SIEMENS NIXDORF

PC

System board D808

EISA/PCI

Technical Manual

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A26361-D808-Z121-1-7619

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Technical Manual

October 1994 edition

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Introduction

This technical manual describes the system board D808.

Explanation of symbols

The meanings of the symbols and fonts used in this manual are as follows:

⚠ Pay particular attention to texts marked with this symbol. Failure to observe this warning endangers your life, destroys the system, or may lead to loss of data.

ℹ This symbol is followed by supplementary information, remarks and tips.

▶ Texts which follow this symbol describe activities that must be performed in the order shown.

␣ This symbol means that you must enter a blank space at this point.

↵ This symbol means that you must press the Enter key.

Texts in this typeface are screen outputs from the PC.

Texts in this bold typeface are the entries you make via the keyboard.

Texts in italics indicate commands or menu items.

"Quotation marks" indicate highlighted text and names of chapters.

Features

– Pentium processor (into ZIF socket): 60 MHz, 16 Kbyte cache, coprocessor

– Mercury EISA-PCI chipset

– 64 bit data bus

– 256 Kbyte second level cache

– 8 to 192 Mbyte main memory (3 banks)

– Flash memory (128 Kbyte)

– 36-bit SIM modules (PS/2 modules)

– Socket for real-time clock with 114 Byte CMOS RAM memory and battery

– Floppy disk controller (up to 2,88 Mbyte)

– Fast IDE hard disk controller on the PCI bus

– 3 PCI slots

– 1 ISA slot

– 4 Master-capable EISA slots

– Connector for floppy disk drive

– 2 connectors for IDE hard disk drives (2 x 2 IDE hard disks can be connected)

– Connector for external loudspeaker

– Parallel interface (ECP and EPP compatible)

– Two serial interfaces

– Mouse port (PS/2)

– Keyboard port (PS/2

– Piezoelectric busser

– Switch bank for user settings

– Password protection

1 = slots 1 to 4 (EISA)
2 = slot 5 (ISA)
3 = slots 6 to 8 (PCI)
4 = Mouse and keyboard interface
5 = Serial interfaces Ser1 and Ser2
6 = Parallel interface
7 = Connector for standard-
    power supply and for
    3,3 V power supply
8 = Real-time clock (RTC)
9 = Connector for IDE
    hard disk drive (secondary)
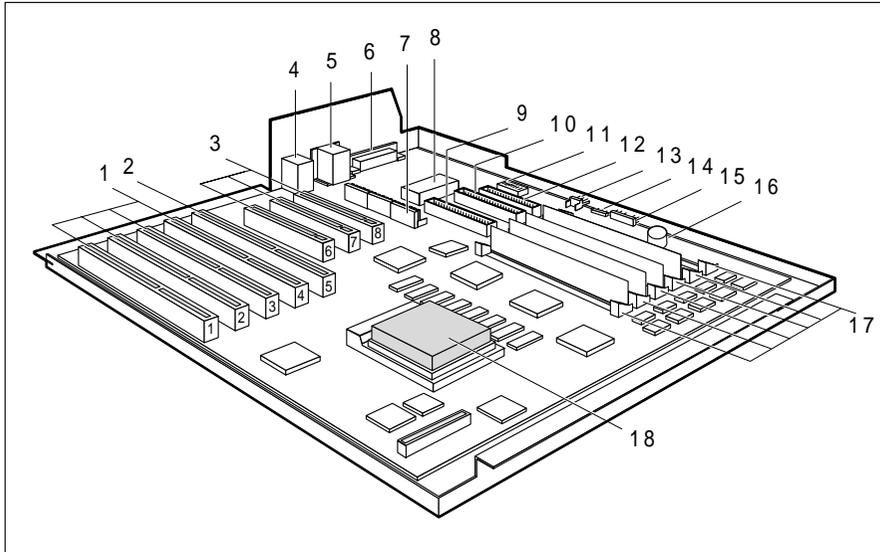
10 = Connector for IDE
     hard disk drive (primary)
11 = DIP switch S500
12 = Connector for standard
     floppy disk drive
13 = Connector for fan
14 = Connector for external loudspeaker
15 = Connector for indicator
     (system unit on, hard disk)
16 = Piezoelectric busser
17 = 6 sockets for SIM modules
18 = Pentium processor

⚠   Only short boards can be inserted in the following slots:
       – slot 4 (EISA)
       – slot 5 (ISA)
       – slot 6 (PCI)
       – slot 8 (PCI)

The other slots can accommodate long or short boards.

Important notes

⚠ Please note the information provided in the chapter "Important notes" in the Operating Manual of the PC.

⚠ The lithium battery on the board may only be replaced by specialist technicians. There is a danger of explosion if this is not done properly.
The lithium battery must be replaced with an identical battery or a battery type recommended by the manufacturer.
The lithium battery must be disposed of in accordance with local regulations on the disposal of special refuse.

Be sure to read this page carefully and note the information before you open the PC.

ADVARSEL

⚠ Lithiumbatteri - Eksplosionsfare ved fejlagtig håndtering. Udskiftning må kun ske med batteri af samme fabrikat og type. Lever det brugte batteri tilbage til leverandøren.

ADVARSEL

⚠ Eksplosjonsfare ved feilaktig skifte av batteri. Benytt samme batteritype eller en tilsvarende type anbefalt av apparatfabrikanten. Brukte batterier kasseres i henhold til fabrikantens instruksjoner.

VARNING

⚠ Eksplosionsfara vid felaktigt batteribyte. Använd samma batterityp eller en ekvivalent typ som rekommenderas av apparattillverkarenfabrikanten. Kassera använt batteri enligt fabrikantens instruktion.

VAROITUS

⚠ Paristo voi räjähtää, jos se on virheellisesti asennettu. Vaihda paristo ainoastaan laitevalmistajan suosittelemaan tyyppiin. Hävitä käytetty paristo valmistajan ohjeiden mukaisesti.

Modules with **e**lectrostatic **s**ensitive **d**evices (ESD) may be identified by labels.

When you handle modules fitted with ESDs, you must observe the following points under all circumstances:

– When you handle modules fitted with ESDs, you must always discharge yourself (e.g. by touching a grounded object) before working.

– The equipment and tools you use must be free of static charges.

– Pull out the power plug before inserting or pulling out modules containing ESDs.

– Always hold modules with ESDs by their edges.

– Never touch pins or conductors on modules fitted with ESDs.

Notes on software

Program with time loops

Problems can occur with programs in which time loops have been implemented through software loops. This applies in particular to older programs which were written for 8 MHz processors.

SCO-UNIX on devices with Pentium or OverDrive processor

If you use the processor mentioned above, the Adaptec-SCSI controller AHA 1740 cannot be addressed under SCO-UNIX 3.2.4 and ODT 2.0.

To solve this problem, you can order from SCO an **SLS** (Support Level Supplement) consisting of 3 floppy disks, or contact one of our IT Service Shops.

The problem no longer exists in the new releases of SCO-UNIX 3.2.4.2 and ODT 2.1.
There will be no support for older versions (SCO-UNIX versions lower than 3.2.4 and ODT versions lower than 2.0).

Settings

You can make settings in the setup menu or using the switch block on the system board.

Setup menu

The setup menu displays settings and technical information on the PC's configuration. The Operating Manual describes how to call the setup menu and change menu entries. Pressing the function key F1 provides help information on each entry field.

The setup menu consists of the following screen pages:
System Configuration
System Security Options
Additional System Options
PCI Device Configuration
Additional Hard Disk Options

System Configuration page

```
                        CMOS Setup
                    System Configuration
--------------------------------------------------------------------

Time (hh:mm:ss)   08:38:27              Date (mm/dd/yy)   08/13/1993

Diskette A:       1.4M
Diskette B:       NONE

                           Cyl    Hd    Pre    LZ    Sec   Mbyte
Hard Disk 1:      NONE
Hard Disk 2:      NONE
Hard Disk 3:      NONE
Hard Disk 4:      NONE

Base Memory:      640K                  Video Display:    EGA/VGA
Extended Memory:  15360K                Speed Select:     HIGH


Error Halt:       HALT ON ALL ERRORS

--------------------------------------------------------------------

<F1> Help         <F8> System info    <F10> Store CMOS  <Esc> Exit  Page
<...> Edit field  <↑↓←→> Next field   <PgUp> Next page  <Ctrl> ...   01
```

Example of the *System Configuration* page

Time
Date

> *Time* and *Date* show the time and date respectively according to the PC. The time is shown in the format *hh:mm:ss* (hours:minutes:seconds) and the date is shown in the format *mm/dd/yy* (month/day/year).

