

FUJITSU Server PRIMERGY TX1310 M3

Operating Manual

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Certified documentation according to DIN EN ISO 9001:2008

To ensure a consistently high quality standard and user-friendliness, this documentation was created to meet the regulations of a quality management system which complies with the requirements of the standard DIN EN ISO 9001:2008.

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Before reading this manual

For your safety

This manual contains important information for safely and correctly using this product.

Carefully read the manual before using this product. Pay particular attention to the accompanying manual "Safety Notes and Regulations" and ensure these safety notes are understood before using the product. Keep this manual and the manual "Safety Notes and Regulations" in a safe place for easy reference while using this product.

Radio interference

This product is a "Class A" ITE (Information Technology Equipment). In a domestic environment this product may cause radio interference, in which case the user may be required to take appropriate measures. VCCI-A

Aluminum electrolytic capacitors

The aluminum electrolytic capacitors used in the product's printed circuit board assemblies and in the mouse and keyboard are limited-life components. Use of these components beyond their operating life may result in electrolyte leakage or depletion, potentially causing emission of foul odor or smoke.

As a guideline, in a normal office environment (25°C) operating life is not expected to be reached within the maintenance support period (5 years). However, operating life may be reached more quickly if, for example, the product is used in a hot environment. The customer shall bear the cost of replacing replaceable components which have exceeded their operating life. Note that these are only guidelines, and do not constitute a guarantee of trouble-free operation during the maintenance support period.

High safety use

This product has been designed and manufactured to be used in commercial and/or industrial areas as a server.

When used as visual display workplace, it must not be placed in the direct field of view to avoid incommoding reflections (applies only to TX server systems).

The device has not been designed or manufactured for uses which demand an extremely high level of safety and carry a direct and serious risk of life or body if such safety cannot be assured.

These uses include control of nuclear reactions in nuclear power plants, automatic airplane flight control, air traffic control, traffic control in mass transport systems, medical devices for life support, and missile guidance control in weapons systems (hereafter, "high safety use"). Customers should not use this product for high safety use unless measures are in place for ensuring the level of safety demanded of such use. Please consult the sales staff of Fujitsu if intending to use this product for high safety use.

Measures against momentary voltage drop

This product may be affected by a momentary voltage drop in the power supply caused by lightning. To prevent a momentary voltage drop, use of an AC uninterruptible power supply is recommended.

(This notice follows the guidelines of Voltage Dip Immunity of Personal Computer issued by JEITA, the Japan Electronics and Information Technology Industries Association.)

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Harmonic Current Standards

This product conforms to harmonic current standard JIS C 61000-3-2.

Only for Japan: About SATA hard disk drives (HDDs)

The SATA version of this server supports HDDs with SATA / BC-SATA storage interfaces. Please note that the usage and operation conditions differ depending on the type of HDD used.

Please refer to the following internet address for further information on the usage and operation conditions of each available type of HDD:

<http://jp.fujitsu.com/platform/server/primergy/harddisk/>

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1 Introduction

The PRIMERGY TX1310 M3 server is an Intel-based server for workgroups and small networks. The server is suitable for use as a file server and also as an application, information or Internet server.

Thanks to its highly developed hardware and software components, the PRIMERGY TX1310 M3 server offers a high level of data security and availability.

Security functions in the *BIOS-Setup* and on the system board protect the data on the server against manipulation. The supported RAID levels allow the hard disk controllers to offer error tolerance, through data redundancy, for users who want to provide complete protection for valuable data.

Its low noise level and high energy efficiency make it ideal for office environments.

1.1 Concept and target groups for this manual

This operating manual describes how to install, set up and operate your server.

This operating manual is intended for those responsible for installing the hardware and ensuring that the system runs smoothly. It contains all the information you need to put your PRIMERGY TX1310 M3 into operation.

To understand the various expansion options, you will need to be familiar with the fields of hardware and data transmission and you will require a basic knowledge of the underlying operating system.

1.2 Documentation overview

More information on your PRIMERGY TX1310 M3 can be found in the following documents:

- "Quick Start Hardware - FUJITSU Server PRIMERGY TX1310 M3"
- "ServerView Quick Start Guide"
- "Safety Notes and Regulations" manual
"安全上のご注意" for Japan
- "Warranty" manual
"保証書" for Japan
- "ServerView Suite Local Service Concept - LSC" manual
- "Returning used devices" manual and "Service Desk" leaflet
"サポート&サービス" for Japan
- "FUJITSU Server PRIMERGY TX1310 M3 Upgrade and Maintenance Manual"
- "D3521 BIOS Setup Utility for FUJITSU Server PRIMERGY TX1310 M3 Reference Manual"



All documentation on PRIMERGY hardware and ServerView software is available online from the Fujitsu manuals server at:

<http://manuals.ts.fujitsu.com>

For Japan:

<http://www.fujitsu.com/jp/products/computing/servers/primergy/manual/>

The complete PRIMERGY documentation set can also be downloaded as a DVD ISO image at:

<ftp://ftp.ts.fujitsu.com/images/serverview/manuals>

For Japan:

<http://www.fujitsu.com/jp/products/computing/servers/primergy/downloads/>



For Japan:

Before using the product, please check for additional information that may be available under the following URL:



<http://jp.fujitsu.com/platform/server/primergy/products/note/>

Further sources of information:

- ServerView Suite Glossary
- Manual for the monitor
- Documentation for the boards and drives
- Operating system documentation
- Information files in your operating system

1.3 Notational conventions

The following notational conventions are used in this manual:

<i>Text in italics</i>	indicates commands or menu items.
"Quotation marks"	indicate names of chapters and terms that are being emphasized.
▶	describes activities that must be performed in the order shown.
 CAUTION!	pay particular attention to texts marked with this symbol. Failure to observe this warning may endanger your life, destroy the system or lead to the loss of data.
	indicates additional information, notes and tips.

2 Functional overview

This section provides information on the features and technical data of the PRIMERGY TX1310 M3 server. For information on key characteristics and layout of the system board, see "D3521 BIOS Setup Utility for FUJITSU Server PRIMERGY TX1310 M3 Reference Manual".

2.1 Features

Intel® Xeon®, Pentium® or Core™ i3 CPU

The server comes with an Intel® Xeon®, Pentium® or Core™ i3 CPU for high-speed data processing.

System board

The features of the system board are described in the "FUJITSU Server PRIMERGY TX1310 M3 Upgrade and Maintenance Manual", the setup possibilities are described in the "D3521 BIOS Setup Utility for FUJITSU Server PRIMERGY TX1310 M3 Reference Manual".

Trusted Platform Module (TPM)

A Trusted Platform Module (TPM) for safer storage of keys can be implemented as an option. This module enables programs from third party manufacturers to store key information (e.g. drive encryption using Windows Bitlocker Drive Encryption).

The TPM is activated via the BIOS system (for more information, refer to the "D3521 BIOS Setup Utility for FUJITSU Server PRIMERGY TX1310 M3 Reference Manual").



CAUTION!

- When using the TPM, note the program descriptions provided by the third party manufacturers.
- You must also create a backup of the TPM content. To do this, follow the third party manufacturer's instructions. Without this backup, if the TPM or the system board is faulty you will not be able to access your data.

