



Data Sheet

Fujitsu ATX Mainboard D3128-B

Extended Lifecycle Series

Powered by the Intel® C600 series chipset, DDR3 1600 SDRAM memory (ECC support)
and Intel® Xeon® ("Sandy Bridge EP") processors (LGA2011)
Designed & approved for 24/7 continuous operation

Chipset:

Intel® C602 Chipset
(Patsburg A)

Processors:

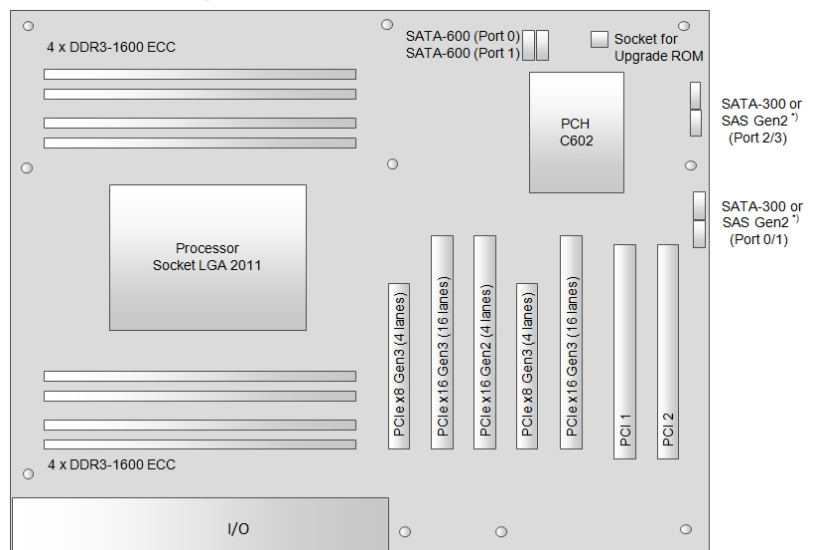
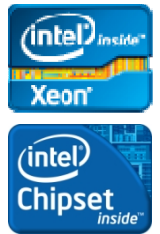
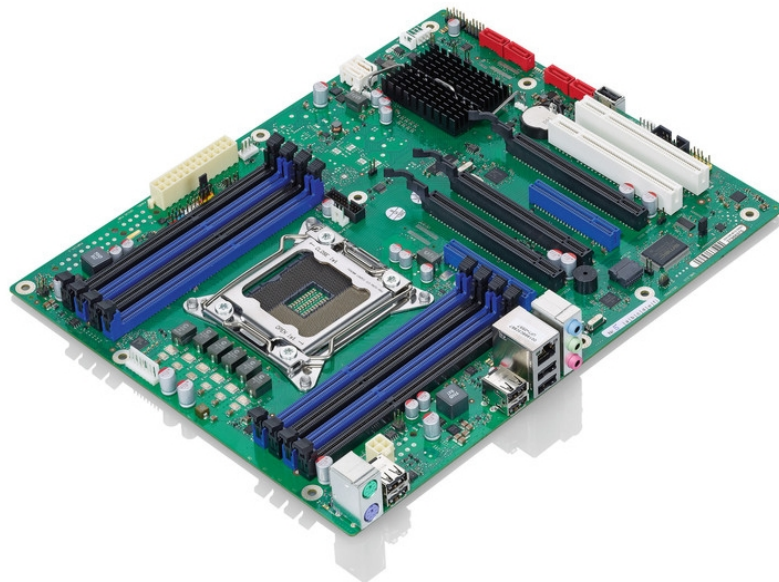
Intel® Xeon® Processor E5-26xx series
Intel® Xeon® Processor E5-16xx series
Intel® Core™ i7 Processor 38xx / 39xx series
Compatible with Intel® processors LGA2011
(up to 150W TDP)

Memory:

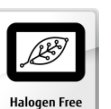
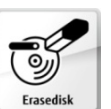
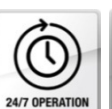
DDR3 800 SDRAM
DDR3 1066 SDRAM
DDR3 1333 SDRAM
DDR3 1600 SDRAM
with ECC Support
(memory speed and ECC depends on processor)

Product Features:

2 x PCIe x16 –generation 3 onboard
5.1 multichannel audio onboard
USB 2.0 and USB 3.0 onboard
Intel GbE LAN onboard supporting iAMT 7.1 / vPro
Serial ATA III & RAID onboard
Trusted Platform Modul (Infineon) V1.2 onboard
BIOS-POST/-Boot & OS - HW Watchdog onboard
SAS Gen II onboard (upgrade option)



