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# System board D1131

Additional Technical Manual

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# **System board D1131**

## **Additional Technical Manual**

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# Introduction



This system board is available in different configuration levels. Depending on the hardware configuration of your device, it may be that you cannot find several options in your version of the system board, even though they are described.

You may find further information e. g. in the complete Technical Manual for the system board and in the description "BIOS Setup".

Further information to drivers is provided on the supplied drivers diskettes or on the "Drivers & Utility" or "ServerStart" CD. For detailed information please look at chapter "Installing drivers and utilities".

## Features

Function	Version
	<b>G1x</b>
Processor	PGA 370 or Celeron
Chipset	440 ZX / 66 MHz FSB*
DIMM sockets	2
Main memory up to	256 Mbyte
ISA slots	0
PCI slots	2
ISA/PCI shared	1
AGP Port	1
System monitoring	--
Thermal Management	--
Wake On LAN (WOL)	X
Keyboard On	--
IrDA	--
Chipcard Reader	--
Save to Disk	X
Save to RAM	--
IAPC	--

\*: Front Side Bus



Computer mainboards and components contain very delicate IC chips. To protect them against damage caused from electric static, you have to follow some precautions:

- Unplug your computer when you work inside.
- Hold components by the edge, don't touch their leads.
- Use a grounded wrist strap.

Place the mainboard and the components on a grounded antistatic pad whenever you work outside the computer.

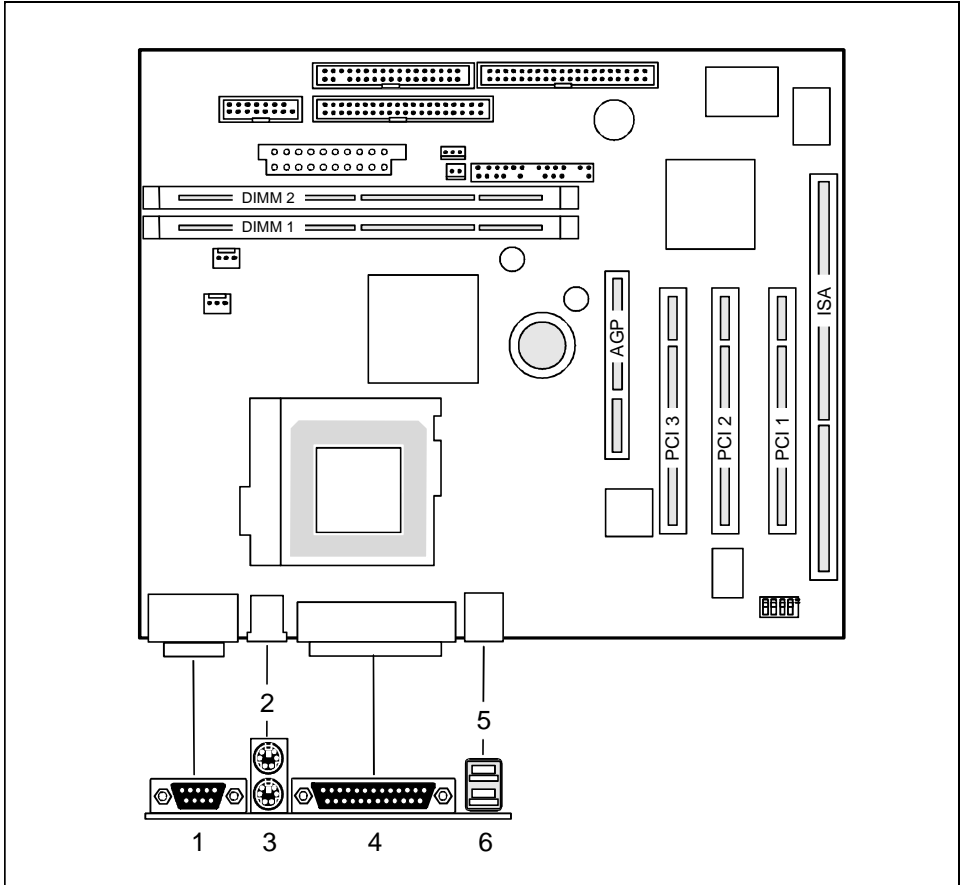
Once you have installed the system board, you should remove the battery protection (i.e. the thin plastic plate between battery and contact spring).