Functional overview

- If a failure occurs, please inform your service about the TPM activation before it takes any action, and be prepared to provide them with your backup copies of the TPM content.

Hard disk drives (HDDs)

Up to four 3.5" SATA HDDs, each with a maximum height of 1 inch, are built into the drive cages. There is a wire connection to the controller.

The system board offers an onboard SATA controller.

Onboard SATA controller

A SATA controller is integrated on the system board; up to four SATA HDDs can be connected to the controller. The LSI Embedded MegaRAID software (SATA Software RAID) supports RAID levels 0, 1 and 10.

The SATA HDDs cannot be replaced during operation.

For more information on configuring the controller, see section ["Configuring the onboard SATA controller" on page 56](#).

Accessible drives

Optical drives (ODD)

An installation slot for an ultra slim ODD is available (optional). The ODD cannot be replaced during operation.

RDX drives

The 5.25-inch bay is available for one RDX device. This RDX drive cannot be replaced during operation.

Power supply unit (PSU)

In its basic configuration the server comes with a standard PSU that adjusts automatically to any mains voltage in the range of 100 V - 240 V.

Advanced Thermal Design

The Advanced Thermal Design option allows you to operate the system with a wider temperature range either of 5 °C to 40 °C or 5 °C to 45 °C, depending on your system and configuration.



This option can only be ordered from the manufacturer and is indicated by the respective logo on the identification rating plate.



CAUTION

In a system that is configured with Advanced Thermal Design, only certain components which support the respectively increased higher operating temperature range may be installed and used. For applicable restrictions, please refer to the official configurator tool.

High level of availability and data security

When memory data is accessed, 1-bit errors are identified in the main memory and automatically corrected with the error correcting code (ECC) method.

The PDA (Prefailure Detection and Analysis) technology from Fujitsu analyzes and monitors all components that are critical for system reliability.

Server management

- Temperature monitoring of the CPU and the surrounding area
- End-of-life monitoring of fans with prompt notification before failure

ServerView Installation Manager

You can configure the PRIMERGY server quickly and precisely with the ServerView Installation Manager software provided. User-guided menus are available for installing the server operating system (for further details see section "[Configuring the server](#)" on page 56).

Service and support

PRIMERGY servers are easy to maintain and modular, thus enabling quick and simple maintenance.

The handles and locks (touch point) used to exchange components are colored green to ensure simple and immediate recognition.

In order to prevent the components from being damaged by incorrect handling when they are being installed and removed, the areas of all components that can be touched without damaging them are also marked green.

The Flash EPROM program supplied with the Fujitsu utilities supports a fast BIOS update.

ServerView Remote Management

ServerView Remote Management is the remote management solution from Fujitsu for PRIMERGY servers. ServerView Remote Management and the relevant hardware components integrated on the system board allow remote monitoring and maintenance as well as fast restoration of operation in the event of errors.

Remote monitoring and maintenance avoids time-consuming and costly on-site repairs and reduces service costs. This leads to a reduction in the total cost of ownership and an excellent return on investment for the remote management solution.



For more information about ServerView Remote Management refer to the ServerView manual.

2.2 Server specification

This section explains the specifications for the server. The specifications for this server are liable to be updated without any notice. Please be forewarned.

System Board

System board type	D3521
Chipset	Intel® C236

CPU

CPU quantity and type	1x Intel® Dual Core CPUs or 1x Quad Core CPUs E3-1200v6 series
-----------------------	--

Memory Modules Configuration

Memory slots	4
Memory slot type	DIMM (DDR4)
Memory capacity (min. - max.)	4 GB - 64 GB
Memory protection	ECC/EDC
Memory notes	Memory modules with 4, 8, or 16 GB and 2400 MHz

Interfaces

USB connectors	USB 3.0 (2x front, 4x rear), USB 2.0 (2x rear), USB 3.0 (1x internal) for backup drives
Graphics	1x Display Port
LAN / Ethernet (RJ-45)	1x Gbit/s Ethernet
Serial connector	1x (optional)

Functional overview

Onboard or integrated controllers

Serial ATA total	5
RAID Controller	RAID level 0, 1, 10
SATA Controller	Embedded in Intel® Chipset C236®
LAN Controller	Single chip GbE Ethernet controller Intel® i219LM onboard, 1 x 10/100/1000 Mbit/s, PXE-Boot by LAN via PXE-Server, Teaming supported
Trusted Platform Module (TPM)	Infineon V1.2 / V2.0 compliant (option)

Slots

PCI-Express Gen3 x16 (mechanically x8)	1x
PCI-Express Gen3 x4 (mechanically x16)	1x support for VGA adapter D3453
PCI-Express Gen3 x1	2x (both notched)

Drive bays

Hard disk bay configuration	4x 3.5-inch SATA
Accessible drives	1x 5.25-inch RDX backup drive (optional)
Optical drives	1x ultra slim ODD

Operating Panel

Operating button	On/off button
Status LEDs Power	Power-on (white)
HDD access	HDD activity indicator

Dimensions / Weight

Tower (W x D x H)	179.95 x 312.9 x 373.95 mm
Weight	max. 12 kg (depending on configuration)

Ventilation clearance

At least 200 mm on the front and rear.

Ambient conditions

Environment class 3K2	EN 60721 / IEC 721 Part 3-3
Environment class 2K2	EN 60721 / IEC 721 Part 3-2
Temperature:	
Operation (3K2)	5 °C ... 40°C (with ATD 40°C) 10 °C ... 35 °C
Transport (2K2)	-25 °C ... 60 °C
Humidity	10% ... 85% (non condensing)

Condensation during operation must be avoided!

Noise level

Sound power level $L_{WA,d}$ (ISO 9296)	< 3.7 B (standby) < 4.0 B (operation)
Sound pressure level at adjacent position L_{pAm} (ISO 9296)	< 24 dB (A) (standby) < 24 dB (A) (operation)

Electrical values of the PSU

Power supply configuration	Standard power supply
Max. output	250 W
Rated voltage range	100 V - 240 V
Rated frequency range	50 Hz - 60 Hz
Rated current	max. 3.3 A – 1.3 A (100 V / 240 V)

Functional overview

Compliance with standards

Product safety and ergonomics	
International	IEC 60950-1 2ed; am1 + am2
Europe	
Safety	EN 60950-1 2ed; A1 + A2 + A11 + A12 EN 62479 EN 62311
Ergonomics	ISO 9241-3 EN 2941-3 EK1-ITB2000:2013
USA / Canada	CSA-C22.2 No. 60950-1-07 2ed; am1 + am2 UL 60950-1 2ed; am1 + am2
Australia / New Zealand	AS/NZS 60950-1
Taiwan	CNS 14336
China	GB 4943.1
India	IS 13252-1
Electromagnetic compatibility	
International	CISPR 22 + CISPR 24 + CISPR 32
Europe	EN 55022 Class A EN 55024 EN 61000-3-2 EN 61000-3-3 ETSI EN 300386
USA / Canada	FCC 47CFR part 15 Class A / ICES-003
Australia / New Zealand	AS/NZS CISPR22 Class A AS/NZS CISPR32 Class A
Taiwan	CNS 13438 Class A
China	GB 9245 / GB 17625.1
Japan	VCCI Class A / JEITA
Korea	KN 32 / KN 35
RoHS Compliance EU	EN 50581
RoHS Compliance Taiwan	CNS 15336



CAUTION!