> ⚠ If the settings in the *Time* and *Date* fields are frequently wrong when you power up the computer, the lithium battery is dead. Change the battery as described in "Add-on modules - Replacing the lithium battery").

Diskette A
Diskette B

> specify the type of floppy disk drive installed. The possible settings are: *360K*, *1.2M*, *720K*, *1.4M*, *2.8M or NONE*.

> Default entry for *Diskette A*:
>   3 1/2-inch floppy drive   *1.4M*
>   5 1/4-inch floppy drive   *1.2M*
> Default entry for *Diskette B*:   *NONE*

Hard Disk 1
Hard Disk 2
Hard Disk 3
Hard Disk 4
> indicate the types of hard disks installed. The entries here may possibly not match the information printed on the hard disk drive by the manufacturer. The maximum transfer rate of two IDE drives connected to the same connector is determined by the slower of the two. Fast hard disks should therefore be connected to the first IDE connector and identified as *Hard Disk 1* or *Hard Disk 2*; slower hard disks should be connected to the second IDE connector and identified as *Hard Disk 3* or *Hard Disk 4*.
> Possible settings: *1* through *43*, *AUTO* or *NONE*.

> **i** Do not alter the default settings unless you mount a different hard disk drive. If the wrong hard disk type is entered, the operating system cannot be loaded.

> Special entries for the hard disk type:
> Entry for SCSI hard disks: *NONE*
> Entry for ESDI hard disks: *1*

1 through *39*
> The hard disk parameters (cylinders, heads, etc.) for types 1 through 39 are preset.

40 through *43*
> The hard disk parameters (cylinders, heads, etc.) for types 40 through 43 are user-defined and are entered at the keyboard.

Examples of user-defined entries (IDE drives)

Size	Cyl	Hd	Pre*	Lz*	Sec	Mbytes
120 Mbytes:	762	8	NONE	762	39	121
170 Mbytes:	904	8	NONE	904	46	170
210 Mbytes:	683	16	NONE	683	38	212
340 Mbytes:	904	16	NONE	904	46	340
540 Mbytes:	1048	16	NONE	1048	63	542
1 Gbyte:	2079	16	NONE	2079	63	1080

* These values are preset and cannot be modified.

AUTO
> If the hard disk supports this mode, the setup menu reads the hard disk parameters from the disk itself and sets them automatically. You do not need to select the parameters yourself.

NONE
> The computer either has no hard disk or is fitted with a SCSI hard disk.

Default entry for *Hard Disk 1*:
> depends on the type of hard disk installed
Default entry for *Hard Disk 2*, *3*, *4*: *NONE*

Base Memory
> indicates the size of the available base memory below 1 Mbyte.

512K
> A module needs the memory between 512 and 640 Kbytes.

640K
> The memory is used by the system board.

Default entry: *640K*

Extended Memory
> indicates the size of the memory above 1 Mbyte. You can reduce the size of extended memory if necessary.

Video Display
> specifies the type of monitor connected.
> Possible entries are: *EGA/VGA*, *COLOR 40*, *COLOR 80*, *MONO*.

Default entry: *EGA/VGA*

Speed Select
> specifies the system speed set at system startup. You might, for example, need to select a slower speed for certain software programs that use programmed time loops.

HIGH
> Full system speed

LOW
> Reduced system speed.

Default entry: *HIGH*

Error Halt
> specifies which errors the self-test should not report. The default setting should only be changed if required by special applications.

HALT ON ALL ERRORS
> The self-test reports all errors it encounters.

NO KEYBOARD ERROR HALT
> The self-test ignores keyboard errors.

NO DISK ERROR HALT
> The self-test ignores floppy disk and hard disk errors.

NO KEYBOARD OR DISK HALT
> The self-test ignores keyboard, floppy disk and hard disk errors.

NO HALT ON ANY ERRORS
> The self-test ignores all errors.

Default entry: *HALT ON ALL ERRORS*

The System Security Options page

```
                        CMOS Setup
                  System Security Options
-------------------------------------------------------------------------

Time (hh:mm:ss)  08:38:27              Date (mm/dd/yy)   08/13/1993


System Load:         STANDARD
Security Features:   DISABLED

Serial 1:         COM1 (3F8h)     Diskette Write:    ENABLED
Serial 2:         COM2 (2F8h)     Diskette Ctrlr:    ENABLED

Parallel:         LPT1 (378h)     Setup Prompt:      ENABLED
Par Mode:         PRINTER         Quick Load:        DISABLED
                                  Virus Warning:     DISABLED
Mouse Ctrlr:      ENABLED
Flash Write:      ENABLED



-------------------------------------------------------------------------

<F1> Help        <F8> System info    <F10> Store CMOS  <Esc> Exit  Page
<+ -> Select item <↑↓←→> Next field   <PgUp> Next page  <Ctrl> ...   02
```

Example of the *System Security Options* page

Time / Date
> *Time* shows the current time and *Date* shows the current date according to the PC.

System Load
> allows you to disable booting from floppy disk or swap the drive letters assigned to the floppy disk drives.

STANDARD
> The operating system can be loaded from floppy disk or hard disk.

NONSTANDARD
> System start-up is controlled by the operating system (terminal emulation).

DISKETTE LOCK
> The operating system can only be loaded from hard disk.

DISKETTE SWAP
> Drives A and B are switched.

Default entry: *STANDARD*

Security Features
> allows you to define a password to prevent access to the data in your PC.

DISABLED
> No passwords are in effect.

SYSTEM AND Setup LOCK
> The setup menu and the operating system are protected by passwords.

SETUP LOCK
> The setup menu is protected by a password.

KEYBOARD AND Setup LOCK
> The setup menu is protected and the keyboard and the mouse are locked by passwords.

CHANGE PASSWORD
> This option is only displayed if a password has already been defined. It enables you to alter the password.

Default entry: *DISABLED*

Serial 1

selects the address and the interrupt used to access serial interface 1.

COM1 (3F8h)

Serial interface 1 is set to the address 3F8h and IRQ4 (edge-triggered).

COM3 (3E8h)

Serial interface 1 is set to the address 3E8h and IRQ4 (edge-triggered).

DISABLED

Serial interface 1 is disabled.

Default entry: *COM1 (3F8h)*

Serial 2

selects the address and the interrupt used to access serial interface 2.

COM2 (2F8h)

Serial interface 2 is set to the address 2F8h and IRQ3 (edge-triggered).

COM4 (2E8h)

Serial interface 2 is set to the address 2E8h and IRQ3 (edge-triggered).

DISABLED

Serial interface 2 is disabled.

Default entry: *COM2 (2F8h)*

Parallel

selects the address and the interrupt used to access the parallel interface.

LPT1 (378h)

The parallel interface is set to the address 378h and IRQ7.

LPT3 (3BCh)

The parallel interface is set to the address 3BCh and IRQ7.

DISABLED

The parallel interface is disabled.

Default entry: *LPT1 (378h)*

Par Mode

specifies whether the parallel interface is to be used as a bidirectional input/output port or just as an output port.
In addition LPT1 can be configured for *ECP, EPP*, and *ECP and EPP* transfer modes, which allow transfer rates of 2 and 2.4 Mbytes/s. These modes will only work with peripheral devices which also support them.

PRINTER

The port functions as an output port only.

BIDIRECTION

Data can be transferred in both directions across the port.

EPP

Enhanced Parallel Port transfer mode.

ECP

Enhanced Capability Port transfer mode.