*) Upgrade ROM #1 required for SAS support (Converts PCH from C602 to C604)



Features and benefits

Board Size	ATX: 12" x 9.6" (305 x 244 mm)
Chipset	Intel® "Patsburg A" C602 Chipset
Memory	8 DIMM Sockets DDR3, max. 64GB, Single / Dual / Triple / Quad Channel 800/1066/1333/1600MHz, single rank / dual rank unbuffered, ECC / non-ECC support (depends on processor)
Processors	Intel® Xeon® Processor E5-26xx series Intel® Xeon® Processor E5-16xx series Intel® Core™ i7 Processor 38xx / 39xx series (BIOS ≥ R.1.6.0 required) Socket R (LGA2011), max. 150W TDP, integrated Memory Controller (For details on supported processors please refer to our website)
Power Specification	24 Pin System Power Connector + 4 Pin Processor Power Connector required Support for Soft-Off Power Supplies 5V and 3.3V Supply Voltage on PCI Slots (PCI Rev. 2.3) 3.3V Auxiliary Supply Voltage on PCI Slots (Wake-Up Function) On board CPU Voltage Regulator, 5V / 2A Auxiliary Power required for USB Wake-Up from Save-to-RAM, Save-to-Disk

Power Supply Requirements

Source	Voltage	Voltage Tolerance (max)	Supply Current (typ.) ^{A)}
Main Power Supply	+ 12 V _{CPU}	± 5 %	tbd
	+ 12 V _{System}	± 5 %	tbd
	- 12 V	± 10 %	0.05 A
	+ 5 V	± 5 %	tbd
Aux. Power Supply	+ 3.3 V	± 5 %	tbd
	+ 5 V	+5%; -3%	2 A

A) Configuration: Processor / Memory / Graphics etc. tbd

BIOS

AMI Aptio 4.x (UEFI) BIOS
modified and adapted by Fujitsu Technology Solutions; Recovery BIOS, BIOS and CPU Microcode Update, Quick Boot, Logo Boot, Quiet Boot, Plug & Play, DRAM and PCI Auto Configuration, S.M.A.R.T. Support

Security Features

Recovery BIOS, System and BIOS Password, Boot Sequence Control, Serial/USB- Port Access Protection, Boot Sector Virus Warning, Write Protection for Flash BIOS, EraseDisk (BIOS Feature), Infineon Trusted Platform Module (TPM) V1.2.

Special Features

Silent Fan	Independent temperature related processor fan and system fan supervision and control
System Guard	View and adjust Silent Fan features
Silent Drives	Noise reduction for optical and hard disk drives
Recovery BIOS	Restores a corrupted BIOS
Desk Update	Easy driver update with Drivers&Utilities DVD
Multi Boot	Comfortable boot from any boot device
HDD Password	Access protection for disk drives
24/7 Operation	Mainboard is designed for continuous operation
Boot Watchdog	Full supervision of BIOS POST and Boot sequence

External Connectors



PS/2 2 x USB 2.0

4 x USB 2.0

Audio

Conexant CX20642, 5.1 Multichannel, High Definition Audio

LAN

Intel 82579LM LAN Controller with 10/100/1000 MBit/s, iAMT 7.1 / DASH 1.1, Wake-on-LAN (WoL) by interesting Packets, Link Status Change and Magic Packet™, PXE Support, BIOS MAC Address Display; Support for Jumbo-Frames

Drives

- 2 x SATA III 600 Interfaces (up to 6GBit/s, NCQ); 4 x SATA II 300 Interfaces (up to 3GBit/s, NCQ; no support for optical drives); AHCI; RAID 0, 1, 5, 10.
- By using an upgrade ROM, the 4 SATA II ports can be used as SAS (gen 2)