This device meets the requirements of Class A CISPR 22/32. This device can cause radio interference in residential areas.

3 Installation steps, overview

This chapter contains an overview of the steps necessary to install your server. Links take you to sections where you can find more detailed information about the respective steps:

- ▶ First of all, it is essential that you familiarize yourself with the safety information in chapter "[Important information](#)" on page 25.
- ▶ Transport the server to the place where you want to set it up.
- ▶ Unpack all parts, check the contents of the package for visible transport damage and check whether the items delivered match the details on the delivery note (see section "[Unpacking the server](#)" on page 40).
- ▶ Make sure that all necessary manuals (see "[Documentation overview](#)" on page 10) are available; print out the PDF files if required.
- ▶ Components that have been ordered additionally may be delivered loose with the server. Install these in the server as described in the supplied documentation.
- ▶ Set up the server (see section "[Setting up the server](#)" on page 41).
- ▶ Wire the server. Follow the instructions in sections "[Connecting devices to the server](#)" on page 42 and "[Notes on connecting/disconnecting cables](#)" on page 44.
- ▶ Connect the server to the mains (see section "[Connecting the server to the mains](#)" on page 44).
- ▶ Familiarize yourself with the controls and indicators on the front and rear of the server (see section "[Controls and indicators](#)" on page 49).
- ▶ Configure the server and install the desired operating system and applications. The following options are available:
 - Remote installation with the ServerView Installation Manager:

With the ServerView Suite DVD provided, you can configure the server and install the operating system in a convenient manner.

Details on how to operate the ServerView Installation Manager, as well as some additional information, are included in the "ServerView Suite Installation Manager" user's guide (on the Fujitsu manuals server under *x86 Servers - Software - ServerView Suite - Server Installation and Deployment*).

Configuration information can also be found in section ["Configuring the server and installing the operating system with the ServerView Installation Manager"](#) on page 57.

- Local configuration and installation with or without the ServerView Installation Manager (see section ["Configuring the server and installing the operating system with the ServerView Installation Manager"](#) on page 57 or section ["Configuring the server and installing the operating system without the ServerView Installation Manager"](#) on page 58).



You will find more information on installing the server remotely or locally in the "ServerView Suite Installation Manager" user's guide (on the Fujitsu manuals server under *x86 Servers - Software - ServerView Suite - Server Installation and Deployment*).

4 Important information



Depending on your server or the installed options some information is not valid for your server.



CAUTION!

Before installing and starting up a server, please observe the safety instructions listed in the following section. This will help you to avoid making serious errors that could impair your health, damage the server and endanger the data base.

4.1 Safety instructions



The following safety instructions are also provided in the manual "Safety Notes and Regulations" or "安全上のご注意".

This server meets the relevant safety regulations for IT equipment. If you have any questions about whether you can install the server in the intended environment, please contact your sales outlet or our customer service team.

- The actions described in this manual shall be performed by technical specialists. A technical specialist is a person who is trained to install the server including hardware and software.
- Repairs to the server that do not relate to CSS failures shall be performed by service personnel. Please note that unauthorized interference with the server will void the warranty and exempt the manufacturer from all liability.
- Any failure to observe the guidelines in this manual, and any improper repairs could expose the user to risks (electric shock, energy hazards, fire hazards) or damage the equipment.
- Only valid for non hot-plug components
Before installing/removing internal components to/from the server, turn off the server, all peripheral devices, and any other connected devices. Also unplug all power cords from the power outlet. Failure to do so can cause electric shock or damage.

Important information

Before starting up

- During installation and before operating the server, observe the instructions on environmental conditions for your server.
- If the server is brought in from a cold environment, condensation may form both inside and on the outside of the server.

Wait until the server has acclimatized to room temperature and is absolutely dry before starting it up. Material damage may be caused to the server if this requirement is not observed.

- Only transport the server in its original packaging or in packaging that protects it from impacts and jolts.
In Japan and APAC, transporting the server in its original packaging does not apply.

Installation and operation

- This server should not be operated in ambient temperatures above 35 °C. For servers with Advanced Thermal Design the ambient temperature can increase to 40 °C or 45 °C.
- If the server is integrated into an installation that draws power from an industrial power supply network with an IEC309 connector, the power supply's fuse protection must comply with the requirements for non-industrial power supply networks for type A connectors.
- The server automatically adjusts itself to a mains voltage, see the type label of your server. Ensure that the local mains voltage lies within these limits.
- This server must only be connected to properly grounded power outlets or connected to the grounded rack internal power distribution server with tested and approved power cords.
- Ensure that the server is connected to a properly grounded power outlet close to the server.
- Ensure that the power sockets on the server and the properly grounded power outlets are easily accessible.
- The On/Off button or the main power switch (if present) does not isolate the server from the mains power supply. In case of repair or servicing disconnect the server completely from the mains power supply, unplug all power plugs from the properly grounded power outlets.

- Always connect the server and the attached peripheral devices to the same power circuit. Otherwise you run the risk of losing data if, for example, the server is still running but a peripheral device (e.g. memory subsystem) fails during a power outage.
- The adequately shielded data cables must be used.

All data and signal cables must have sufficient shielding. The use of cable type S/FTP Cat5 or higher is recommended.
Use of unshielded or badly shielded cables may lead to increased emission of interference and/or reduced fault-tolerance of the device.
- Ethernet cabling has to comply with EN 50173 and EN 50174-1/2 standards or ISO/IEC 11801 standard respectively. The minimum requirement is a Category 5 shielded cable for 10/100 Ethernet, or a Category 5e cable for Gigabit Ethernet.
- Route the cables in such a way that they do not create a potential hazard (make sure no-one can trip over them) and that they cannot be damaged. When connecting the server, refer to the relevant instructions in this manual.
- Never connect or disconnect data transmission lines during a storm (risk of lightning hazard).
- Make sure that no objects (e.g. jewelry, paperclips etc.) or liquids can get inside the server (risk of electric shock, short circuit).
- In emergencies (e.g. damaged casing, controls or cables, penetration of liquids or foreign bodies), contact the server administrator or your customer service team. Only disconnect the server from the mains power supply if there is no risk of harming yourself.
- Proper operation of the server (in accordance with IEC 60950-1 resp. EN 60950-1) is only ensured if the server is completely assembled and the rear covers for the installation slots have been fitted (electric shock, cooling, fire protection, interference suppression).
- Only install server expansions that satisfy the requirements and rules governing safety and electromagnetic compatibility and those relating to telecommunication terminals. If you install other expansions, they may damage the server or violate the safety regulations. Information on which server expansions are approved for installation can be obtained from our customer service center or your sales outlet.
- The components marked with a warning notice (e.g. lightning symbol) may only be opened, removed or exchanged by authorized, qualified personnel. Exception: CSS components can be replaced.

