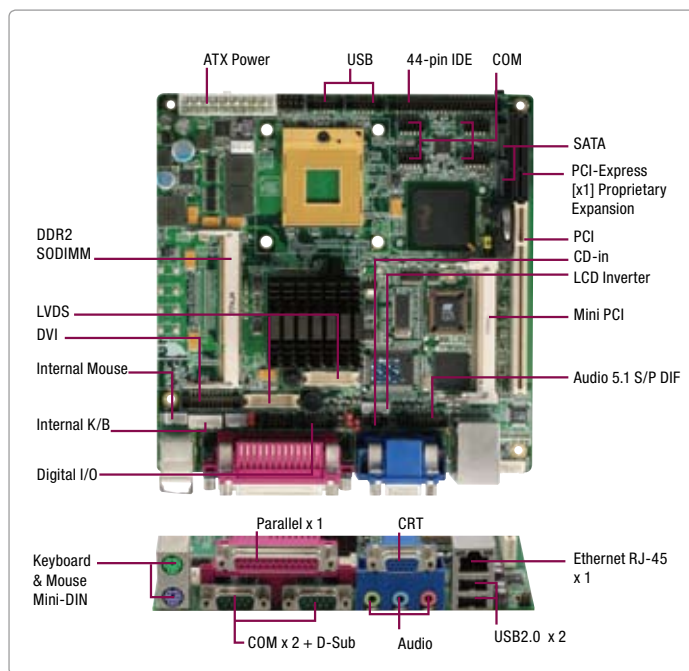


# EMB-945T Rev. B

Embedded Motherboard with Intel® Core™ 2 Duo/ Core™ Duo/ Celeron® M Processor

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Embedded & Industrial Motherboards



## Features

- Socket-478M or Onboard Intel® Core™ 2 Duo/ Core™ Duo/ Celeron® M Processor
- Intel® 945GME + ICH7M
- SODIMM DDR2 400/533/667 Max. 4 GB
- Gigabit Ethernet x 1 (Intel® 82573L)
- Up To 24-bit Dual-channel LVDS LCD
- AC97 5.1CH Audio
- Type 2 CompactFlash™, SATA 3.0Gb/s x 2 (Optional RAID 0 & 1), EIDE x 1
- COM x 6, Parallel x 1, USB2.0 x 6, 8-bit Digital I/O x 1
- PCI x 1, PCI-Express [x1] x2 (Through Riser Card), Mini PCI x 1
- ATX
- LCD Inverter Connector With Brightness Control



## Specifications

| System                      |  |
|-----------------------------|--|
| Form Factor                 | Mini-ITX   |
| Processor                   | Supports Socket-478M or onboard Intel® Core™ 2 Duo/ Core™ Duo/ Celeron® M Processor up to 2.16 GHz, FSB 533/667  |
| System Memory               | 200-pin DDR2 SODIMM x 2, Max. 4 GB (DDR2 400/533/667)  |
| Chipset                     | Intel® 945GME + ICH7M  |
| I/O Chipset                 | ITE 8712 + Fintek F81216D  |
| Ethernet                    | Intel® 82573L, 10/100/1000Base-TX, RJ-45 x 1   |
| BIOS                        | Award Plug & Play BIOS – 1MB ROM   |
| Wake On LAN                 | Yes  |
| Watchdog Timer              | ITE 8712   |
| H/W Status Monitoring       | Supports power supply voltages, fan speed and temperature monitoring   |
| Expansion Interface         | Mini PCI x 1, PCI x 1, PCI-Express [x1] x 1  |
| Power Requirement           | ATX (+3.3V, +5V, +12V)   |
| Power Consumption (Typical) | Intel® T7400 2.16 GHz, DDR2 667 1 GB<br>2.59A@+12V, 2.88A@+5V, 0.6A@+3.3V  |
| Board Size                  | 6.7"(L) x 6.7"(W) (170 mm x 170 mm)  |
| Gross Weight                | 1.2 lb (0.5 Kg)  |
| 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)                | 70,000   |
| Display                     |  |
| Chipset                     | Intel® 945GME  |
| VGA/LCD Controller          | 1. Intel® 945GME integrated Graphics, shared memory up to 224 MB with DVMT; LCD supports 24-bit dual-channel LVDS<br>2. Chrontel 7307 for DVI support<br>3. Chrontel 7308 for 24-bit Dual-channel LVDS support |
| DVI                         | DVI-D in pin-header  |
| I/O                         |  |
| Storage                     | EIDE x 1 (UDMA 33 for one device), SATA 3.0Gb/s x 2<br>Type 2 CompactFlash™ x 1  |
| Serial Port                 | RS-232 x 5, RS-232/422/485 x 1,  |
| Parallel Port               | SPP/ EPP/ ECP mode   |
| USB                         | USB2.0 x 6   |
| PS/2 Port                   | Keyboard x 1, Mouse x 1  |
| Digital I/O                 | Supports 8-bit (Programmable)  |
| IrDA                        | One IrDA Tx/Rx header  |
| Audio                       | Mic-in, Line-in, Line-out, CD-in, S/PDIF in/out  |