# Mechanics

## Layout

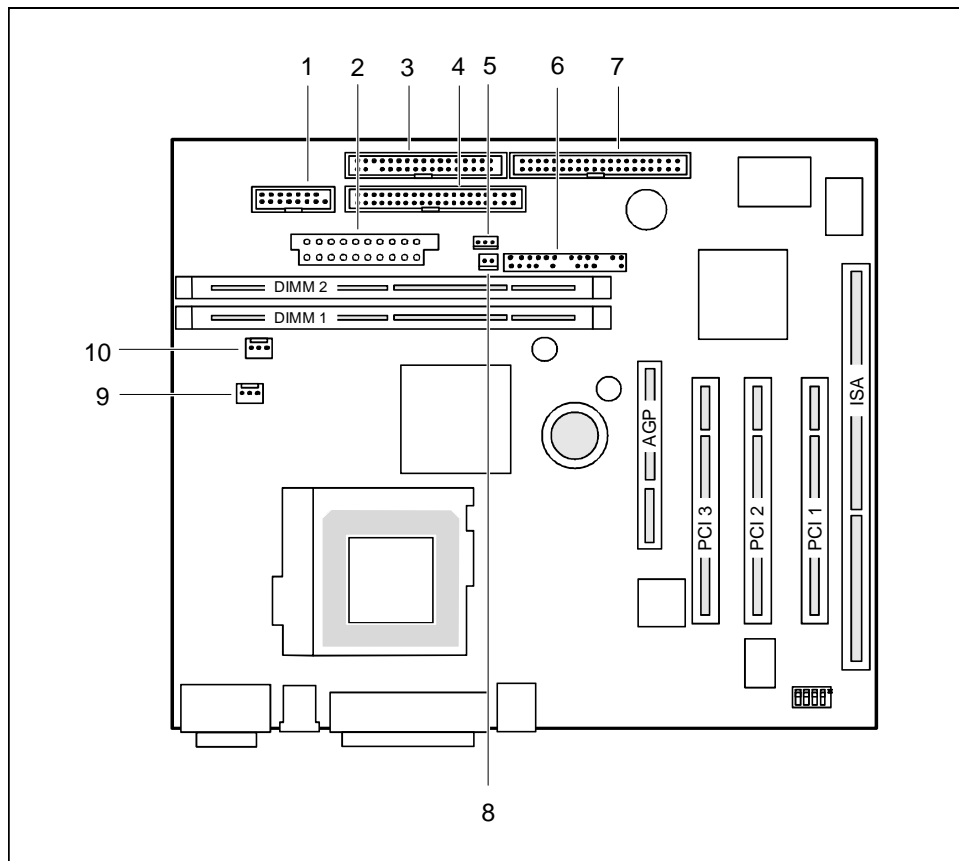
µ-ATX 9,6" x 8" (243,84 mm x 203,2 mm)

Some of the following connectors are optional and may therefore not be included on your mainboard.



- 1 = Serial port 1
- 2 = PS/2 mouse port
- 3 = PS/2 keyboard port

- 4 = Parallel interface
- 5 = USB connection 2
- 6 = USB connection 1



- |   |                                      |
|---|--------------------------------------|
| 1 = Serial chipcard reader interface or serial port 2 | 6 = Connector for control panel      |
| 2 = Power supply                                      | 7 = IDE drives 1 and 2 (primary)     |
| 3 = Floppy disk drive                                 | 8 = ON/OFF switch                    |
| 4 = IDE drives 3 and 4 (secondary)                    | 9 = Fan 1 (e. g. for the processor)  |
| 5 = Wake On LAN                                       | 10 = Fan 2 (e. g. for the processor) |

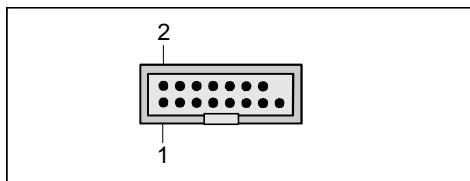
The components and connectors marked do not have to be present on the system board.

## Connectors and Jumpers



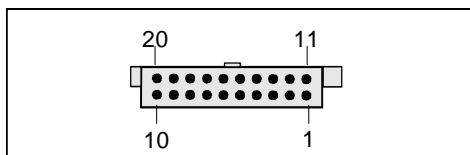
Some of the following connectors are optional!

### Internal serial (COM2) port (external via wire)



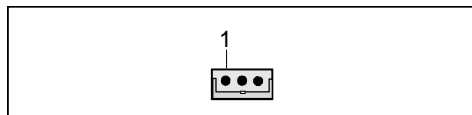
Pin	Signal	Pin	Signal
1	DCD 2 (low asserted)	2	DSR 2 (low asserted)
3	SIN 2 (high asserted)	4	RTS 2 (low asserted)
5	SOUT 2 (high asserted)	6	CTS 2 (low asserted)
7	DTR 2 (low asserted)	8	PC_ON_Strobe
9	GND	10	VCC Auxiliary
11	EXT SMI (low asserted)	12	VCC
13	RESETDRV (high asserted)	14	GND
15	GND	16	Key

### Power supply ATX connector



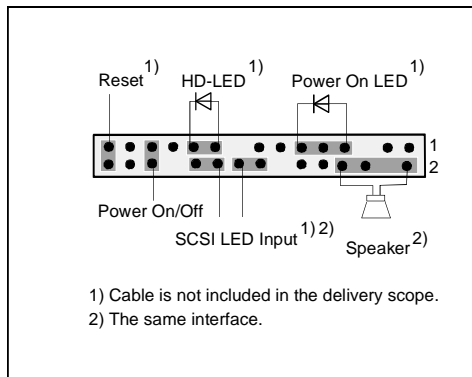
Pin	Signal	Pin	Signal
1	+3.3 V	2	+3.3 V
3	GND	4	+5 V
5	GND	6	+5 V
7	GND	8	Powergood (high asserted)
9	+5 V Auxiliary	10	+12 V
11	+3.3 V	12	-12 V
13	GND	14	PS on (low asserted)
15	GND	16	GND
17	GND	18	-5 V
19	+5 V	20	+5 V