Important information

- The warranty is void if the server is damaged during installation or replacement of server expansions.
- Only set screen resolutions and refresh rates that are specified in the operating manual for the monitor. Otherwise, you may damage your monitor. If you are in any doubt, contact your sales outlet or customer service center.
- Only valid for non hot-plug components
Before installing/removing internal components to/from the server, turn off the server, all peripheral devices, and any other connected devices. Also unplug all power cords from the power outlet. Failure to do so can cause electric shock or damage.

Internal devices remain hot after shutdown. Wait for a while after shutdown before installing or removing internal options.

- Do not damage or modify internal cables or internal devices. Doing so may cause a server failure, fire, or electric shock and will void the warranty and exempt the manufacturer from all liability.
- The circuit boards and soldered parts of internal options are exposed and can be damaged by static electricity. To ensure reliable protection, you must wear an earthing band on your wrist when working with this type of module and connect it to an unpainted, conducting metal part of the server.
- Do not touch the circuitry on boards or soldered parts. Hold the metallic areas or the edges of the circuit boards.
- Install the screw removed during installation/detaching internal options in former position. To use a screw of the different kind can cause a breakdown of equipment.
- The procedure of installation on this notes might change depending on a configuration of option.

Batteries

- Incorrect replacement of batteries may lead to a risk of explosion. The batteries may only be replaced with identical batteries or with a type recommended by the manufacturer.
- Do not throw batteries into the trash can.
Batteries must be disposed of in accordance with local regulations concerning special waste.
- Make sure that you insert the battery the right way round.

- The battery used in this server may present a fire or chemical burn hazard if mistreated. Do not disassemble, heat about 100 °C (212F), or incinerate the battery.
- Replace the lithium battery on the system board in accordance with the instructions in the corresponding Upgrade and Maintenance Manual, chapter "System board and components" > "CMOS battery".
- All batteries containing pollutants are marked with a symbol (a crossed-out garbage can). In addition, the marking is provided with the chemical symbol of the heavy metal decisive for the classification as a pollutant:

Cd Cadmium

Hg Mercury

Pb Lead

Working with optical disk drives and media

When working with optical disk drives, these instructions must be followed.



CAUTION!

- Only use CDs/DVDs/BDs that are in perfect condition, in order to prevent data loss, equipment damage and injury.
- Check each CD/DVD/BD for damage, cracks, breakages etc. before inserting it in the drive.

Note that any additional labels applied may change the mechanical properties of a CD/DVD/BD and cause imbalance and vibrations.

Damaged and imbalanced CDs/DVDs/BDs can break at high drive speeds (data loss).

Under certain circumstances, sharp CD/DVD/BD fragments can pierce the cover of the optical disk drive (equipment damage) and can fly out of the drive (danger of injury, particularly to uncovered body parts such as the face or neck).

- High humidity and airborne dust levels are to be avoided. Electric shocks and/or server failures may be caused by liquids such as water, or metallic items, such as paper clips, entering a drive.
- Shocks and vibrations are also to be avoided.
- Do not insert any objects other than the specified CDs/DVDs/BDs.

Important information

- Do not pull on, press hard, or otherwise handle the CD/DVD/BD tray roughly.
- Do not disassemble the optical disk drive.
- Before use, clean the optical disk tray using a soft, dry cloth.
- As a precaution, remove disks from the optical disk drive when the drive is not to be used for a long time. Keep the optical disk tray closed to prevent foreign matter, such as dust, from entering the optical disk drive.
- Hold CDs/DVDs/BDs by their edges to avoid contact with the disk surface.
- Do not contaminate the CD/DVD/BD surface with fingerprints, oil, dust, etc. If dirty, clean with a soft, dry cloth, wiping from the center to the edge. Do not use benzene, thinners, water, record sprays, antistatic agents, or silicone-impregnated cloth.
- Be careful not to damage the CD/DVD/BD surface.
- Keep the CDs/DVDs/BDs away from heat sources.
- Do not bend or place heavy objects on CDs/DVDs/BDs.
- Do not write with ballpoint pen or pencil on the label (printed) side.
- Do not attach stickers or similar to the label side. Doing so may cause rotational eccentricity and abnormal vibrations.
- When a CD/DVD/BD is moved from a cold place to a warm place, moisture condensation on the CD/DVD/BD surface can cause data read errors. In this case, wipe the CD/DVD/BD with a soft, dry cloth then let it air dry. Do not dry the CD/DVD/BD using devices such as a hair dryer.
- To avoid dust, damage, and deformation, keep the CD/DVD/BD in its case whenever it is not in use.
- Do not store CDs/DVDs/BDs at high temperatures. Areas exposed to prolonged direct sunlight or near heating appliances are to be avoided.



You can prevent damage from the optical disk drive and the CDs/DVDs/BDs, as well as premature wear of the disks, by observing the following suggestions:

- Only insert disks in the drive when needed and remove them after use.
- Store the disks in suitable sleeves.
- Protect the disks from exposure to heat and direct sunlight.

Laser information

The optical disk drive complies with IEC 60825-1 laser class 1.



CAUTION!

The optical disk drive contains a light-emitting diode (LED), which under certain circumstances produces a laser beam stronger than laser class 1. Looking directly at this beam is dangerous.

Never remove parts of the optical disk drive casing!

Modules with Electrostatic-Sensitive Devices (ESD modules)

Modules with electrostatic-sensitive devices are identified by the following sticker:

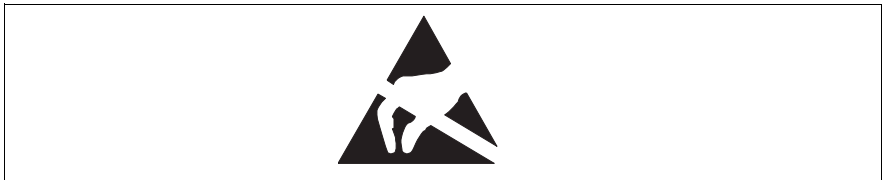


Figure 1: ESD label



The ESD label can be different.

When you handle ESD modules, you must always observe the following points:

- Switch off the server and remove the power plugs from the power outlets before installing or removing ESD modules.

Important information

- The circuit boards and soldered parts of internal options are exposed and can be damaged by static electricity. To ensure reliable protection, you must wear an earthing band on your wrist when working with ESD modules and connect it to an unpainted, conducting metal part of the server.
- Any devices or tools that are used must be free of electrostatic charge.
- Wear a suitable grounding cable that connects you to the external chassis of the server.
- Always hold ESD modules at the edges or at the points marked green (touch points).
- Do not touch any connectors or conduction paths on an ESD module.
- Place all the components on a pad which is free of electrostatic charge.



For a detailed description of how to handle ESD modules, see the relevant European or international standards (EN 61340-5-1, ANSI/ESD S20.20).

Transporting the server



CAUTION!

Only transport the server in its original packaging or in packaging that protects it from impacts and jolts.

In Japan and APAC, transporting the server in its original packaging does not apply.

Do not unpack the server until it is at its installation location.

If you need to lift or transport the server, ask other people to help you.

Never lift or carry the server by the handles or the Quick Release Levers (QRLs) on the front panel.

Notes on installing the server in the rack



CAUTION!

- For safety reasons, at least 2 people are required to install the server in the rack because of its weight and size.