ECP AND EPP

Enhanced Capability and Enhanced Parallel Port transfer mode.

Default entry: *PRINTER*

Mouse Ctrlr

enables and disables the built-in mouse controller on the system board.

ENABLED

The mouse controller is enabled (IRQ12 used).

DISABLED

The mouse controller is disabled (IRQ12 free).

Default entry: *ENABLED*

Flash Write

write-protects the flash BIOS.

ENABLED

The flash BIOS can be written or deleted, provided switch 3 on the system board is set to OPEN.

DISABLED

The flash BIOS cannot be written. The BIOS cannot be flash-upgraded from floppy disk.

Default entry: *ENABLED*

Diskette Write
This field is used to enable and disable floppy disk write-protection.

ENABLED
Floppy disks can be read, written or deleted, provided switch 6 of the switch block S500 on the system board is set to OPEN.

DISABLED
Floppy disks can only be read.

Default entry: *ENABLED*

Diskette Ctrlr
enables and disables the built-in floppy disk controller on the system board.

ENABLED
The floppy disk controller is enabled.

DISABLED
The floppy disk controller is disabled.

Default entry: *ENABLED*

Setup Prompt
specifies whether the *F2 FOR SETUP* prompt is displayed when the PC is started.

ENABLED
The *F2 FOR SETUP* prompt is displayed when the system is started.

DISABLED
The prompt is not displayed.

Default entry: *ENABLED*

Quick Load
allows you to shorten the duration of the self-test and speed up system start-up. If you choose the quick self-test option, only a minimum memory test is carried out.

ENABLED
The quick self-test is enabled.

DISABLED
The normal self-test is carried out.

Default entry: *DISABLED*

Virus Warning
enables and disables a check of the boot sector on the bootable hard disk for changes since the last system start-up. If changes are detected and the cause is unknown, you should run an appropriate virus checker to check for a virus.

ENABLED
If the boot sector has been modified since the system last booted (e.g,. a new operating system version has been installed or the hard disk has been infected by a virus), an on-screen warning appears.

```
    !!! HARD DISK WARNING !!!
   Boot sector has been modified.
Confirm the new boot sector in SETUP,
    and run a virus scan program.
```

This warning is re-displayed each time you restart the system until you acknowledge the message with CONFIRM or you disable the function by setting this field to DISABLED.

CONFIRM
By selecting this option, you indicate to the system that the modification to the boot sector was intentional (e.g., you have installed a new operating system version).

DISABLED
Boot sectors are not checked.

Default entry: *DISABLED*

Additional System Options page

```
                        CMOS Setup
                  Additional System Options
-----------------------------------------------------------------------------

Time (hh:mm:ss)   08:38:27              Date (mm/dd/yy)   08/13/1993


System BIOS:           128K
Shadow BIOS ROM:       SYSTEM AND VIDEO BIOS
                       C800  CC00  D000  D400  D800  DC00
Shadow Adaptor ROM:    NO    NO    NO    NO    NO    NO

Cache:                 INTERN AND EXTERN
Cache Mode:            WRITE BACK
Cache BIOS ROM:        VIDEO BIOS ONLY
                       C800  CC00  D000  D400  D800  DC00
Cache Adaptor ROM:     NO    NO    NO    NO    NO    NO




-----------------------------------------------------------------------------

<F1> Help        <F8> System info    <F10> Store CMOS  <Esc> Exit   Page
<+ -> Select item <↑↓←→> Next field   <PgUp> Next page  <Ctrl> ...    03
```

Example of the *Additional System Options* page

Time / Date
> *Time* shows the current time and *Date* shows the current date according to
> the PC.

System BIOS
> can make available a ROM address area of 32 Kbytes for requests via the
> ISA/PCI bus (e.g., SCSI BIOS).

Entry	Memory area / location
96K	E8000H - FFFFFH / system board
128K	E0000H - FFFFFH / system board

96K
> A 96-Kbyte area is reserved for the system BIOS.
> A 32-Kbyte area (E0000H - E7FFFH) is available for requests via the
> ISA/PCI bus.

128K
> A 128-Kbyte area is reserved for the system BIOS.

Default entry: *128K*

Shadow BIOS ROM
> allows you to copy the video BIOS to fast RAM in addition to the system
> BIOS at system start-up. Copying the BIOS to RAM increases CPU
> performance.

SHADOW BIOS ROM memory areas:

Entry	RAM area used
SYSTEM BIOS ONLY	E8000H - FFFFFH
SYSTEM AND VIDEO BIOS	C0000H - C7FFFH/E8000H - FFFFFH

SYSTEM AND VIDEO BIOS
> The system BIOS and the video BIOS are both copied to RAM area
> C0000H - C7FFFH and F0000H - FFFFFH.

SYSTEM BIOS ONLY
> Only the system BIOS is copied to RAM area E8000H - FFFFFH.

Default entry: *SYSTEM AND VIDEO BIOS*

Shadow Adaptor ROM
> allows you to copy 16-Kbytes adaptor ROMs to RAM. If ROM code executes
> from RAM it increases your PC's performance. The ROM of PCI adaptors is
> always copied to RAM, regardless of the setting in this field.

NO
> The relevant ROM area is not copied to RAM.

YES
> The relevant ROM area is copied to RAM.

Default entry: *NO*

Cache

specifies which cache memory the CPU should use. Cache memory greatly increases performance. If the system runs too fast for certain older software, you can slow it down by disabling the cache (DISABLED).

INTERN ONLY
Only the internal cache is enabled.

INTERN AND EXTERN
The internal cache and the external cache are enabled.

DISABLED
Both the internal cache and the external cache are disabled. All cache-related settings are then without effect.

Default entry: *INTERN AND EXTERN*

Cache Mode

Condition: *Cache* must be enabled.

Cache Mode sets the mode in which the CPU uses the cache; write operations to the cache are carried out either in write-back mode or write-through mode. In write-back mode the CPU writes information to the cache and the information is only written to main memory if necessary. Memory and cache contents are not identical. In write-through mode the processor writes the information to the cache and to main memory. The contents of memory and cache are identical.

WRITE BACK
The cache works in write-back mode.

WRITE THROUGH
The cache works in write-through mode.

Default entry: *WRITE BACK*

Cache BIOS ROM

Condition: *Cache* must be enabled.

Cache BIOS ROM lets you specify BIOS ROM areas that should also be mapped to the cache in addition to main memory.

SYSTEM BIOS ONLY
The system BIOS is mapped to the cache.

VIDEO BIOS ONLY
The video BIOS is mapped to the cache.

SYSTEM AND VIDEO BIOS
The system BIOS and the video BIOS are mapped to the cache.

DISABLED
BIOS ROM areas are not mapped to the cache.

Default entry: *SYSTEM AND VIDEO BIOS*

Cache Adaptor ROM

Condition: *Cache* must be enabled.

Cache Adaptor ROM allows you to specify whether the relevant 16-Kbyte ROM area should be mapped to the cache. Mapping the ROM area to RAM increases system performance.

NO
The relevant ROM area is not mapped to the cache.

YES
The relevant ROM area is mapped to the cache.

Default entry: *NO*

PCI Device Configuration page

```
                   CMOS Setup
                 PCI Device Configuration
--------------------------------------------------------------------
Time (hh:mm:ss)  08:38:27              Date (mm/dd/yy)  08/13/1993

Memory Base Address:    44000000h   Color Palette Snoop:    DISABLED
I/O Base Address:       D000h       Parity Checking:        ENABLED


                        INTA#      INTB#      INTC#      INTD#
PCI Interrupt Mapping:  AUTO       AUTO       AUTO       AUTO




--------------------------------------------------------------------

<F1> Help        <F8> System info    <F10> Store CMOS <Esc> Exit  Page
<...> Select item <↑↓←→> Next field   <PgUp> Next page  <Ctrl> ...   04
```

Example of the *PCI Device Configuration* page

Time / Date
>   *Time* shows the current time and *Date* shows the current date according to
>   the PC.

Memory Base Address
>   shows the base address used to map memory areas of PCI boards.

