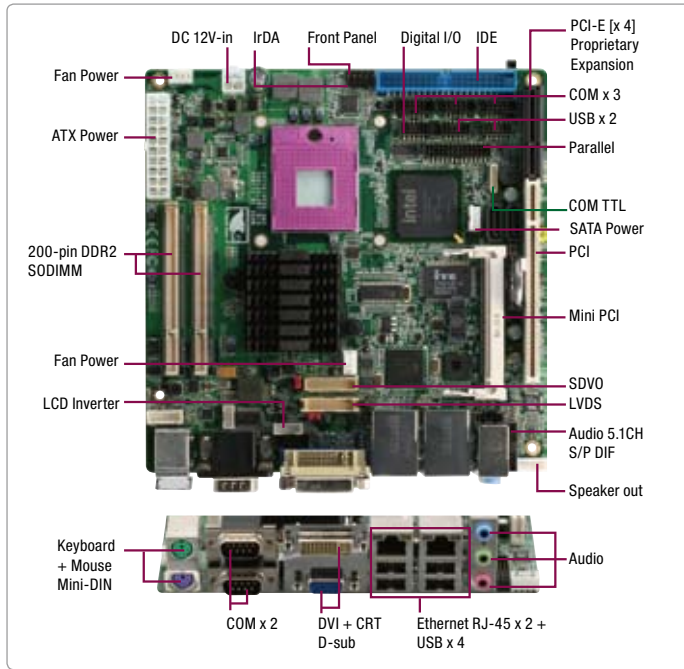


EMB-9658T

Embedded Motherboard with Intel® Core™ 2 Duo/ Celeron® M (Socket-P Based) Processor

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Embedded & Industrial Motherboards



Features

- Intel® Core™ 2 Duo/ Celeron® M (Socket-P Based) Processor
- Intel® GME965 + ICH8M (-E Optional For RAID)
- SODIMM DDR2 533/667 Memory, Max. 4 GB
- Gigabit Ethernet x 2
- 18/24-bit Dual-Channel LVDS, DVI/CRT, SDVO Connector For 2nd 18/24-bit Dual-Channel LVDS/DVI
- HD 5.1CH Audio
- SATA 3.0Gb/s x 2, EIDE x 1, CompactFlash™
- USB2.0 x 8, COM x 5, Parallel x 1, 8-bit Digital I/O
- PCI x 1, Mini PCI x 1 & PCI-Express [x4] x 1 (Through Riser Card)
- DC12V/ ATX
- SATA Power Connector Onboard x 1, Optional RAID 0 & 1, TPM, 6th RS-232



Specifications

System	
Form Factor	Mini-ITX
Processor	Intel® Core™ 2 Duo/ Celeron® M (Socket-P based) Processor
System Memory	200-pin DDR2 SODIMM x 2, Max. 4 GB (DDR2 533/667)
Chipset	Intel® GME965 + ICH8M (-E optional for RAID)
I/O Chipset	ITE8712
Ethernet	Intel® 82566MM/82573L for 10/100/1000Base-TX, RJ-45 x 2
BIOS	Award Plug & Play SPI BIOS - 2 MB ROM
Wake on LAN	Yes
Watchdog Timer	ITE. IT8712F/KX-L
H/W Status Monitoring	Supports power supply voltages and temperature monitoring
Expansion Interface	PCI x 1, Mini PCI x 1 & PCI-Express [x4] slot x 1 (through Riser card)
Battery	Lithium battery
Power Requirement	DC 12V / ATX
Power Consumption (Typical)	T7500 2.2 GHz, DDR2 800 2 GB 3.81A@-12V (DC 12V PW)
Board Size	6.7" (L) x 6.7" (W) (170mm x 170mm)
Gross Weight	1.1lb (0.5kg)
Operating Temperature	32°F ~ 140°F (0°C ~ 60°C)
Storage Temperature	-40°F ~ 176°F (-40°C ~ 80°C)
Operating Humidity	0% ~ 90% relative humidity, non-condensing
MTBF (Hours)	54,000
Display	
Supports LCD/CRT, LCD/DVI, CRT/DVI, Dual Simultaneous/ Dual View Displays	
Chipset	Intel® GME965 integrated
Memory	Shared system memory up to 384 MB/DVMT 4.0
Resolutions	Up to 2048 x 1536 (QXGA) @ 60 Hz for CRT Up to 2048 x 1536 (QXGA) for LCD
LCD Interface	Up to 24-bit dual-channel LVDS
DVI	DVI-I x 1
SDVO	SDVO x 1
I/O	
Storage	EIDE x 1 (shared signals with CompactFlash™), SATA 3.0Gb/s x 2, SATA Power x 1
Serial Port	RS-232 x 4, RS-232/422/485 x 1, TTL x 1
Parallel Port	SPP/ EPP/ ECP mode
USB	USB2.0 x 8
PS/2 Port	Keyboard x 1, Mouse x 1
Digital I/O	Support 8-bit (Programmable)
IrDA	One IrDA Tx/Rx header
Audio	HD 5.1 channel