(For the reader in Japan, please refer to "安全上のご注意".)

- Never lift the server into the rack using the QRLs (Quick Release Levers) on the front panel.

- When connecting and disconnecting cables, observe the relevant instructions in the "Important Information" chapter of the technical manual for the corresponding rack. The technical manual is supplied with the corresponding rack.
- When installing the rack, make sure that the anti-tilt mechanism is correctly fitted.
- Do not extend more than one server out of the rack simultaneously even if the tilt protection is in place. If several servers are simultaneously extended from the rack, there is a risk that the rack could tip over. See the safety information of the rack and the warning label.
- If the server/rack is intended for permanent connection to the mains only an authorized specialist (electrician) is allowed to work. Please follow the regulation of each country.
- If the server is integrated into an installation that draws power from an industrial power supply network with an IEC309 type connector, the power supply's fuse protection must comply with the requirements for non-industrial power supply networks for the type A connector.

Other important information

- During cleaning, observe the instructions in the corresponding Operating Manual chapter "Starting up and operation" > "Cleaning the server".
- Keep all manuals close to the server. All documentation must be included if the equipment is passed on to a third party.

4.2 CE conformity



The system complies with the requirements of European Regulations. Find the CE declaration on certificate portal:

<https://sp.ts.fujitsu.com/sites/certificates/default.aspx>

To open the CE declaration applicable for your system, proceed as follows:

- ▶ Select *Industry Standard Servers*.
- ▶ Select your model, e.g. *Rack server*.
- ▶ Select your system, e.g. *PRIMERGY RX2530 M1*.
- ▶ Select *CE Cert <your system>*.



CAUTION!

This is a Class A product. In a domestic environment this product may cause RF interference, in which case the user may be required to take adequate measures.

4.3 FCC Class A Compliance Statement

If there is an FCC statement on the device, it applies to the products covered in this manual, unless otherwise specified herein. The statement for other products will appear in the accompanying documentation.

NOTE:

This equipment has been tested and found to comply with the limits for a "Class A" digital device, pursuant to Part 15 of the FCC rules and meets all requirements of the Canadian Interference-Causing Equipment Standard ICES-003 for digital apparatus. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in strict accordance with the instructions, may cause harmful interference to radio communications. However, there is no warranty that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Fujitsu is not responsible for any radio or television interference caused by unauthorized modifications of this equipment or the substitution or attachment of connecting cables and equipment other than those specified by Fujitsu. The correction of interferences caused by such unauthorized modification, substitution or attachment will be the responsibility of the user.

The use of shielded I/O cables is required when connecting this equipment to any and all optional peripheral or host devices. Failure to do so may violate FCC and ICES rules.

4.4 Environmental protection

Environmentally-friendly product design and development

This product has been designed in accordance with the Fujitsu standard for "environmentally friendly product design and development". This means that key factors such as durability, selection and labeling of materials, emissions, packaging, ease of dismantling and recycling have been taken into account. This saves resources and thus reduces the harm done to the environment.

Further information can be found at:

http://ts.fujitsu.com/products/standard_servers/index.html

For the reader in Japan:

<http://jp.fujitsu.com/platform/server/primergy/concept/>

Energy-saving information

Devices that do not need to be constantly switched on should be switched off until they are needed as well as during long breaks and after completion of work.

Packaging information

This packaging information does not apply in Japan and APAC.

Do not throw away the packaging. You may need it later for transporting the server. If possible, the equipment should only be transported in its original packaging.

Information on handling consumables

Please dispose of printer consumables and batteries in accordance with the applicable national regulations.

In accordance with EU directives, batteries must not be disposed of with unsorted domestic waste. They can be returned free of charge to the manufacturer, dealer or an authorized agent for recycling or disposal.

All batteries containing pollutants are marked with a symbol (a crossed-out garbage can). They are also marked with the chemical symbol for the heavy metal that causes them to be categorized as containing pollutants:

Cd Cadmium

Hg Mercury

Pb Lead

Labels on plastic casing parts

Please avoid sticking your own labels on plastic parts wherever possible, since this makes it difficult to recycle them.

Returns, recycling and disposal

Please handle returns, recycling and disposal in accordance with local regulations.



The device must not be disposed of with domestic waste. This device is labeled in compliance with European directive 2012/19/EU on waste electrical and electronic equipment (WEEE).

This directive sets the framework for returning and recycling used equipment and is valid across the EU. When returning your used device, please use the return and collection systems available to you. Further information can be found at:

<http://ts.fujitsu.com/recycling>

Details regarding the return and recycling of devices and consumables within Europe can also be found in the "Returning used devices" manual, via your local Fujitsu branch, or at:

<http://ts.fujitsu.com/recycling>

5 Hardware installation



CAUTION!

- Follow the safety instructions in the chapter "[Important information](#)" on page 25.
- Do not expose the server to extreme environmental conditions (see "[Ambient conditions](#)" on page 19). Protect the server from dust, humidity and heat.
- Make sure that the server is acclimatized for the time indicated in this table before putting it into operation.

Temperature difference (°C)	Minimum acclimatization time (hours)
5	3
10	5
15	7
20	8
25	9
30	10

Table 1: Acclimatization time

In the [table "Acclimatization time"](#), the temperature difference refers to the difference between the operating environment temperature and the temperature to which the server was exposed previously (outside, transport or storage temperature).

5.1 Unpacking the server



CAUTION!

Follow the safety instructions in ["Important information" on page 25](#).

For Japan:

Please refer to "安全上のご注意".

Do not unpack the server until it is at its installation location.

- ▶ Transport the server to the place where you want to set it up.
- ▶ Unpack all individual parts.
Keep the original packaging in case you want to transport the server again (applies only to EMEA market).
- ▶ Check the delivery for any damage during transport.
- ▶ Check whether the items delivered match the details on the delivery note.
- ▶ Notify your supplier immediately should you discover that the items delivered do not correspond to the delivery note.

5.2 Setting up the server

- ▶ Transport the server to the place where you want to set it up.
- ▶ Unpack the server (see section ["Unpacking the server" on page 40](#)).
- ▶ Set up the server.



CAUTION!

- The device must be protected from direct sunlight.
 - The required minimum distances for operation and maintenance areas must be adhered to.
 - The server must be accessible at the rear for connection to other devices (e.g. memory subsystem).
 - The mains plug must be accessible easily and safely.
 - There must be a clearance of at least 200 mm in front of and behind the server to ensure adequate ventilation of the subsystem.
- ▶ Wire the server. Follow the instructions in sections ["Connecting devices to the server" on page 42](#) and ["Notes on connecting/disconnecting cables" on page 44](#).
 - ▶ Connect the server to the mains (see section ["Connecting the server to the mains" on page 44](#)).