I/O Base Address
>   shows the base address for PCI adapter input/output operations.

Color Palette Snoop
>   specifies whether setting of the color palette is to be available on the ISA
>   bus.
>
>   *ENABLED*
>   >   Setting of the color palette is available simultaneously on the PCI bus and
>   >   the ISA bus. This setting can be of relevance when operating video or
>   >   multimedia boards on the ISA bus.
>
>   *DISABLED*
>   >   Setting of the color palette is only available on the PCI bus.
>
>   Default entry: *DISABLED*

Parity Checking
>   specifies whether the PCI bus is to be parity-checked.
>
>   *ENABLED*
>   >   A parity check is performed on the PCI bus.
>
>   *DISABLED*
>   >   No parity check is performed on the PCI bus.
>
>   Default entry: *ENABLED*

PCI Interrupt Mapping
>   specifies which PCI interrupt is to be mapped to which ISA interrupt. With
>   multifunctional PCI adaptor boards you may use all PCI interrupts.
>   The PCI interrupts INTA# and INTB# are normally assigned as follows:
>   Slot 1 = INTA#, slot 2 = INTB#
>
>   Possible entries: *NONE, AUTO, 3, 4, 5, 6, 7, 9, 10, 11, 12, 14, 15*
>
>   Default entry: INTA#   *AUTO*
>   INTB#   *AUTO*
>   INTC#   *AUTO*
>   INTD#   *AUTO*

> **i**   You can obtain information on assigned ISA interrupts on PCI boards
>   by pressing the function key **F8** which brings up the *System
>   Information* screen.

Additional Hard Disk Options page

```
                           CMOS Setup
                    Additional Hard Disk Options
--------------------------------------------------------------------------

Time (hh:mm:ss)   08:38:27              Date (mm/dd/yy)   08/13/1993


Hard Disk Ctrlr:   ENABLED

                   Transfer Mode    LBA Translation    Power Down
Hard Disk 1:       STANDARD         DISABLED           DISABLED
Hard Disk 2:       STANDARD         DISABLED           DISABLED
Hard Disk 3:       STANDARD         DISABLED           DISABLED
Hard Disk 4:       STANDARD         DISABLED           DISABLED




--------------------------------------------------------------------------

<F1> Help        <F8> System info    <F10> Store CMOS  <Esc> Exit   Page
<+ -> Select item <↑↓←→> Next field   <PgUp> Next page  <Ctrl> ...    05
```

Example of the *Additional Hard Disk Options* page

Time / Date
> *Time* shows the current time and *Date* shows the current date according to the PC.

Hard Disk Ctrlr
> enables and disables the built-in IDE hard disk controller. The associated interrupt will only be available if no hard disk is physically connected.
>
> *ENABLED*
> > The IDE hard disk controller is enabled.
>
> *DISABLED*
> > The IDE hard disk controller is disabled.
>
> Default entry: *ENABLED*

Hard Disk 1: Transfer Mode
Hard Disk 2: Transfer Mode
Hard Disk 3: Transfer Mode
Hard Disk 4: Transfer Mode
> specifies the transfer rate for the IDE hard disks.
>
> *STANDARD*
> > The system transfers 512 bytes per interrupt
>
> *AUTO SELECT*
> > If fast hard disks are installed, the highest possible transfer rate is selected. If the hard disk supports this mode, the setup menu prompts for the maximum number of blocks to be transferred per interrupt. The maximum is 32 blocks of 512 bytes each. In addition, the hard disk's PIO modes 0 through 4 (Processor Input Output modes) are used.
>
> *8K BLOCK XFER*
> > Eight Kbytes are transferred per interrupt.
>
> Default entry: *STANDARD*

Hard Disk 1: LBA Translation
Hard Disk 2: LBA Translation
Hard Disk 3: LBA Translation
Hard Disk 4: LBA Translation
> enables and disables the LBA (Logical Block Addressing) mode. LBA mode allows you to install and use hard disks with a capacity of more than 528 Mbytes. If a hard disk supports LBA mode, you can use its full capacity.
>
> ⚠ You may only use IDE drives in the LBA mode selected when they were set up. In other words, if you set up a hard disk with LBA mode *DISABLED*, you may only operate the hard disk with LBA mode *DISABLED*.
>
> *DISABLED*
> > The BIOS uses the hard disk parameters and supports a maximum capacity of 528 Mbytes.

AUTO SELECT

    If the hard disk supports LBA and it has a capacity of more than 528 Mbytes, the BIOS translates the hard disk parameters, allowing the disk's full capacity to be used.

    If the hard disk does not support LBA, its parameters are not translated.

Default entry: *DISABLED*

Hard Disk 1: Power Down
Hard Disk 2: Power Down
Hard Disk 3: Power Down
Hard Disk 4: Power Down

    specifies the period of hard disk inactivity after which the hard disk's motor is power down. The next hard disk read or write operation powers up the hard disk again automatically.
The hard disk requires roughly 15 seconds to run up.
Possible entries: *DISABLED*, *5 min*, *10 min*, *15 min*

Default entry: *DISABLED* (the hard disk does not power down)

Switch block S500

The 8 switches of the DIP switch S500 serve to set various board functions. The list below shows switch numbers and associated functions.

Switch 1: Recovery mode

    Places the PC in recovery mode. This mode enables the PC to boot from the floppy disk drive via a second, non-erasable rudimentary BIOS after an error BIOS update (BIOS flash). The BIOS update can be repeated after rebooting.

Switch open

    BIOS operates in normal mode.

Switch closed

    BIOS operates in recovery mode.

Default setting: *Switch open*

Switch 2: Password protection

Switch open

    Setup menu can only be called if the correct password is entered.

Switch closed

    Setup menu can be called irrespective of the assigned password.

Default setting: *Switch open*

Switch 3: freely definable

    The position of the switch can be queried via the port 0C91H (bit 2).

Switch open

    Bit 2 is set to 1.

Switch closed

    Bit 2 is set to 0.

Default setting: *Switch open*

Switch 4: freely definable

The position of the switch can be queried via the port 0C91H (bit 3).

Switch open

Bit 3 is set to 1.

Switch closed

Bit 3 is set to 0.

Default setting: *Switch open*

Switch 5: Flash EPROM Write Protection

Switch open

The Flash EPROM can be written to.

Switch closed

The Flash EPROM cannot be written to.

Default setting: *Switch open*

Switch 6: Floppy Disk Write Protect

Switch open

Floppy disks may be read, written to or deleted.

Switch closed

Floppy disks may only be read.

Default setting: *Switch open*

Floppy disks can be read in any switch setting.

Switch 7: Reserved for manufacturer

Default setting: *Switch open*

Do not change the default setting!

Switch 8: Manufacturing Test
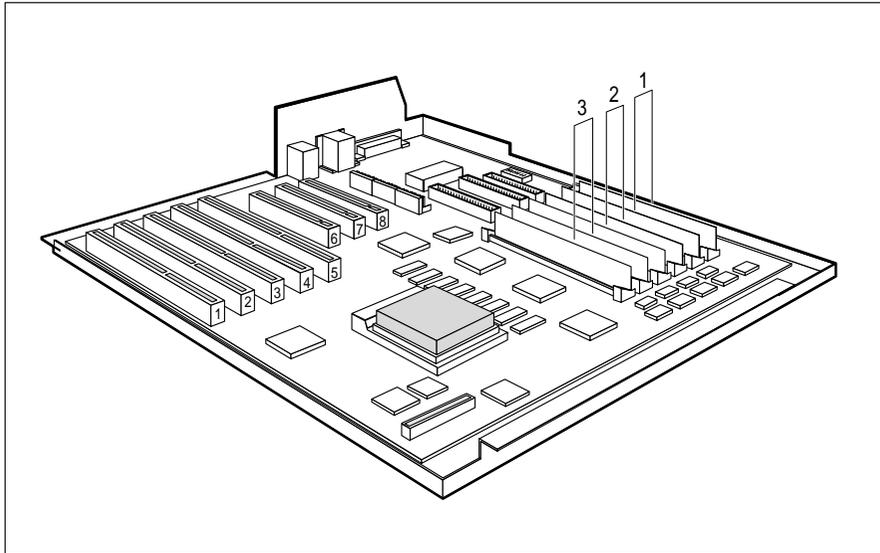
Switch open

The PC operates in normal mode.

