Data Sheet

We make sure

FUJITSU SIEMENS COMPUTERS

Industrial Mainboard D2703-S Mini-ITX

AMD M690E & SB600 Chipset for DDR2 800/667 SDRAM Memory (SO-DIMM) and AMD Turion™ 64 X2 Dual Core and Sempron™ Mobile Processors

Enhanced operating temperature range from 0℃ to 60 ℃
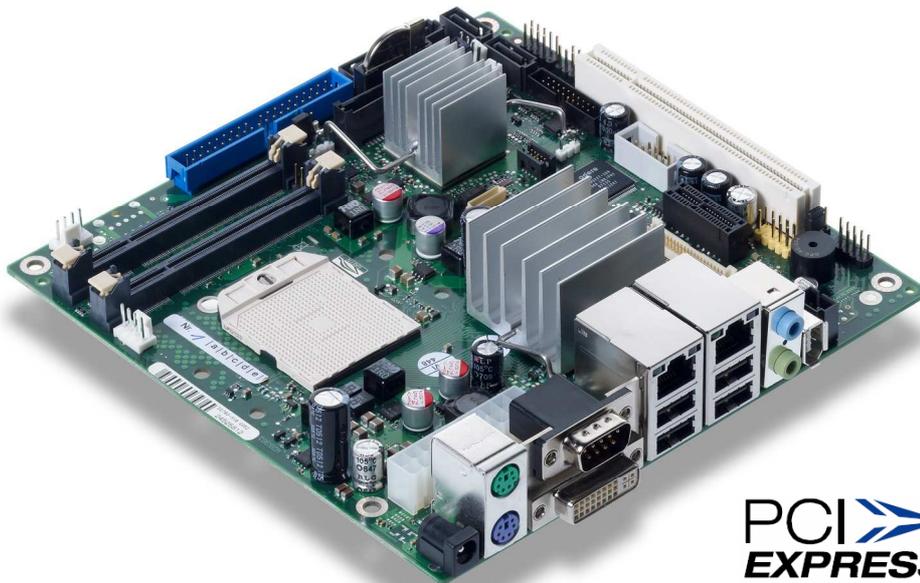
Chipset:
AMD M690E & SB600

Processors:
Mobile Socket S1 with Hyper Transport™

AMD Mobile Turion™ 64 X2 Dual Core
AMD Mobile Sempron™

Power Supply:
Standard ATX Supply or 24V DC Supply

Memory:
DDR2 800/667 SDRAM (SO-DIMM)

Product Features:
ATI Radeon X1250 graphics on board; VGA, DVI
and Dual Channel LVDS support
HD Audio on board
Dual GbE LAN on board
Serial ATA II RAID on board
CF support (for Embedded OS) on board
USB 2.0 and IEE1394 (Firewire 400) on board

Project-based Stuffing Options
Mini-PCI Express Connector (incl. USB interface)
Trusted Platform Module V1.2

Silent Fan   System Guard   Silent Drives   Desk Update   Recovery BIOS   Multi Boot   HDD Password

Board Size	Mini-ITX: 6.7" x 6.7" (170 x 170 mm)
Chipset	AMD M690E & SB600

Memory
2 SO DIMM Sockets (1.8V), 256MB - 8GB, Single Channel or
Dual Channel DDR2 800/667 SDRAM, unbuffered, no ECC
(For details on recommended RAM, please refer to our website)

Processors
AMD Mobile Turion™ 64 X2 Dual Core Processors
AMD Mobile Sempron™ Processors

Mobile Socket S1g1 (PGA 638), max. 35W, HyperTransport™ 1; 800MHz
(For details on supported processors, please refer to our website)

Power Specification
BTX12V (24 Pin) or ATX12V (20 Pin) Power Supply required
Support for Soft-Off Power Supplies or
24V / 5A via DC-connector (Rear I/O connector or onboard connector)
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 (BTX/ATX only)
required for USB Wake-Up from Save-to-RAM, Save-to-Disk

Power Supply Requirements
for onboard components (worst case)

Source (ATX / BTX)	Voltage	PS Load (min. .) [1]	Tolerance (max)	Mainboard Current (max.)
Main Power Supply	+ 12 V	0.1 A [2]	± 5 %	tbd
	- 12 V	0 A	± 10 %	tbd
	+ 5 V	1 A	± 5 %	tbd
	+ 3.3 V	0.25 A	± 5 %	tbd
Aux. Power	+ 5 V	0 A	± 5 %	2 A
Source				
DC-In	+ 24 V	tbd.	+10% / -15 %	5 A

1) PS must support these minimum load conditions for mainboard incl. processor and memory if there is no power consumption by any additional components (e.g. drives, LVDS, PCI adapters)
2) min. 0.1A for 9W Sempron processor; min. 0.2A for 35W Turion processor

BIOS
Phoenix TrustedCore BIOS Version V6.00
modified and adapted by Fujitsu Siemens Computers; Recovery BIOS, SM-BIOS (DMI), BIOS Update via USB (stable user settings), Quick Boot, Logo Boot, Quiet Boot, Plug & Play, Automatic DRAM and PCI Configuration, BIOS Support for S.M.A.R.T., Advanced Power Management, ACPI S3 (Save-to-RAM), ACPI S4 (Save-to-Disk), Wake on time from S5; Flexible LVDS Support

Security Features
Recovery BIOS, System and BIOS Password, Boot Sequence Control for each SATA / IDE Drive, Serial Port Access Protection, Boot Sector Virus Warning, Write Protection for Flash BIOS. Trusted Platform Module V1.2 optional.