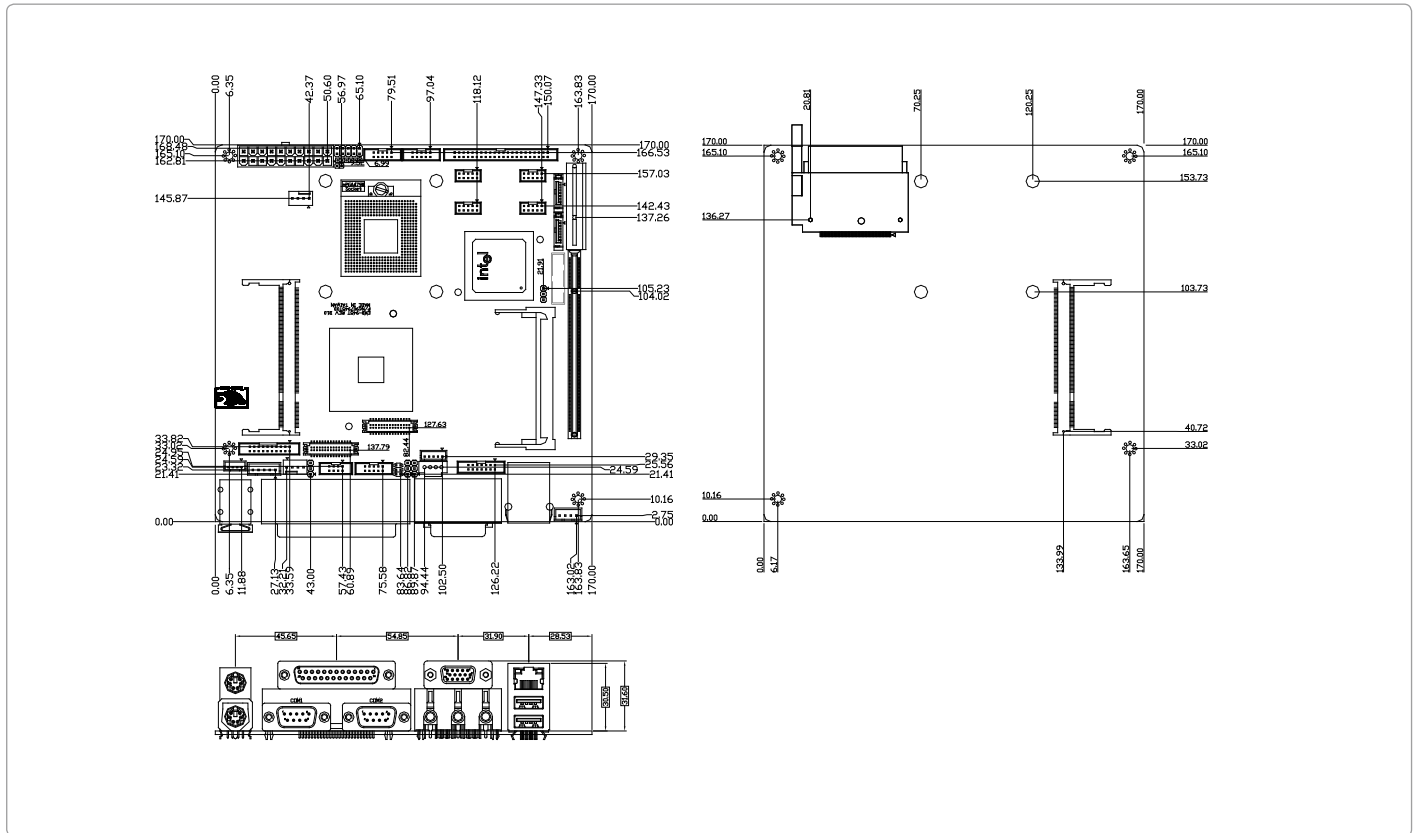
## Packing List

- **1701440500**  
44-pin ATA33 Cable (Optional for TF-EMB-945T-A10-02)
- **9657666600**  
Jumper Cap
- **1709070500**  
SATA Cable
- **1702150150**  
SATA Power Cable
- **M20852T000**  
Metal I/O Bracket
- **Product CD**
- **EMB-945T Rev.B**

# EMB-945T Rev. B

## 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-945T-B10 | Socket | SODIMM | Fan         | VGA/LVDS/DVI-I | SATA2 x 2,<br>EIDE x 1,<br>CF x 1 | 24-bit Dual-channel | GbE x 1 | 6   | 5      | 1              | PCI-E[x1] x 1, Mini PCI x 1,<br>PCI x 1 | ATX   | 0°C ~ 60°C |

## Optional Accessories

- TF-PER-R16P-A10**  
 Riser Card, PCI + PCI-Express [x4] for Mini-ITX
- TF-PER-C10L-A10**  
 Mini PCI 10/100Base-TX Ethernet Module with Realtek 8100C
- TF-PER-C10L-A10-01**  
 Mini PCI Gigabit Ethernet Module with Realtek 8110S
- TF-PER-C10L-A10-02**  
 Mini PCI 10/100Base-TX Ethernet Module with Intel® 82551QM
- TF-PER-C10L-A10-03**  
 Mini PCI Gigabit Ethernet Module with Intel® 82541GI
- TF-PER-C20S-A10**  
 Mini PCI 2-port SATA Module Rev. A1.0
- TF-PER-C30F-A10**  
 Mini PCI 3-port IEEE 1394a Module
- TF-PER-C40C-A10**  
 Mini PCI 2-port RS-232 Module Rev. A1.0
- TF-PER-C40C-A10-01**  
 Mini PCI 4-port RS-232 Module Rev. A1.0
- TF-PER-1110-A10**  
 Riser Card for PCI, 2-slot
- TF-PER-C102**  
 PCI-Express Dual Ethernet Board
- M166666006**  
 Metal, A1, Heat sink, Silver, 60 x 60 x 25.4mm for socket 478
- 17592SPI30**  
 Cooler, Silver, 60 x 60 x 23, Dataguard
- TF-PER-K002**  
 Cable Kit for EMB-945T Rev.B