a period of 90 days from the date of receipt.

S2Kconnect warrants that NETWORK INTERFACE CARDS will be free from defects in materials and workmanship under normal use and service for a period of 2 years from the date of receipt, that NETWORK INFRASTRUCTURE COMPONENTS (e.g., hubs, Switches, concentrators) will be free from defects in materials and workmanship under normal use and service for a period of 2 years from the date of receipt, and other HARDWARE for a period of 6 months from the date of receipt respectively.

This warranty is given by S2Kconnect as producer of the PRODUCT; possible legal warranty or liability claims against the dealer, whom you have acquired your SOFTWARE or HARDWARE product from, shall neither be replaced by nor limited through this warranty.

Customer Remedies

S2Kconnect's entire liability and your exclusive remedy shall be, at S2Kconnect's option, either return of the price paid, or repair or replacement of the SOFTWARE or HARDWARE that does not meet S2Kconnect's Limited Warranty and which is returned to S2Kconnect GmbH with a copy of your receipt. This Limited Warranty is void if failure of the SOFTWARE or HARDWARE has resulted from accident, abuse, or misapplication. Any replacement SOFTWARE will be warranted by S2Kconnect GmbH only for the remainder of the original warranty period or 30 days, whichever is longer. Any replacement HARDWARE will be warranted for the remainder of the original warranty period or 6 months, whichever is longer.

No other Warranties

S2Kconnect GmbH disclaims all other warranties or liabilities with respect to the SOFTWARE, the HARDWARE, the accompanying Product Manual(s) and other written materials and any other accessories.

No Liability for Consequential Damages

S2Kconnect GmbH does not warrant the software and hardware for a specific application, nor does S2Kconnect GmbH accept any consequential damages due to the use of the hardware or software. S2Kconnect GmbH and its suppliers shall not be liable for any other damages whatsoever (including, without limitation, damages for loss of business profits, business interruption, loss of business information or data, property loss or other financial loss), arising out of the use of or the inability to use this S2Kconnect GmbH product, even if S2Kconnect GmbH has been advised of the possibility of such damages. In any case, S2Kconnect's entire liability shall be limited to the amount actually paid by you for the product.

Other

This agreement is governed by the procedural and substantive laws of the State California, U.S.A.. UN Trade Laws shall not be applicable in any case.

Should individual stipulations of this Agreement be or become invalid, this invalid stipulation shall be replaced by a stipulation, which is as close as possible to the invalid stipulation.

Should you have any questions concerning this Agreement, or if you desire to contact S2Kconnect GmbH for any reason, please use the address information enclosed in this product or write to: S2Kconnect GmbH, Siemensstrasse 23, 76275 Ettlingen, Germany.

U.S. Government Use

Use, duplication, or disclosure by the United States Government is subject to restrictions as set forth in FAR § 52.227-14 (June 1987) Alternate III(g)(3) (June 1987), FAR § 52.227-19 (June 1987), or DFARS § 52.227-7013 © (1) (June 1988), as applicable. Contractor / Manufacturer is S2Kconnect.

Europe

Dear Customer,

if you acquired your S2Kconnect product in EUROPE, the following license and purchase agreement applies to you: This is a legal agreement between you, the end user and S2Kconnect GmbH, in Ettlingen/Federal Republic of Germany.

S2Kconnect License and Purchase Agreement

By opening the sealed disk package and taking possession of the hardware, you are agreeing to be bound by the terms of this Agreement. If you do not agree to the terms of this Agreement, promptly return the unopened and unused disk package and hardware with the accompanying items (including all written materials and other accessories) to the place of purchase for a full refund.

Grant of Software License

This S2Kconnect License Agreement (License) permits you to use one copy of the S2Kconnect software product acquired with this License ("SOFTWARE") on any single computer, provided the SOFTWARE is in use on only one computer at any time. If you have multiple Licenses for the SOFTWARE, then at any time, you may have as many copies of the SOFTWARE in use as you have Licenses. The SOFTWARE is "in use" on a computer when it is loaded into the temporary memory (i.e. RAM) or installed into the permanent memory (e.g. hard disk or other storage device) of that computer, except that a copy installed on a network server for the sole purpose of distribution to other computers is not "in use". If the anticipated number of users of the SOFTWARE will exceed the number of applicable Licenses, then you must have a reasonable mechanism or process in place to assure that the number of persons using the SOFTWARE concurrently does not exceed the number of Licenses. If the SOFTWARE is permanently installed on the hard disk or other storage device of a computer (other than a network server) and one person uses that computer more than 80% of the time it is in use, then that person may also use the SOFTWARE on a portable or home computer.

Copyright

The SOFTWARE is owned by S2Kconnect or its suppliers and is protected against copying by copyright laws, international treaty provisions and other national laws.

If the SOFTWARE is not copy protected you may either make one copy of the SOFTWARE solely for backup or archival purposes, or transfer the SOFTWARE to a single hard disk provided you keep the original solely for backup or archival purposes.