Special Features
Silent Fan	Independent temperature related processor fan and system fan supervision and control
System Guard	View and adjust Silent Fan
Silent Drives	Noise reduction for optical and hard disk drives
Recovery BIOS	Restores a corrupted BIOS
Desk Update	Simple driver update with Driver&Utilities DVD
Multi Boot	Comfortable boot from any boot device

Designed for Industrial Applications
Longlife components for 24 / 7 use in industrial applications
Tin-plated PCB for improved durability of PCB surface
Revision control & Extended Lifetime (up to 5 Years)
Enhanced operating temperature range (0℃ - 60℃) [1]

External Connectors

Mouse　　COM1　　LAN1　　LAN2　Audio

DC-IN Keyboard　DVI-I　　　USB　　　USB Audio Firewire
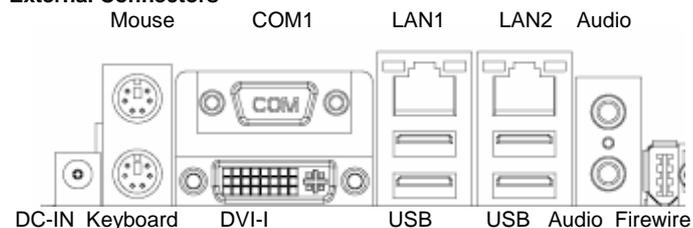
Graphics
Integrated ATI Radeon X1250 graphics; shared memory (up to 256MB); DirectX 9 compliant; DVI, VGA and Dual Channel LVDS support

Audio
Realtek ALC262 (HD Audio); HW 3D Stereo Enhancement; SW Wavetable Synthesis Support

LAN
Dual Realtek RTL8111C 10/100/1000 Ethernet controller

Drives
1 ATA 133 Interface for 1 Drive
4 Serial ATA II 300 Interfaces (max 3 GBit/s); up to 4 Drives; RAID 0/1/10
1 CF Interface (Typ I)

Features	D2703-S
Chipset	AMD M690E & SB600
Board Size	Mini-ITX
VGA [2] / DVI / LVDS	✓ / ✓ / ✓
Stereo Audio / Multichannel Audio	✓ / -
Buzzer / int. Speaker Support	✓ / -
Dual LAN Gbit / 100 Mbit / 10 Mbit	✓ / ✓ / ✓
LAN ASF / AoL / WoL / Boot	- / - / ✓ / ✓
SATA / ATA / RAID	✓ / ✓ / ✓
FireWire™ / USB 2.0	✓ / ✓
FAN monitored & controlled CPU/AUX1/AUX2	✓ / ✓ / ✓
TEMP monitored CPU/ONB1/ONB2/OFFB	✓ / ✓ / ✓ / -

Special Features

Silent Fan / Silent Fan LT / System Guard / Silent Drives	✓ / - / ✓ / ✓
Recovery BIOS / Desk Update / Multi Boot / Safe Standby	✓ / ✓ / ✓ / -
HDD Password	✓
Boot Logo Option	✓

Internal Connectors

DIMM Sockets (DDR2 800/667, SO-DIMM)	2
PCI Express x16 Slot for Graphics Card	-
PCI Express x1 Slot	1
PCI Slot (32Bit, 33 MHz, Rev. 2.3)	1
SATA (300) / ATA (133) / Floppy / CF Card	4 / 1 / - / 1
S/PDIF (digital Audio) OUT / IN	1 / -
CD Audio Input	-
Frontpanel Audio (9-Pin) AC'97 / Azalia [3]	- / 1
FireWire™ (9-Pin, Intel standard header)	1
USB (2.0, ~480 MB/s; 2 channels per connector)	2
Serial (FIFO, 16550 compatible)	1
FAN CPU / System (AUX1) / System (AUX2) [4]	1 / 1 / 1
SMBus (Case Temperature) / Intrusion (Case Open)	- / -
LVDS Dual Channel / Backlight Inverter	1 / 1
Feature Connector (General Purpose I/O, IrDA)	1
Frontpanel (Power Switch, LEDs, Intel 10 pin header)	1
Onboard Power Output (+5V/+12V) for drives	1
Onboard (internal input) 24V DC-In 24V / 5A [5]	1
Power 20 pin (ATX) / 4 pin (12V processor supply)	1 / -

External Connectors

VGA Sub D [2] / DVI-I	- / 1
Audio In / Line out (or driver configuration)	1 / 1
S/PDIF (digital Audio) OUT / IN	- / -
LAN (RJ-45)	2
PS/2 Mouse / Keyboard	1 / 1
FireWire™ (6-Pin, IEEE 1394)	1
USB (2.0, ~480MB/s)	4
Serial (RS232, FIFO, 16550 compatible)	1
DC-IN (external input) 24V / 5A [5]	1
Parallel (EPP/ECP)	-

1) Forced cooling required, see technical documentation for detailed requirements
2) Via optional DVI-I / VGA interface connector
3) Support for AC´97 audio frontpanel possible via BIOS Setup option
4) All fan connectors = 4 pin PWM　　5) Not for simultaneous use!