5.3 Connecting devices to the server

The connectors for external devices are on the front and rear of the server. The additional connectors available on your server depend on the expansion cards installed. For further information refer to the “FUJITSU Server PRIMERGY TX1310 M3 Upgrade and Maintenance Manual”. The standard connectors are indicated by symbols and color coding:

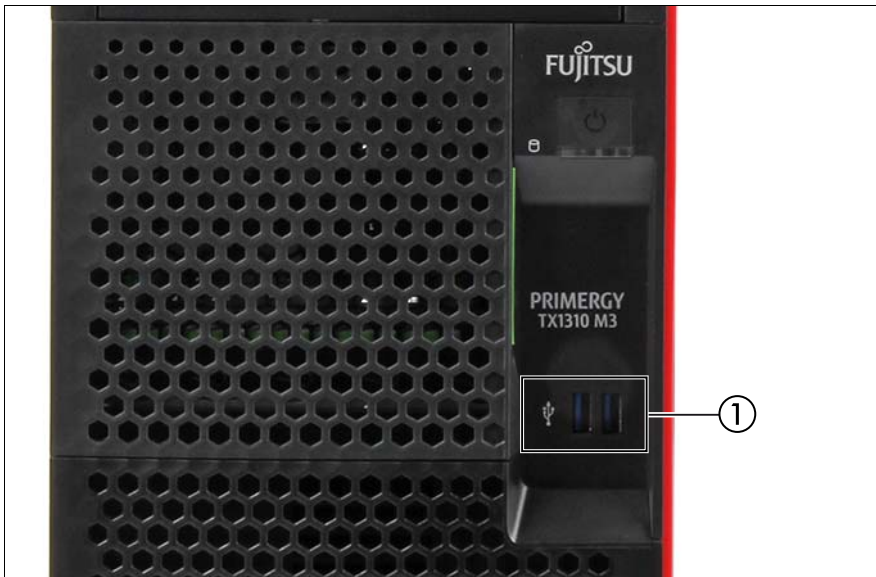


Figure 2: Connectors on the front

1	2 x USB 3.0 connectors (blue)
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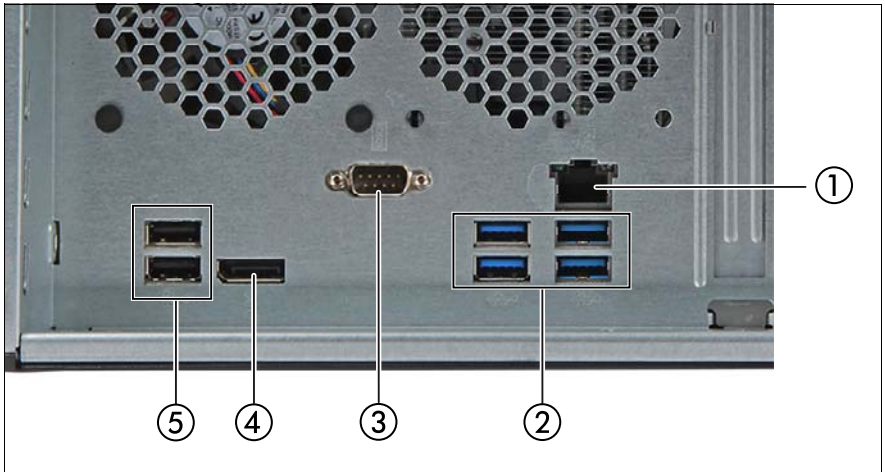


Figure 3: Connector panel on the rear side

1	LAN connector
2	USB 3.0 connectors (x4)
3	Serial connector (optional)
4	Video connector (Display Port)
5	USB 2.0 connectors (x2)

i Some of the devices that can be connected may require special drivers (see the documentation for the connected device).

- ▶ Connect the data cables to the server and peripherals.

5.4 Connecting the server to the mains

The server is equipped with an integrated PSU.



CAUTION!

The server is automatically set to a mains voltage in the range 100 V - 240 V. You may only operate the server if its rated voltage range corresponds to the local mains voltage.

- ▶ Connect the power cord to the server PSU.
- ▶ Connect the mains plug to a grounded mains outlet in the in-house power supply network.

5.5 Notes on connecting/disconnecting cables



CAUTION!

Always read the documentation supplied with the device you wish to connect.

Never connect, or disconnect cables during a thunderstorm.

Never pull on a cable when disconnecting it. Always take hold of the cable by the plug.

Follow the sequence described below to connect or disconnect external devices to or from the server:

Be sure to wait for 10 seconds or more after shutdown before turning the server on.

Connecting cables

- ▶ Turn off all power and equipment switches.
- ▶ Disconnect all power plugs from the properly grounded power outlets.
- ▶ Connect all cables to the server and peripherals.
- ▶ Plug all data communication cables into the utility sockets.
- ▶ Plug all power cords into the properly grounded power outlets.

Disconnecting cables

- ▶ Turn off all power and equipment switches.
- ▶ Disconnect all power plugs from the properly grounded power outlets.
- ▶ Unplug all data communication cables from the utility sockets.
- ▶ Disconnect the relevant cables from the server and all the peripherals.



For connecting or disconnecting LAN cables, the server does not need to be powered off. To avoid loss of data teaming function has to be enabled.

Information for ensuring electromagnetic compatibility

All data and signal cables must have sufficient shielding. The use of cable type S/FTP Cat5 or higher is recommended.

Use of unshielded or badly shielded cables may lead to increased emission of interference and/or reduced fault-tolerance of the device.

6 Starting up and operation



CAUTION!

Follow the safety instructions in chapter "[Important information](#)" on [page 25](#).

6.1 Access to the drives



Figure 4: Removing the side cover

- ▶ Pull up on the locking lever (1).
- ▶ Open the side cover (2).
- ▶ Remove the side cover (3).



The following procedure is described in detail in the "FUJITSU Server PRIMERGY TX1310 M3 Upgrade and Maintenance Manual".

- ▶ Remove the HDD cage cover by pulling it backwards beginning at its right side (4).

Starting up and operation

- ▶ Open the HDD cage door by swivelling it downwards.



CAUTION!

The HDD cage door can only be opened **after** the side cover has been removed because of the anti-theft lock.

- ▶ Remove the HDD cage door.
You now have access to the HDDs.

Installation has to be done in reverse order.



6.2 Controls and indicators

6.2.1 Server front





Figure 5: Front panel

6.2.1.1 Controls on the front panel

Pos.	Label	Button	Function
1		On/Off button	Used to switch the server on or off.  If the system is running an ACPI-compliant operating system, pressing the On/Off button will perform a graceful shutdown.

6.2.1.2 Indicators on the front panel

Pos.	Label	Indicator	Status	Description
1		On/Off button	white on	System is switched on.
			off	System is switched off.
2		HDD/SSD activity indicator	white flashing	Data access in progress.

6.2.1.3 Indicators on the drives

Optical drive activity indicator

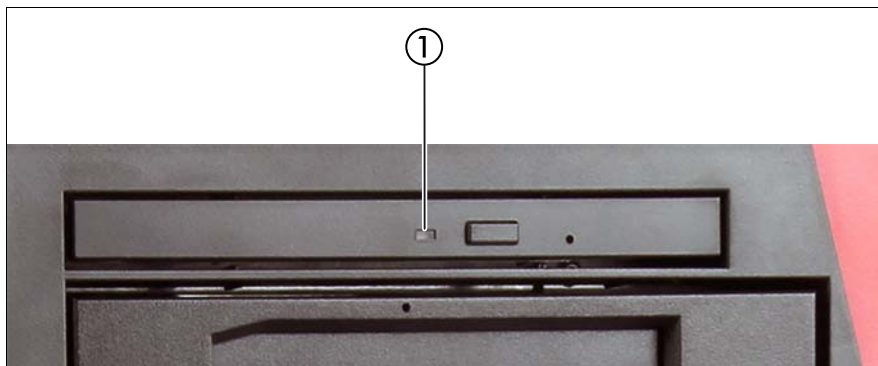


Figure 6: Indicator on the optical drive

Pos.	Indicator	Status	Description
1	ODD activity indicator	off	The optical drive is inactive.
		green on	The storage medium is being accessed.