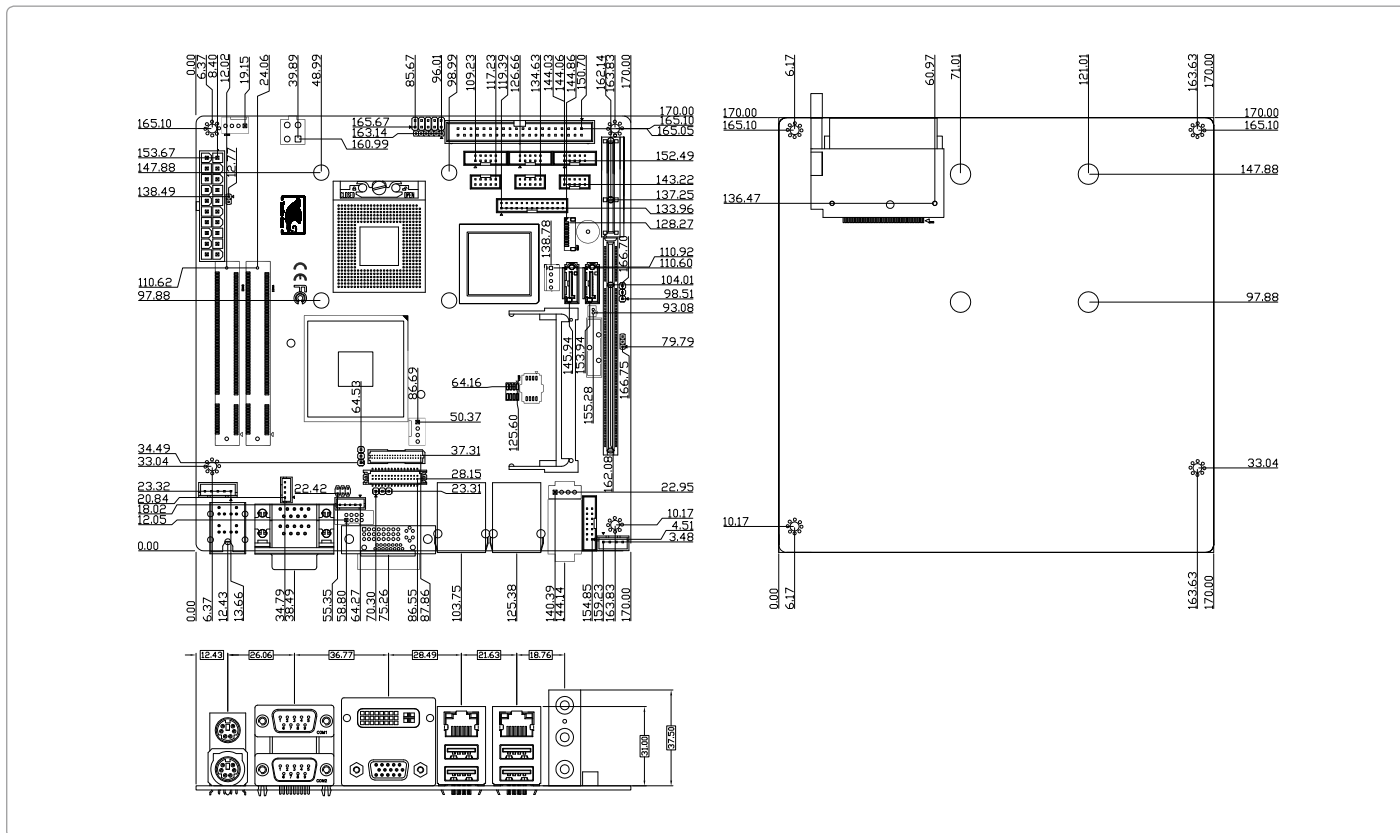
Packing List

- 1709070500
SATA Cable
- 1702151200
Onboard SATA Power Cable
- M206908T00
Metal I/O Bracket
- Product CD
- EMB-9658T

EMB-9658T

Dimension

Unit: mm



Ordering Information

Part Number	CPU	RAM	Fan/Fanless	Display	Storage	LVDS	LAN	USB	RS-232	RS-232/422/485	Expansion Slot	Power	Temp.
TF-EMB-9658T-A10	Socket	SODIMM	Fan	VGA/LVDS/DVI-I	SATA2 x 2, EIDE x 1, CF x 1	18b/24b, 2 CH	GbE x 2	8	4	1	Mini PCI x 1 + PCI-E[x4] x 1	ATX	0°C ~ 60°C
TF-EMB-9658T-A10-01	Socket	SODIMM	Fan	VGA/LVDS/DVI-I	SATA2 x 2, EIDE x 1, CF x 1	18b/24b, 2 CH	GbE x 2	8	4	1	Mini PCI x 1 + PCI-E[x4] x 1	+12V/DC	0°C ~ 60°C
TF-EMB-9658T-A10-02 (Bulk)	Socket	SODIMM	Fan	VGA/LVDS/DVI-I	SATA2 x 2, EIDE x 1, CF x 1	18b/24b, 2 CH	GbE x 2	8	4	1	Mini PCI x 1 + PCI-E[x4] x 1	ATX	0°C ~ 60°C