Switch closed

The PC runs through the tests of the POST routines of the BIOS in an
endless loop. (POST = Power-On Self Test)

Default setting: *Switch open*

Add-on modules

Installing memory modules
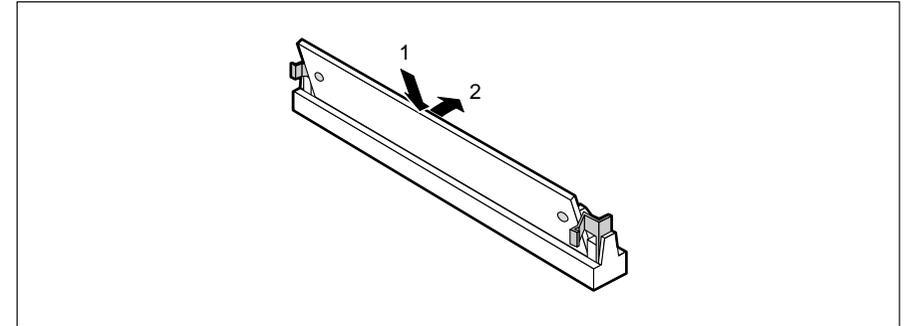
1 = memory bank 1
2 = memory bank 2
3 = memory bank 3

▶ Insert the memory module at an angle into the appropriate slot (1).

▶ Tilt the module back until it snaps into place (2).

Removing memory modules

▶ Force the plastic holders carefully outward at left and right (1).

▶ Tilt the module forward (2) and pull the module off upward (3).

Main memory

The system board has 6 sockets for memory modules (SIMM, Single Inline Memory Module / PS/2 modules), which are divided into 3 banks with two sockets each. Memory modules have a capacity of 4, 8, 16 and 32 Mbyte. A memory bank must always be fully occupied and equipped with memory modules of the same capacity. Thus, a memory capacity of 8, 16, 32 or 64 Mbyte is possible for each memory bank, which permits a maximum memory expansion of 192 Mbyte. The size of the memory modules may vary between memory banks. The order of the 3 memory banks is not relevant. There may be empty memory banks between occupied memory banks.
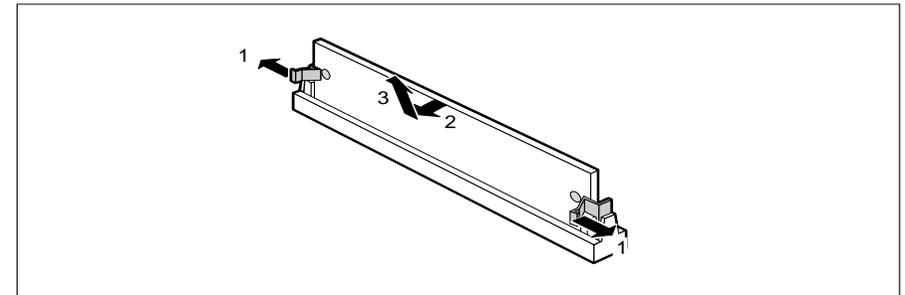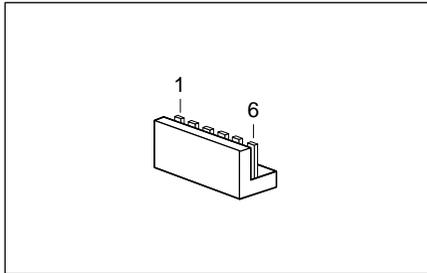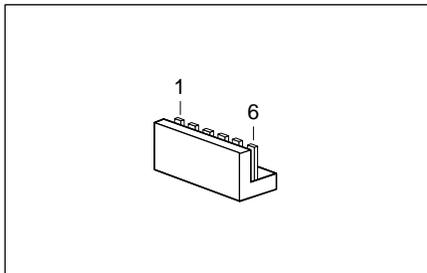
Interface pinouts, interrupts and DMA

Connector X800/X801 and X811: Power supply

Connector X800

Pin	Meaning
1	Power Good
2	+ 5 V
3	+ 12 V
4	- 12 V
5	0 V
6	0 V

Connector X801

Pin	Meaning
1	0 V
2	0 V
3	- 5 V
4	+ 5 V
5	+ 5 V
6	+ 5 V

Connector X811
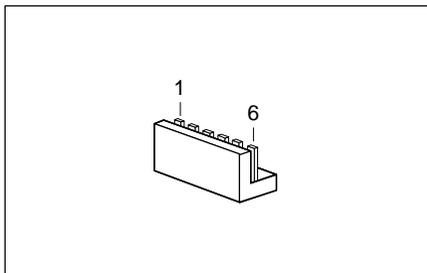
Pin	Meaning
1	0 V
2	0 V
3	0 V
4	+ 3,3 V
5	+ 3,3 V
6	+ 3,3 V

Connector X805: Indicators at the front
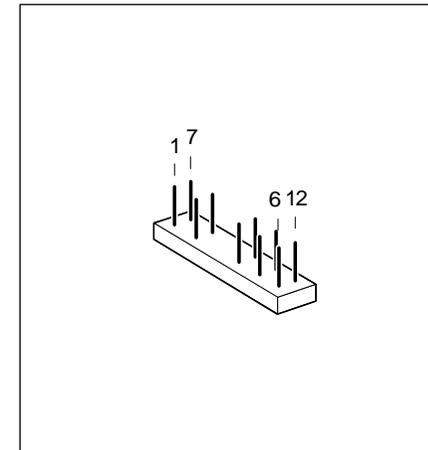
Pin	Signal
1	+ 5 V via 330 Ohm-R
2	free
3	coded
4	free
5	Indicator: System ON
6	+ 5 V via 330 Ohm-R
7	0 V
8	0 V
9	coded
10	0 V
11	0 V
12	Indicator: Hard disk

Connector X806: Fan
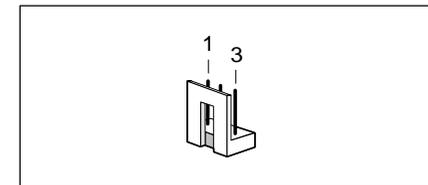
Pin	Meaning
1	0 V
2	+ 12 V
3	free

Connector X809: Loudspeaker
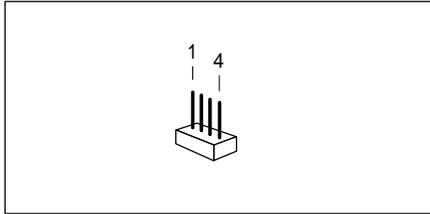
Pin	Meaning
1	SPEAKER_OUT_L
2	free
3	coded
4	+ 5 V via 33 Ohm-R

Connector X810: Control signals for power supply
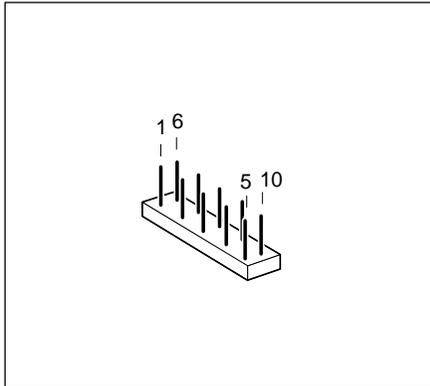
Pin	Signal
1	free
2	SOFT_OFF_PRSNT_L
3	free
4	DRIVES_OFF_L
5	free
6	free
7	MONITOR_OFF_L
8	POWER_OFF_L
9	free
10	0 V

Parallel interface
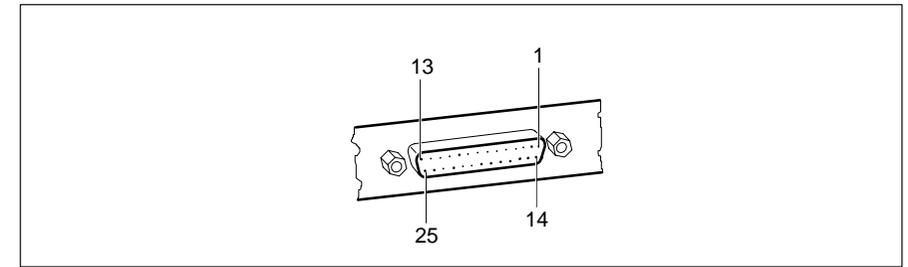
The parallel interface supports three transfer modes: SPP, EPP and ECP. SPP mode (standard parallel port) is the mode traditionally used to drive a printer. The EPP (Enhanced Parallel Port) and ECP (Extended Capabilities Port) modes are transfer modes that allow transfer rates of 2 and 2.4 Mbytes/s. These modes will only work in connection with peripheral devices which specifically support them. The new transfer modes are used among other things for connecting to SCSI or IDE peripherals. The pinouts are different in all three modes.