There are also optical drives without activity indicators.

RDX drive activity indicator



Figure 7: Indicator on the RDX drive

Pos.	Indicator	Status	Description
1	RDX drive activity indicator	Off	Drive does not have power.
		Steady green	Drive is ready and working properly.
		Blinking green	Drive is ejecting media.
		Steady amber	RDX has detected a drive fault condition. For more information, run a diagnostic application.
		Steady green/ Blinking amber once eject button is pressed	Host computer is accessing the media and the user has pressed the eject button. The drive will eject the media after the host access completes.

6.2.2 Server rear

6.2.2.1 Indicators on the I/O panel

LAN indicators

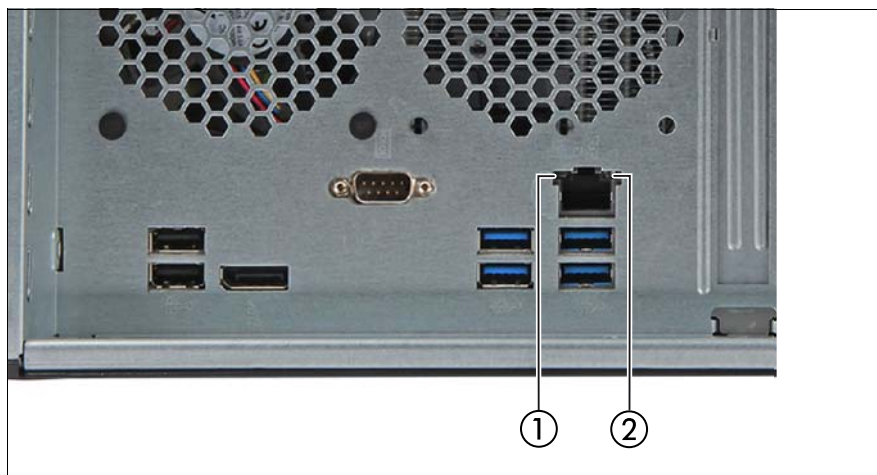


Figure 8: Indicators on the connector panel: LAN indicators

Pos.	Indicator	Status	Description
1	LAN link/transfer indicator	green on	A LAN connection has been established.
		off	LAN is not connected.
		green flashing	LAN data transfer is in progress
2	LAN speed indicator	yellow on	Data traffic at a transfer rate of 1 Gbit/s
		green on	Data traffic at a transfer rate of 100 Mbit/s
		off	Data traffic at a transfer rate of 10 Mbit/s.

6.3 Switching the server on and off



CAUTION!

- If nothing appears on the screen but flickering stripes after switching on the server, switch the server off immediately (see chapter ["Flickering stripes on monitor screen" on page 65](#)).
- The On/Off button does not disconnect the server from the mains voltage. To completely disconnect it from the mains voltage, remove the power plug(s) from the socket(s).
- Do not move, strike, or shake the server when it is turned on. This can damage the hard disk in the server and cause data loss.
- Turn the server on when the temperature is in its operating environment range (10 - 35°C). For details on the operating environment, refer to "Safety Precautions". When operating the device outside of this operating environment, the server may operate improperly, damage data etc. Furthermore, Fujitsu cannot be held responsible for any related damage, malfunction, or loss of data, etc.
- Be sure to wait for 10 seconds or more after shutdown before turning the server on.
- After connecting all power cords, wait at least 10 seconds before pressing the On/Off button.

Switching the server on



Figure 9: On/Off button of the server

– Starting up for the first time:

For Japan, please refer to "はじめにお読みください".

- ▶ Press the On/Off button (1) (see figure 9 on page 54).
- ▶ Insert the ServerView Suite DVD in the DVD drive.
- ▶ Follow the on-screen instructions (see also section "[Configuring the server and installing the operating system with the ServerView Installation Manager](#)" on page 57 or section "[Configuring the server and installing the operating system without the ServerView Installation Manager](#)" on page 58).

– System already installed:

- ▶ Press the On/Off button (1) (see figure 9 on page 54).

The server is switched on, performs a system test and boots the operating system.

Switching the server off

- ▶ Shut down the operating system properly.

The server is switched off automatically and goes into standby mode.



If the operating system does not switch off the server automatically, press the On/Off button for at least four seconds and/or send a corresponding control signal.



CAUTION!

There is a risk that data may be lost.

Other Power On/Off options



The usage of Power On/Off options requires the installation of ServerView Agents.

Besides the On/Off button, the server can be switched ON and OFF in the following ways:

- **Timer-controlled switch-on/off**

Using the ServerView Operations Manager, you can configure that the server is switched on/off controlled by timer.

- **Ring indicator**

The server is switched on by an internal or external modem.

- **Wake up On LAN (WOL)**

The server is switched on by a command via the LAN (Magic Packet™) (LAN1 only).

- **After power failure**

The server automatically reboots following a power failure (depending on the settings in the BIOS).

- **Power button override**

The system can be switched off by pressing and holding down the On/Off button (for approximately 4 - 5 seconds).




CAUTION!

There is a risk that data may be lost.



6.4 Configuring the server

This section contains information about configuring the server and installing the operating system.

-  Make sure that the power saving functions are disabled in the *Power* menu of the BIOS Setup during operation.

6.4.1 Configuring the onboard SATA controller

A SATA controller is integrated on the system board. You can configure the onboard controller either before or during installation with the ServerView Installation Manager. Using the ServerView Installation Manager is recommended.

-  The controller has its own configuration utility. For further information, refer to the “Embedded MegaRAID Software User’s Guide” (on the Fujitsu manuals server under *x86 Servers - Expansion Cards - Storage Adapters - LSI Configuration Software - Embedded MegaRAID Software*).
-  Descriptions of operating systems not covered in the controller manual are provided in the corresponding readme under:

<http://www.fujitsu.com/global/services/computing/server/ia/driver/index.html>

For Japan:


<http://www.fujitsu.com/jp/products/computing/servers/primergy/downloads/>


6.4.2 Configuring the server and installing the operating system with the ServerView Installation Manager

Using the ServerView Installation Manager on the ServerView Suite DVD provided, you can conveniently configure the server and install the operating system. This includes configuring the server-specific settings using the ServerView Configuration Manager and configuring the RAID controller using the **ServerView RAID Manager**.

Advantages of the ServerView Installation Manager

- Wizard-assisted configuration of your server hardware and disk arrays.
- Wizard-assisted installation of all leading server operating systems.
- Wizard-assisted creation of configuration files for unattended installation of several PRIMERGY servers with identical hardware configurations.
- Installation of drivers and additional software.

 The software that can be installed depends on your server's hardware configuration. This configuration is detected automatically.