TF-EMB-9658T-A10-03 (Bulk)	Socket	SODIMM	Fan	VGA/LVDS/DVI-I	SATA2 x 2, EIDE x 1, CF x 1	18b/24b, 2 CH	GbE x 2	8	4	1	Mini PCI x 1 + PCI-E[x4] x 1	+12V/DC	0°C ~ 60°C

Optional Accessories

- **17592SPI30**
Cooler, Silver, 60mm x 60mm x 23mm, Dataguard
- **M16666006**
Metal, A1, Heat Sink, Silver, 60mm x 60mm x 25.4mm for Socket-478
- **1701400453**
IDE Cable, 40 p, 45cm, 2.54mm IDC
- **1700140164**
Audio 5.1 Channel/ SPDIF, 16cm
- **1701260200**
Printer Cable 20cm
- **1701100206**
COM Port Cable 20cm
- **1709100201**
USB Cable, 20cm, With Bracket
- **TF-PER-R16P-A10**
Riser Card, PCI + PCI-E [x4]
- **TF-PER-V03B-A10**
SDVO to DVI Module
- **TF-PER-V04B-A10**
SDVO to LVDS Module
- **TF-PER-1110-A10**
Riser Card for PCI, 2-slot
- **TF-PER-T158**
6th RS-232 Card For EMB-9458/9658