Pinout in SPP mode

Pin	Signal name	Description
1	STROBE	Data message
2 - 9	Data Lines 0-7	Data lines 0-7
10	ACKNOWLEDGE	Data acknowledgement
11	BUSY	Not ready to receive
12	PE	End of paper
13	SELECT	Device selection
14	AUTO	Automatic new line
15	ERROR	Device error
16	INIT	Reset/initialize
17	SELECT IN	Printer selection
18 - 25	GROUND	Ground

Pinout in EPP mode

Pin	Signal	Signal direction
1	Write	Output
2 - 9	Data Lines 0 - 7	Input/output
10	Intr	Input
11	Wait	Input
12	not used	---
13	not used	Input
14	DStrb	Output
15	not used	---
16	not used	---
17	AStrb	Output
18 - 25	Ground	

Pinout in ECP mode

Pin	Signal	Signal direction
1	HostClk	Output
2 - 9	Data Lines 0-7	Input/output
10	PeriphClk	Input
11	PeriphAck	Input
12	AckReverse	Input
13	Xflag	Input
14	HostAck	Output
15	PeriphRequest	Input
16	ReverseRequest	Output
17	ECP-Mode	Output
18 - 25	Ground	

Serial interface
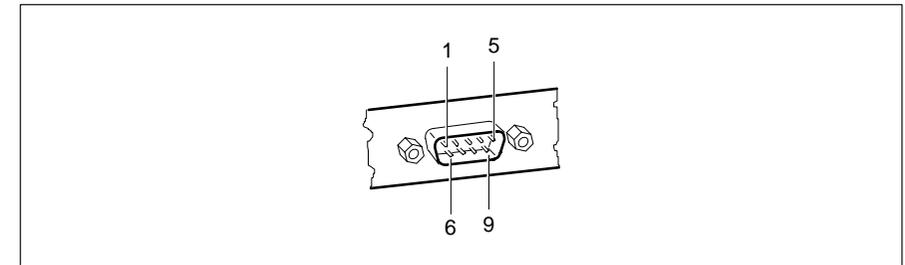
Pin	Signal	Meaning
1	DCD	Data Carrier Detect
2	RxD	Receive Data
3	TxD	Transmit Data
4	DTR	Data Terminal Ready
5	Signal Ground	Ground
6	DSR	Data Set Ready
7	RTS	Request to Send
8	CTS	Clear to Send
9	Ri	Ring Indicator

PS/2 mouse port
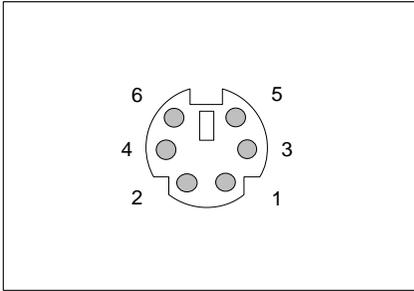
Pin	Signal
1	data
2	free
3	0 V
4	+5 V
5	clock
6	free

PS/2 keyboard port
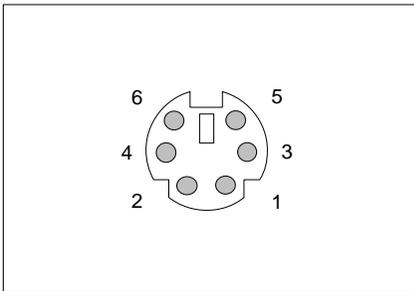
Pin	Signal
1	data
2	free
3	0 V
4	+ 5 V
5	clock
6	free

Interrupt Request Levels and DMA channels

Interrupt Request Levels and DMA channels are listed below.

Interrupt Request Levels

IRQ0 = timer 0
IRQ1 = keyboard
IRQ2 = interrupt cascading
IRQ3 = serial interface 2 (COM2/COM4)
IRQ4 = serial interface 1 (COM1/COM3)
IRQ5 = free
IRQ6 = floppy disk controller
IRQ7 = parallel interface (LPT1/LPT3)
IRQ8 = real-time clock
IRQ9 = free/VGA controller
IRQ10 = free
IRQ11 = free
IRQ12 = mouse
IRQ13 = math coprocessor
IRQ14 = IDE hard disk controller (primary)
IRQ15 = IDE hard disk controller (secondary)

DMA channels

DMA0 = free
DMA1 = free
DMA2 = floppy disk controller
DMA3 = free/parallel interface in ECP mode
DMA4 = DMA channel cascading
DMA5 = free
DMA6 = free
DMA7 = free

Error messages

This chapter contains error messages generated by the system board.

`Access Denied - System Halted`

You have entered an illegal password three times. Restart the PC.

Vous avez entré trois fois un mot de passe erroné. Faites redémarrer le PC.

Ha introducido tres veces una contraseña incorrecta. Arranque nuevamente el PC.

Avete indicato una parola chiave errata per tre volte. Avviate nuovamente il PC.

Lösenordet har skrivits felaktigt tre gånger. Starta on datorn.

U hebt driemaal een ongeldig wachtwoord ingevoerd. Herstart de PC.

`Access Denied - Press Any Key to Continue`

You have entered an illegal password three times. Press any key. The PC reboots.

Vous avez entré trois fois un mot de passe erroné. Actionnez une touche quelconque. Le PC redémarre.

Ha introducido tres veces una contraseña incorrecta. Pulse una tecla. El PC arranca nuevamente.

Avete indicato la parola chiave errata per tre volte. Digitate un tasto qualsiasi. Il PC si riavvia.

Lösenordet har skrivits felaktigt tre gånger. Tryck valfri tangent. Datorn omstartas.

U hebt driemaal een ongeldig wachtwoord ingevoerd. Druk op een willekeurige toets. Hierna herstart de PC

`Diskette drive failure`
`Diskette drive 0 failure`
`Diskette drive 1 failure`

Check the entry defining the drive type in the *Diskette* field in the setup menu. Check the floppy disk drive's connecting cables.

Contrôlez le type du lecteur de disquette dans la zone *DISKETTE* du menu setup ainsi que ses raccordements physiques.

Verifique en el menú setup el tipo de unidad en el campo *DISKETTE* y las conexiones de la unidad de disquetes.

Verificate nel menu di setup nel campo *Diskette* il tipo del drive ed i collegamenti del floppy disk drive.

Kontrollera i Setup-menyns inmatningsfält Diskett diskettstationstypen och anslutningarna till diskettstationen.

Kontroleer de diskette-eenheid die is opgegeven in het veld *Diskette* van het Setup-menu en tevens de aansluitingen voor de diskette-eenheid.

`Fixed disk configuration error`
`Fixed disk controller failure`
`Fixed disk x failure`

Check the entries defining the hard disk type in the *Hard Disk Ctrlr*, *Hard Disk 1*, *Hard Disk 2*, *Hard Disk 3*, *Hard Disk 4* in the setup menu. Check the drive's connecting cables and jumper and switch settings.