## Wake on LAN (WOL) connector



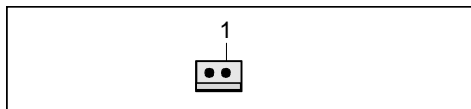
Pin	Signal
1	+5 V Auxiliary
2	GND
3	Wake pulse (high asserted)

## Front panel connector



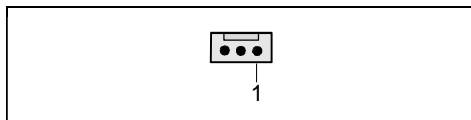
Pin	Signal	Pin	Signal
1	Boot Lock	2	Speaker
3	Anode Standby LED	4	Key
5	Key	6	GND
7	Anode PON_LED	8	VCC
9	Not connected	10	Key pin
11	Cathode PON_LED (GND)	12	Key pin
13	Not connected	14	Key
15	Not connected	16	Not connected
17	Key	18	SCSI LED Input
19	Anode HD_LED	20	SCSI LED Input
21	Cathode HD_LED	22	Not connected
23	GND	24	Key
25	Power Button	26	GND
27	Not connected	28	GND
29	Reset Button	30	GND

### Power on switch connector (ON/OFF switch)



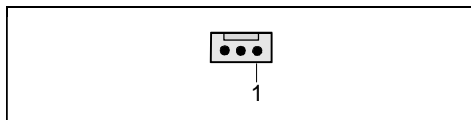
Pin	Signal
1	GND
2	Power on pulse (low asserted)

### Fan 1 connector



Pin	Signal
1	GND
2	Controlled fan voltage (0...+12 V)
3	Not connected

### Fan 2 connector



Pin	Signal
1	GND
2	+12 V
3	Fan sense

## Configuration

### Celeron (PGA 370) processors core frequency (300 - 433 MHz)



The clock frequency of the processor is set automatically.

## Functions controlled by the switch block

Function	SW1	SW2	SW3	SW4
Password Skip	on	X	X	X
Off	off	X	X	X
Recovery BIOS	X	on	X	X
Off	X	off	X	X
Floppy write protect	X	X	on	X
Off	X	X	off	X



Switch 4 (SW4) is reserved!

## Power

### Power requirement

Source	Voltage	Maximum variation	Maximum current	Comment
Main power supply	+5.0 V	±5 %	15 A	
Main power supply	+12 V	±10 %	300 mA	
Main power supply	-12 V	±10 %	100 mA	
Main power supply	+3.3 V	±5 %	4 A	
Auxiliary power supply	+5.0 V	±5 %	50 mA	
			670 mA	Wake on LAN

### Power loadability

Fuse number	Maximum Fuse current	Function	Maximum function current
1	750 mA	Universal serial bus (USB) Port A	500 mA
		Keyboard	Not specified
		Mouse	Not specified
2	750 mA	Universal serial bus (USB) Port B	500 mA

## Installing Drivers

- ▶ Insert the "Drivers & Utilities" CD.
- ▶ When the *DeskStart* window appears, select *SCENIC Pro*.
- ▶ Select the language in which you want to operate the user interface.
- ▶ Select *Operating System used*.
- ▶ Select - *Updates*.

# Upgrades

## Main memory

- Support:** The system needs at least one module and can manage at most two SDRAM modules.  
PC100 modules must have an SPD-EEPROM\*.  
It is not possible to mix SDRAM and EDO modules.
- Size:** From 16 Mbytes up to 256 Mbytes SDRAM
- Technology:** 66 or 100 MHz unbuffered DIMM modules.  
168 pin, 3.3V, 100 MHz SDRAM  
2M, 4M, 8M, 16M and 32M x 64 bit  
2M, 4M, 8M, 16M and 32M x 72 bit (with ECC)
- Granularity:** For one socket 16, 32, 64 or 128 Mbyte

\*: The EEPROM of PC100 / PC66 modules contains a number of critical timing parameters and data regarding the chip and the module vendor. Due to this the mainboard will properly recognize the module by reading all important timing parameters specified in the EEPROM via the **Serial Presence Detect** interface.

## Troubleshooting

### Error message BIOS update

BIOS update for installed CPU failed



If this error message occur, refer for further information to the description "BIOS Setup" which is delivered on the "Drivers & Utilities" CD.

### The screen stays blank

If your screen stays blank this may have the following cause:

#### **The wrong RAM memory module has been inserted**

- ▶ See the chapter "Main Memory" for information which memory modules can be used.