 Descriptions of operating systems not covered in the RAID controller manual are provided in the corresponding readme files under:
<http://www.fujitsu.com/global/services/computing/server/ia/driver/index.html>

For Japan:

<http://www.fujitsu.com/jp/products/computing/servers/primergy/downloads/>

To find out how to operate the ServerView Installation Manager and for further information, refer to the associated manual.

If you are using the ServerView Installation Manager, you can skip the following section on how to configure the server and install the operating system. Continue from section "[Cleaning the server](#)" on page 59.

6.4.3 Configuring the server and installing the operating system without the ServerView Installation Manager

Configure onboard SATA controller

Configure the controller as described in section "[Configuring the onboard SATA controller](#)" on page 56.

Installing the operating system

- ▶ Insert the CD/DVD for the operating system you want to install.
- ▶ Reboot the server.
- ▶ Follow the instructions on screen and in the manual for the operating system.

6.5 Cleaning the server



CAUTION!

Switch off the server and disconnect the power plugs from the properly grounded power outlets.

Do not clean any interior parts yourself; leave this job to a service technician.

Do not use any cleaning agents that contain abrasives or may corrode plastic.

Ensure that no liquid enters the system. Ensure that the ventilation areas of the server and the monitor are clear.

Do not use any cleaning sprays (including flammable types). It may cause a device failure or a fire.

Clean the keyboard and the mouse with a disinfecting cloth.

Wipe the server and monitor casing with a dry cloth. If particularly dirty, use a cloth that has been moistened in a mild domestic detergent and then carefully wrung out.

7 Property and data protection

To prevent it being removed from its location, the server can be secured to a fixed object with a steel cable running through a clip on the back.

To protect the system and data internally against unauthorized access, you can activate the security functions of the BIOS Setup.

7.1 BIOS Setup security functions

The *Security* menu in BIOS Setup offers various options for protecting your data from unauthorized access. By combining these options, you can achieve optimum protection for your system.



A detailed description of the *Security* menu and how to assign passwords can be found in the BIOS Setup documentation on the PRIMERGY ServerView Suite DVD.

8 Troubleshooting and tips



CAUTION!

Follow the safety instructions in the "Safety notes and regulations" manual or "安全上のご注意" and in chapter ["Important information" on page 25](#).

If a fault occurs, attempt to resolve it using the measures described:

- in this chapter,
- in the documentation for the connected devices,
- in the help systems of the software used.

If you fail to correct the problem, proceed as follows:

- ▶ Make a list of the steps performed and the circumstances that led to the fault. Also make a list of any error messages that were displayed.
- ▶ Switch off the server.
- ▶ Contact our customer service team.

8.1 Power-on indicator remains unlit

The power-on indicator remains dark after you switch on your device.

Power cable incorrectly connected

- ▶ Make sure that the power cable(s) is/are correctly connected to the server and the grounded power outlet(s).

Power supply overloaded

- ▶ Disconnect the server power plug(s) from the grounded power outlet(s).
- ▶ Wait a few minutes before you plug it/them into the grounded power outlet(s) again.
- ▶ Switch on your server.

8.2 Server switches itself off

Server Management has detected an error

- ▶ Check the error list of System Event Log in ServerView Operations Manager, and attempt to eliminate the error.

8.3 Screen remains blank

Monitor is switched off

- ▶ Switch on your monitor.

Screen has gone blank

- ▶ Press any key on the keyboard.
or
- ▶ Deactivate screen saver. Enter the appropriate password.

Brightness control is set to dark

- ▶ Set the brightness control on the monitor to light. For detailed information, refer to the operating manual supplied with your monitor.

Power cable or monitor cable not connected

- ▶ Switch off the monitor and the server.
- ▶ Check whether the power cable is properly connected to the monitor and to the grounded power outlet.
- ▶ Check whether the monitor cable is properly connected to the server and monitor (if it is plugged in with a connector). If a separate graphics card is installed in the server, then the monitor cable must be connected to the graphics card.
- ▶ Switch on the monitor and the server.

8.4 Flickering stripes on monitor screen



CAUTION!

Switch off the server immediately. Risk of damaging the server.

Monitor does not support the set horizontal frequency

- ▶ Find out which horizontal frequency your monitor screen supports. You will find the horizontal frequency (also known as line frequency or horizontal deflection frequency) in the documentation for your monitor.
- ▶ Refer to the documentation for your operating system or the software for the screen controller for details of how to set the correct horizontal frequency for your monitor, and follow the procedure accordingly.

8.5 No screen display or display drifts

The wrong horizontal frequency or resolution has been selected for the monitor or for the application program.

- ▶ Find out which horizontal frequency your monitor screen supports. You will find the horizontal frequency (also known as line frequency or horizontal deflection frequency) in the documentation for your monitor.
- ▶ Refer to the documentation for your operating system or the software for the screen controller for details of how to set the correct horizontal frequency for your monitor, and follow the procedure accordingly.

8.6 No mouse pointer displayed on screen

Mouse driver not loaded

- ▶ Check whether the mouse driver is properly installed and is activated when the application program is started. Detailed information can be found in the user manuals for the mouse, the operating system and the application program.

8.7 Incorrect date and time

- ▶ Set the date and time in the operating system or in the BIOS Setup under the Main menu, using System Date and System Time respectively.



Note that the operating system may affect the system time. For example, the operating system time may deviate from the system time under Linux, and would overwrite the system time in the default setting on shutdown.

If the date and time are still wrong after the server has been switched off and back on again, replace the lithium battery (for a description refer to the "FUJITSU Server PRIMERGY TX1310 M3 Upgrade and Maintenance Manual") or contact our customer service team.

8.8 Error message on screen

The meaning of the error message is explained in the documentation for the relevant components and programs on the Fujitsu manuals server.

8.9 Expansion cards or onboard devices not recognized

When an expansion card is added, other expansion cards or onboard devices might not be recognized.

- ▶ Reinstall the drivers for the expansion cards or onboard devices that are not recognized.

8.10 Temperature warning

A temperature warning will be send to the hardware event log and OS event log, or ServerView issues a notification of a temperature warning such as by a popup message

The above log is output or the above notification is issued by ServerView when the ambient temperature is within 30 to 35°C, which is near the upper limit of the temperature boundaries (10 to 35°C). This is to notify the administrator before the ambient temperature actually exceeds the range of the temperature boundaries.

- ▶ Although continued use within the temperature boundaries poses no problems within itself, reconsider the surrounding environment conditions if this log is output or if ServerView issues this notification.

8.11 No effect of keyboard or mouse

Typing the keyboard does not display any characters, or the mouse cursor does not move.

- ▶ Check to see whether the keyboard and mouse are connected properly. If they are not connected or you replaced them yourself, then connect the cables to the server.

8.12 Optical drive cannot read data

- ▶ Check to see whether the CD/DVD/BD is inserted properly. If it is not inserted, correctly insert the disk so that the label is facing up.
- ▶ Check to see whether the CD/DVD/BD is not dirty. If it is dirty, wipe it with a soft, dry cloth.
- ▶ Check to see whether the CD/DVD/BD is not scratched or bent. If scratched or damaged, replace the CD/DVD/BD.