Features

Features	D3128-B
Chipset	Intel C602
Board Size	ATX
VGA	-
Stereo Audio / 5.1 Multichannel Audio	- / Ü
Buzzer / int. Speaker Support	Ü / Ü
LAN Gbit / 100 Mbit / 10 Mbit	Ü / Ü / Ü
LAN ASF 2.0 / DASH 1.1 / AoL / Boot / iAMT 7.1	- / Ü / - / Ü / Ü
SATA / ATA / RAID / eSATA Support	Ü / - / Ü / Ü
FireWire™ / USB 2.0 / USB 3.0	- / Ü / Ü
FAN monitored PSU ¹⁾ / CPU / AUX1 / AUX2 / AUX3	Ü / Ü / Ü / Ü / Ü
FAN controlled PSU ¹⁾ / CPU / AUX1 / AUX2 / AUX3	Ü / Ü / Ü / Ü / Ü
TEMP monitored CPU / ONB1-ONB5	Ü / Ü
Special Features	
Silent Fan / Silent Fan LT / System Guard / Silent Drives	Ü / - / Ü / Ü
Recovery BIOS / Desk Update / Multi Boot	Ü / Ü / Ü
HDD Password / USB Security / EraseDisk	Ü / Ü / Ü
BIOS&Boot Watchdog / OS Watchdog	Ü / Ü
Logo Boot Option / Intel On Screen Branding	Ü / Ü
BIOS POST- / BIOS Boot- / OS- HW Watchdog	Ü / Ü / Ü
Operating Mode 24-7 / 8-5 (hrs per day - days per week)	Ü / -
Mainboard operating temperature range (chassis inside)	10°C – 50°C
Internal Connectors	
DIMM Sockets (DDR3 1600)	8
PCI Express x16 (16 lanes, Gen. 3)	2
PCI Express x16 (4 lanes, Gen.2)	1
PCI Express x8 (4 lanes, Gen.3) ²⁾	2
PCI Slots (32Bit, 33 MHz, Rev. 2.3)	2
SATA (600) / SATA (300) / ATA (100) / Floppy / SAS Gen2	2 / 4 / 0 / 0 / 4 ³⁾
S/PDIF (digital Audio) OUT / IN	- / -
Audio Input / Frontpanel HD Audio (9-Pin)	- / 1
FireWire™ (9-Pin, Intel standard Header)	-
USB 2.0 channels / USB 3.0 channels	6 / 2
Specific socket for USB stick	1
Serial (FIFO, 16550 compatible)	1
FAN PSU ¹⁾ / CPU / AUX1 / AUX2 / AUX3	1 / 1 / 1 / 1 / 1
SMBus (Case Temperature)	-
Intrusion (Case Open) / LCD Status Display Support	1 / -
Parallel (EPP/ECP) Pin Connector	-
Power 24 Pin (BTX) / 4 Pin (12V Processor Supply)	1 / 1
External Connectors	
VGA Sub D / DVI	- / -
Audio Mic. In / Line in / Line out	1 / 1 / 1
S/PDIF (digital Audio, cinch) OUT/ IN	- / -
S/PDIF (digital Audio, optical) OUT	-
LAN (RJ-45)	1
PS/2 Mouse / Keyboard	1 / 1
FireWire™ (6-Pin, IEEE 1394)	-
USB 2.0 / USB 3.0	6 / -
Serial (RS232) / Parallel (EPP/ECP) ⁴⁾	- / -

1) Not supported by standard Power Supplies 2) PCIe x16 card can be inserted (open connector) 3) Instead of 4 x SATA-300, requires SAS Upgrade ROM

More information

Fujitsu platform solutions

In addition to Fujitsu Mainboards Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

Dynamic Infrastructures

With the Fujitsu Dynamic Infrastructures approach, Fujitsu offers a full portfolio of IT products, solutions and services, ranging from clients to datacenter solutions, Managed Infrastructure and Infrastructure-as-a-Service. How much you benefit from Fujitsu technologies and services depends on the level of cooperation you choose. This takes IT flexibility and efficiency to the next level.

Computing products

www.fujitsu.com/global/services/computing

- PRIMERGY: Industrial standard server
- SPARC Enterprise: UNIX server
- PRIMEQUEST: Mission-critical IA server
- ETERNUS: Storage system

Software

www.fujitsu.com/software/

- Interstage: Application infrastructure software
- Systemwalker: System management software

More information

Learn more about Fujitsu Mainboards, please contact your Fujitsu sales representative, Fujitsu business partner, or visit our website.

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

Fujitsu green policy innovation

Fujitsu Green Policy Innovation is our worldwide project for reducing burdens on the environment. Using our global know-how, we aim to resolve issues of environmental energy efficiency through IT. Please find further information at: www.fujitsu.com/global/about/environment



**Green
Policy
Innovation**

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