You may not copy the Product Manual(s) or written materials accompanying the SOFTWARE or HARDWARE.

Other Restrictions

You may not rent or lease the SOFTWARE or HARDWARE, but you may transfer your rights under this S2Kconnect License and Purchase Agreement on a permanent basis provided you transfer all copies of the SOFTWARE and all written materials, and the recipient agrees to the terms of this Agreement. You may not reverse engineer, decompile or disassemble the SOFTWARE. Any transfer must include the most recent update and all prior versions.

Hardware

The risk passes to you, the end user, upon taking possession (hand over) of the HARDWARE. Total qualities were not warranted.

Limited Warranty for Hardware and Software

Limited Warranty

S2Kconnect warrants that the SOFTWARE will perform substantially in accordance with the accompanying Product Manual(s) for a period of 90 days from the date of receipt if you have created the required technical preconditions.

S2Kconnect warrants that NETWORK INTERFACE CARDS will be free from defects in materials and workmanship under normal use and service for a period of 5 years from the date of receipt, that NETWORK INFRASTRUCTURE COMPONENTS (e.g., hubs, Switches, concentrators) will be free from defects in materials and workmanship under normal use and service for a period of 2 years from the date of receipt, and other HARDWARE for a period of 6 months from the date of receipt respectively.

Any implied warranties on the SOFTWARE are limited to 90 days, to 5 years on the NETWORK INTERFACE CARDS, to 2 years on the NETWORK INFRASTRUCTURE COMPONENTS and to 6 months on all other hardware. This warranty is given by S2Kconnect as producer of the PRODUCT; possible legal warranty or liability claims against the dealer, whom you have acquired your SOFTWARE or HARDWARE product from, shall neither be replaced by nor limited through this warranty.

Customer Remedies

S2Kconnect's entire liability and your exclusive remedy shall be, at S2Kconnect's option, either return of the price paid, or repair or replacement of the SOFTWARE or HARDWARE that does not meet S2Kconnect's Limited Warranty and which is returned to S2Kconnect with a copy of your receipt. This Limited Warranty is void if failure of the SOFTWARE or HARDWARE has resulted from accident, abuse, or misapplication. Any replacement SOFTWARE will be warranted by S2Kconnect only for the remainder of the original warranty period or 30 days, whichever is longer. Any replacement HARDWARE will be warranted for the remainder of the original warranty period or 6 months, whichever is longer.

No other Warranties

S2Kconnect disclaims all other warranties or liabilities with respect to the SOFTWARE, the HARDWARE, the accompanying Product Manual(s) and other written materials and any other accessories.

No Liability for Consequential Damages

S2Kconnect does not warrant the software and Hardware for a specific application, nor does S2Kconnect accept any consequential damages due to the use of the hardware or software. S2Kconnect and its suppliers shall not be liable for any other damages whatsoever (including, without limitation, damages for loss of business profits, business interruption, loss of business information or data, property loss or other pecuniary loss), arising out of the use of or the inability to use this S2Kconnect product, even if S2Kconnect has been advised of the possibility of such damages. In any case, S2Kconnect's entire liability shall be limited to the amount actually paid by you for the product.

Other

This agreement is governed by the procedural and substantive laws of the Federal Republic of Germany. UN Trade Laws shall not be applicable in any case. Place of litigation is Karlsruhe, FRG, as far as this can be agreed upon operatively in this way.

Should individual stipulations of this Agreement be or become invalid, this invalid stipulation shall be replaced by a stipulation, which is as close as possible to the invalid stipulation.

Should you have any questions concerning this Agreement, or if you desire to contact S2Kconnect for any reason, please use the address information enclosed in this product or write to: S2Kconnect GmbH, Siemensstrasse 23, D-76275 Ettlingen, Germany.

Deutschland, Schweiz, Österreich, Liechtenstein

Verehrte Kundin, verehrter Kunde,

wenn Sie Ihr S2Kconnect Produkt in DEUTSCHLAND, in der SCHWEIZ, in ÖSTERREICH oder in LIECHTENSTEIN erworben haben, gilt für Sie der folgende Lizenz- und Kaufvertrag. Dies ist ein rechtsgültiger Vertrag zwischen Ihnen, dem Endanwender, und der S2Kconnect GmbH mit Sitz in Ettlingen/Bundesrepublik Deutschland.

S2Kconnect Lizenz- und Kaufvertrag

Durch Öffnen der versiegelten Diskettenpackung und durch die Inbesitznahme der Hardware erklären Sie sich an die Bestimmungen der nachfolgenden Vereinbarung gebunden. Wenn Sie mit den Bestimmungen dieses Vertrages nicht einverstanden sind, geben Sie bitte die Diskettenpackung und die Hardware ungeöffnet und unbenutzt mit den Begleitgegenständen (einschließlich aller schriftlichen Unterlagen und dem sonstigen Zubehör) unverzüglich gegen volle Rückerstattung des Preises an die Stelle zurück, von der Sie sie bezogen haben.