Contrôlez le type du disque dur dans les zones *Hard Disk 1*, *Hard Disk 2*, *Hard Disk 3* et *Hard Disk 4* du menu setup ainsi que ses raccordements physiques et ses cavaliers.

Verifique en el menú setup los registros en los campos *HARD DISK 1*, *HARD DISK 2*, *Hard Disk 3* y *Hard Disk 4* para el tipo de disco duro, así como las conexiones y los puentes enchufables en la unidad de disco duro.

Verificate nel menu di setup nel campo *Hard Disk Ctrlr, Hard Disk 1*, *Hard Disk 2*, *Hard Disk 3* e *Hard Disk 4* gli inserimenti relativi al tipo di disco rigido ed i collegamenti ed i ponticelli del disco rigido.

Kontrollera i Setup-menyn allt som skrivits in i inmatningsfälten *Hard Disk Ctrlr*, *Hard Disk 1*, *Hard Disk 2*, *Hard Disk 3*, *Hard Disk 4* för den hårddisktypen samt anslutningarna och insticksbryggorna på hårddiskstationen.

Kontroleer het type harde-schijfeenheid dat is opgegeven in de velden *(Hard Disk Ctrlr*, *Hard Disk 1*, *2*, *3*, *4)* van het Setup-menu en tevens de verbindingen en de brugstekkers op de harde-schijfeenheid.

Incorrect Password

> You have entered an illegal password. Enter the password again and press the Enter key.

> Vous avez fait une erreur dans le mot de passe. Entrez à nouveau le mot de passe et actionnez la touche d'entrée.

> Ha introducido una contraseña incorrecta. Introduzca nuevamente la contraseña y pulse la tecla de entrada

> Avete indicato una parola chiave errata. Indicate nuovamente la parola chiave e digitate il tasto Invio.

> Du har angivit ett felaktigt lösenord. Skriv in det en gång till och tryck Enter.

> U hebt een ongeldig wachtwoord ingevoerd. Voer opnieuw het wachtwoord in en druk op de Enter-toets.

Invalid configuration information

> Check all the entries in the setup menu. If this error occurs each time you power up the PC, contact your sales office or customer service.

> Vérifiez tous les paramètres du menu setup. Si ce message apparaît chaque fois que vous remettez votre PC sous tension, adressez-vous au S.A.V.

> Verifique todos los registros en el menú setup del sistema. Si cada vez que usted conecta su sistema se produce este error, diríjase al Servicio Técnico.

> Verificate tutti i valori nel menu di setup. Se questo messaggio si manifesta dopo ogni accensione, rivolgeteVi al Vostro servizio di assistenza tecnica.

> Kontrollera i Setup-menyn allt som skrivits in. Visas detta felmeddelande varje gång Du knäpper på, kontakta kundservice.

> Kontroleer alle opdrachten in het Setup-menu. Als deze fout zich voordoet telkens u de PC aanschakelt, neemt u best kontakt op met uw onderhoudsdienst.

Invalid configuration information
Invalid EISA configuration storage
Configuration error for slot

> Start the EISA configuration program (ECU) and reconfigure the system. If this error occurs each time the PCE is powered up, contact your customer field service.

> Lancez le programme de configuration EISA (ECU) et reconfigurez le système. Si ce message apparaît chaque fois que vous remettez votre PC sous tension, adressez-vous à votre revendeur ou à notre S.A.V.

> Arranque el programa de configuración EISA (ECU) y configure de nuevo el sistema. Si cada vez que usted conecta su sistema se produce este error, diríjase al distribuidor o a su Servicio Técnico.

> Avviate il programma di configurazione EISA (ECU) e configurate nuovamente il sistema. Se questo messaggio viene ancora visualizzato, rivolgeteVi al Vostro rivenditore o al nostro servizio di assistenza.

> Starta EISA-konfigurationsprogrammet (ECU) och konfigurera systemet på nytt. Kontakta din återförsäljare eller vår kundservice, om detta meddelande även fortsättningsvis visas var gång datorn tillkopplas.

> Start het EISA-konfiguratieprogramma (ECU) en herkonfigureer het systeem. Als de melding dan nog elke keer dat u de PC aanschakelt, verschijnt, dient u kontakt op te nemen met degene die u de PC heeft verkocht of met onze service-afdeling.

I/O Expansion board NMI
I/O Expansion board NMI, Slot x

> Restart your PC. If the error persists, contact your sales office or customer service.

> Faites redémarrer votre PC. Si ce message apparaît à plusieurs reprises, contactez le S.A.V.

> Arranque nuevamente el PC. En caso que este error se produzca repetidamente, informe al Servicio Técnico.

> Avviate nuovamente il PC. Se l'errore si ripete, informate il Vostro servizio di assistenza tecnica.

> Starta om datorn. Visas detta felmeddelande upprepade gånger, v g kontakta kundservice.

> Herstart uw PC. Als de fout zich weer zou voordoen, neemt u best kontakt op met uw onderhoudsdienst.

```
    !!! HARD DISK WARNING !!!
  Boot sector has been modified.
Confirm the new boot sector in SETUP,
  and run a virus scan program.
```

The boot sector of your bootable hard disk drive has been modified since the last boot-up (e.g., a new operating system has been installed of the system has been infected by a virus). If the change to the boot sector was intentional (e.g., you have installed a new operating system), then acknowledge the Virus Warning function in the *System Security Options* page of the setup menu by selecting *CONFIRM*.

If you are not sure what modified the boot sector, you should check your computer for virus infection with the aid of an appropriate virus scanner program.

Le secteur d'initialisation du lecteur prêt à démarrer a été modifié depuis le dernier démarrage du système (nouveau système d'exploitation ou infection par virus, par exemple). Si vous souhaitez modifier le secteur d'initialisation ou si la modification est connue, validez avec *CONFIRM* la fonction Virus Warning du menu setup *System Security Options*.

Si l'origine des modifications du secteur d'initialisation est inconnue, il convient de lancer un programme spécifique de détection des virus informatiques.

El sector de inicialización de la unidad de disquetes arrancable ha sido modificado desde el último arranque de sistema (p. ej. debido a la instalación de un nuevo sistema operativo o la "infección" por un virus). Si conoce y aprueba la modificación del sector de arranque, p. ej. tras la instalación de un nuevo sistema operativo, confirme con *CONFIRM* la función *Virus Warning* de la opción *Security Options* en el menú de setup (configuración).

Si desconoce la causa de las modificaciones en el sector de inicialización, proceda a ejecutar un programa adecuado para combatir el virus informático.

Il settore di lancio (boot) del drive pronto per l'avvio è cambiato dall'ultimo avvio di sistema (p.es. nuovo sistema operativo oppure presenza di virus). Se il cambiamento del settore di lancio è voluto oppure conosciuto, come nel caso di installazione di un nuovo sistema operativo, confermate nel menu di setup *System Security Options* la funzione *Virus Warning* con *CONFIRM*.

Se la causa del cambiamento del settore di lancio e sconosciuta, è necessario avviare un programma per la ricerca di virus.

Den startbara diskettstationens bootsektor har förändrats sedan den senaste systemstarten (t ex nytt operativsystem eller en virus). Bekräfta funktionen *Virus Warning* i Setup-menyn *System Security Options* med *CONFIRM* om bootsektorns förändring är önskad eller känd, som t ex efter installation av ett nytt operativsystem.

Om orsaken till bootsektorns förändring är okänd, måste ett lämpligt program för datorvirussökning startas.

De bootsector van het opstartbare magneetbandloopwerk is sedert de laatste opstarting van het systeem veranderd (bv. nieuw besturingssysteem of virusaanval). Is de verandering van de bootsector gewenst of bekend, b.v. na de installatie van een nieuw besturingssysteem, dan bevestigt u in het setup-menu System Security Options de functie Virus Warning (waarschuwing tegen virussen) met CONFIRM (bevestigen).

Is de oorzaak van de veranderingen van de bootsector onbekend, dan moet een speciaal daarvoor bestemd programma opgestart worden om de computervirus te ontdekken.

```
Keyboard is locked - unlock
```

Unlock the PC and restart the system.

