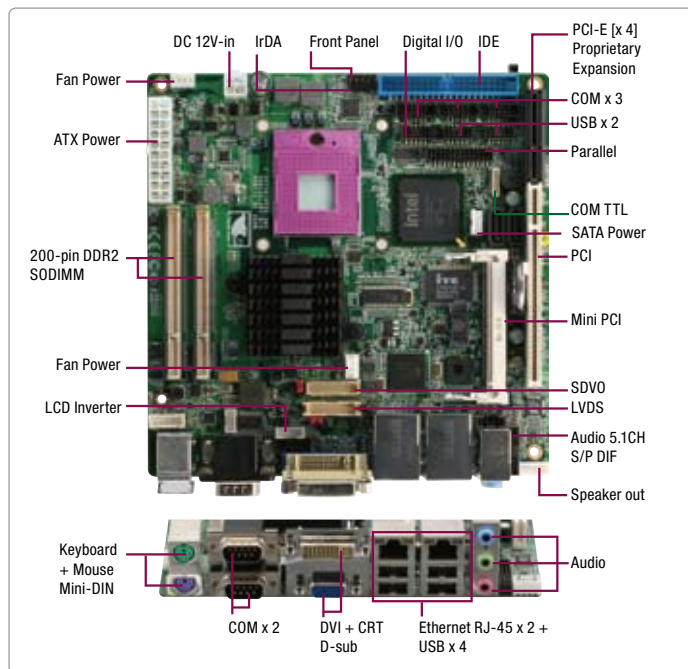


EMB-9658T

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



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 (00C ~ 600C) |
| Storage Temperature | -40°F ~ 176°F (-400C ~ 800C) |
| 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 | Supports 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 |

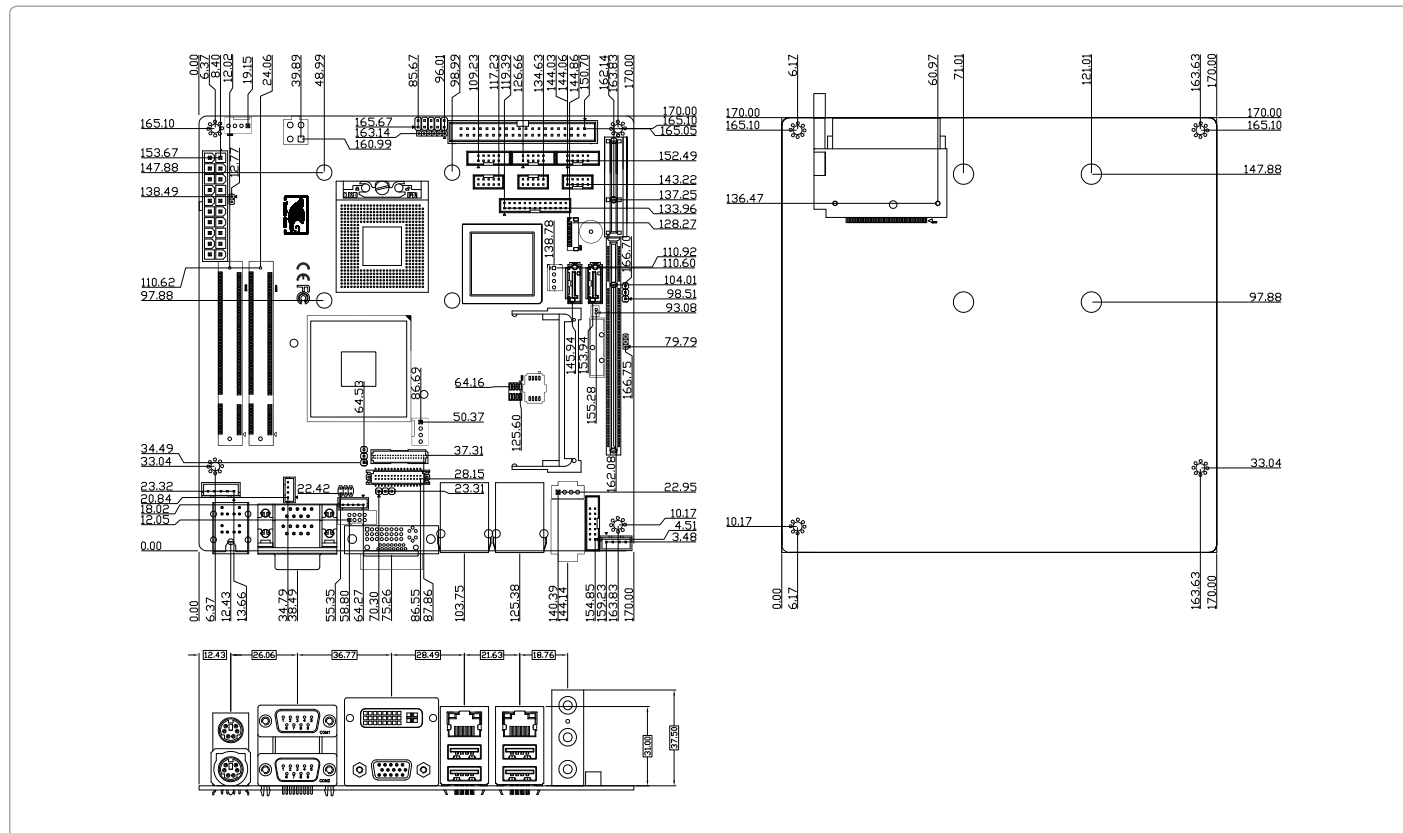
Packing List

- 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