Einräumung einer Software-Lizenz

Diese S2Kconnect Lizenzvereinbarung (Lizenz) gibt Ihnen die Berechtigung, eine Kopie des S2Kconnect Software Produktes, das mit dieser Lizenz (Software) erworben wurde, auf einem Einzelcomputer unter der Voraussetzung benutzen, dass die Software zu jeder beliebigen Zeit auf nur einem einzigen Computer verwendet wird. Wenn Sie Mehrfachlizenzen für die Software erworben haben, dürfen Sie immer nur höchstens so viele Kopien in Benutzung haben, wie Sie Lizenzen besitzen. Die Software ist auf einem Computer "in Benutzung", wenn Sie in den Zwischenspeicher (d.h., RAM) geladen oder in einem Permanentspeicher (z.B. einer Festplatte oder einer anderen Speichervorrichtung) dieses Computers gespeichert ist, mit der Ausnahme, dass eine Kopie, die auf einem Netzserver zu dem alleinigen Zweck der Verteilung an andere Computer installiert ist, nicht "in Benutzung" ist. Wenn die voraussichtliche Zahl der Benutzer der Software die Zahl der erworbenen Lizenzen übersteigt, müssen Sie angemessene Mechanismen oder Verfahren bereithalten, um sicherzustellen, dass die Zahl der Personen, die die Software gleichzeitig benutzen, nicht die Zahl der Lizenzen übersteigt.

Wenn die Software permanent auf einer Festplatte oder einer anderen Speichervorrichtung eines Computers, der kein Netzserver ist, installiert wird und eine einzige Person diesen Computer zu mehr als 80 % der Zeit benutzt, die er in Benutzung ist, darf diese eine Person die Software auch auf einem tragbaren Computer oder einem Heimcomputer benutzen.

Urheberrecht

Die Software ist Eigentum von S2Kconnect oder deren Lieferanten und ist durch Urheberrechtsgesetze, internationale Verträge und andere nationale Rechtsvorschriften gegen Kopieren geschützt.

Wenn die Software nicht mit einem technischen Schutz gegen Kopieren ausgestattet ist, dürfen Sie entweder eine einzige Kopie der Software ausschließlich für Sicherungs- oder Archivierungszwecken machen die Software auf eine einzige Festplatte übertragen, sofern Sie das Original ausschließlich zu Sicherungs- und Archivierungszwecken aufbewahren.

Sie dürfen weder die Handbücher des Produktes noch anderes schriftliches Begleitmaterial zur Software oder Hardware kopieren.

Weitere Beschränkungen

Sie dürfen die Software oder Hardware weder vermieten noch verleihen, aber Sie dürfen die Rechte aus diesem S2Kconnect Lizenz und Kaufvertrag auf Dauer auf einen anderen übertragen, vorausgesetzt, dass Sie alle Kopien der Software und das gesamte schriftliche Begleitmaterial übertragen und der Empfänger sich mit den Bestimmungen dieses Vertrages einverstanden erklärt. Zurückentwickeln (Reverse Engineering), Dekompilieren und Entassemblieren der Software sind nicht gestattet. Eine Übertragung muß die letzte aktuelle Version (Update) und alle früheren Versionen umfassen.

Hardware

Mit der Inbesitznahme (Übergabe) dieser Hardware geht die Gefahr auf Sie, den Endanwender über. Eigenschaften wurden nicht zugesichert.

Beschränkte Garantie für Hardware und Software

S2Kconnect garantiert für einen Zeitraum von 90 Tagen ab Empfangsdatum, dass die Software, soweit die technischen Voraussetzungen hierfür von Ihnen geschaffen wurden, im wesentlichen gemäß der begleitenden Dokumentation arbeitet. S2Kconnect garantiert für Netzwerkadapterkarten für einen Zeitraum von 5 Jahren, Infrastrukturkomponenten (z.B. Konzentratoren, Hubs, Switches) für einen Zeitraum von 2 Jahren und die sonstige Hardware für einen Zeitraum von 6 Monaten ab Empfangsdatum, dass die gelieferte Hardware bei normaler Benutzung und Wartung frei von Material- oder Verarbeitungsfehlern ist. Die Garantie ist bezüglich der Software auf 90 Tage, bezüglich der Netzwerkadapter auf 5 Jahre für Infrastrukturkomponenten auf 2 Jahre und bezüglich der sonstigen Hardware auf 6 Monate beschränkt. Diese Garantie wird von S2Kconnect als Hersteller des Produktes übernommen; etwaige gesetzliche Gewährleistungs- oder Haftungsansprüche gegen den Händler, von dem Sie Ihr Exemplar der Software oder Hardware bezogen haben, werden hierdurch weder ersetzt noch beschränkt.