Débloquez le PC et faites redémarrer le système.

Desbloquee el teclado y arranque nuevamente el PC.

Sbloccate il PC e riavviate il sistema operativo.

Aktivera PCn och starta systemet på nytt.

Deblokkeer de PC en start het systeem opnieuw op.

Keyboard failure
Keyboard stuck key failure
>   Check whether a key is sticking and whether the keyboard is connected
>   correctly.
>
>   Vérifiez que les touches fonctionnent bien et que le clavier est raccordé
>   correctement.
>
>   Verifique si alguna tecla quedó enclavada y si el teclado está conectado
>   correctamente.
>
>   Verificate se un tasto rimane incastrato.
>   Verificate se la tastiera è collegata in modo corretto.
>
>   Kontrollera om det är någon tangent som förblir orörlig.
>   Kontrollera att tangentbordet är anslutet helt korrekt.
>
>   Kontroleer of er een toets geklemd zit en of het toetsenbord op de juiste
>   wijze is aangesloten.

Memory parity error at ...
Unresolved memory parity error
>   Restart your PC. If the system reports this error each time you switch it on,
>   contact your sales office or customer service.
>
>   Faites redémarrer votre PC. Si ce message apparaît chaque fois que vous
>   remettez votre PC sous tension, adressez-vous au S.A.V.
>
>   Arranque nuevamente el PC. Si cada vez que usted conecta su sistema se
>   produce este error, diríjase al Servicio Técnico.
>
>   Avviate nuovamente il PC. Se l'errore si ripete, informate il Vostro servizio di
>   assistenza tecnica.
>
>   Starta om datorn. Visas detta felmeddelande varje gång Du knäpper på,
>   kontakta kundservice.
>
>   Herstart uw PC. Als de fout zich weer zou voordoen, neemt u best kontakt op
>   met uw onderhoudsdienst.

Memory size changed. Please run the EISA configuration
utility.
>   Start the EISA configuration program (ECU).
>
>   Lancez le programme de configuration EISA (ECU).
>
>   Arranque el programa de configuración EISA (ECU).
>
>   Avviate il programma di configurazione EISA (ECU).
>
>   Starta EISA-konfigurationsprogrammet (ECU).
>
>   Start het EISA-konfiguratieprogramma (ECU).

Memory failure at *xxxx* read *xxxx* expecting *xxxx*
>   Restart your PC. If the system reports this error each time you switch it on,
>   contact your sales office or customer service.
>
>   Faites redémarrer votre PC. Si ce message apparaît chaque fois que vous
>   remettez votre PC sous tension, adressez-vous au S.A.V.
>
>   Arranque nuevamente el PC. Si cada vez que usted conecta su sistema se
>   produce este error, diríjase al Servicio Técnico.
>
>   Avviate nuovamente il PC. Se l'errore si ripete, informate il Vostro servizio di
>   assistenza tecnica.
>
>   Starta om datorn. Visas detta felmeddelande varje gång Du knäpper på,
>   kontakta kundservice.
>
>   Herstart uw PC. Als de fout zich weer zou voordoen, neemt u best kontakt op
>   met uw onderhoudsdienst.

```
Not a boot diskette -
No boot device available -
No boot sector on hard disk -
Diskette read failure -
Hard disk read failure -
```
Insert the operating system floppy disk in the floppy disk drive and press Enter.
Check the entries for the floppy disk and hard disk types in the setup menu.

Insérez la disquette contenant le système d'exploitation dans le lecteur de disquette et appuyez sur la touche d'entrée.
Contrôlez les paramètres concernant les types de disquette et de disque dur dans le menu setup.

Coloque el disquete de sistema operativo en la unidad y pulse la tecla de entrada. Verifique los registros para el tipo de disquetes y para el disco duro en el menú setup.

Inserite il dischetto di sistema operativo nel floppy disk drive e premete il tasto Invio.
Verificate nel menu di setup gli inserimenti relativi al tipo del floppy disk drive e del disco rigido.

Sätt in systemdisketten i diskettstationen och tryck Enter.
Kontrollera i Setup-menyn allt som skrivits in för den diskett- och hårddisktypen.

Steek de diskette met het besturingssysteem in de diskette-eenheid en druk op de Enter-toets. Kontroleer in het Setup-menu de opdrachten voor het type diskette-eenheid en harde-schijfeenheid.

```
No timer tick interrupt
Timer 2 failure
Shutdown failure
Gate A20 failure
Unexpected interrupt in protected mode
```
Restart your PC. If the system reports this error each time you switch it on, contact your sales office or customer service.

Faites redémarrer votre PC. Si ce message apparaît chaque fois que vous remettez votre PC sous tension, adressez-vous au S.A.V.

Arranque nuevamente el PC. Si cada vez que usted conecta su sistema se produce este error, diríjase al Servicio Técnico.

Avviate nuovamente il PC. Se l'errore si ripete, informate il Vostro servizio di assistenza tecnica.

Starta om datorn. Visas detta felmeddelande varje gång Du knäpper på, kontakta kundservice.

Herstart uw PC. Als de fout zich weer zou voordoen, neemt u best kontakt op met uw onderhoudsdienst.

```
Passwords entered do not match
```
The password you entered in confirmation was different from the first password. Enter the password again and press the Enter key.

La confirmation du mot de passe est incorrecte. Entrez à nouveau le mot de passe et actionnez la touche d'entrée.

Ha confirmado incorrectamente la contraseña. Introduzca nuevamente la contraseña y pulse la tecla de entrada.

Avete confermato la parola chiave in modo errato. Indicate nuovamente la parola chiave e digitate il tasto Invio.

Du har bekräftat lösenordet fel. Skriv in lösenordet en gång till och tryck Enter.

U hebt een ongeldig wachtwoord ingevoerd. Voer opnieuw het wachtwoord in en druk op de Enter-toets.

```
Pointing device failure
```
Check whether the mouse is properly connected.

Vérifiez si la souris est correctement connectée.

Verifique si el ratón está conectado correctamente.

Controllate che il mouse sia collegato correttamente.

Kontrollera att musen är anslutet helt korrekt.

Controleer of de muis correct aangesloten is.

```
Real time clock failure
Time-of-day not set - run SETUP program
```
Access the setup menu and enter the correct time in the *Time* field. If the system reports this error each time you switch it on, contact your sales office or customer service.

Appelez le menu setup et inscrivez l'heure exacte dans la zone *TIME*. Si ce message apparaît chaque fois que vous remettez votre PC sous tension, adressez-vous au S.A.V.

Llame el menú setup y registre el valor correcto para la hora en el campo *Time*. Si cada vez que usted conecta su sistema se produce este error, diríjase al Servicio Técnico.

Richiamate il menu di setup e indicate l'ora esatta nel campo *Time*. Se l'errore si ripete, informate il Vostro servizio di assistenza tecnica.

Anropa Setup-menyn och skriv in rätt klockslag i inmatningsfältet *Time*. Visas detta felmeddelande varje gång Du knäpper på, kontakta kundservice.

Roep het Setup-menu op en voer de juiste tijdnotatie in het veld *Time* in. Als deze fout zich voordoet telkens u de PC aanschakelt, neemt u best kontakt op met uw onderhoudsdienst.

```
Security Features Not Changed - Press Any Key to Continue
```
You have failed three times in succession to correctly confirm the password. The password has not been set. Press any key. The PC will reboot.

Vous avez confirmé le mot de passe trois fois de manière incorrrecte. Actionnez une touche quelconque.

Ha confirmado tres veces incorrectamente la contraseña. Si pulsa una tecla, el PC ejerce sus operaciones normales. No se ha asignado ninguna contraseña.

Avete confermato per tre volte la parola chiave in modo errato e per questo non è stata assegnata. Premete un tasto qualsiasi.

Du har bekräftat lösenordet fel tre gånger som därför inte träder i kraft. Tryck valfri tangent. Starta on datorn.

Het paswoord werd drie keer verkeerd ingegeven en werd daarom niet vrijgegeven. Druk op een toets. De PC start opnieuw.

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