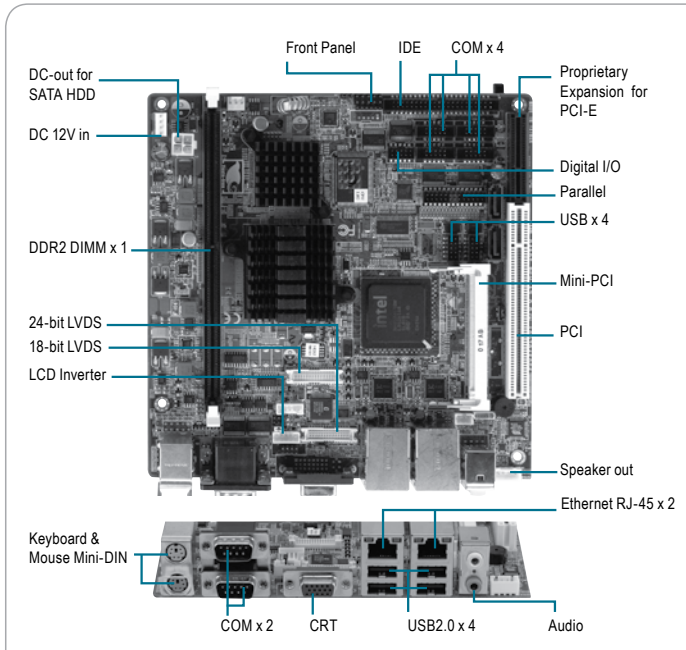


# EMB-9459T Rev. A2.0

Embedded Motherboard With Onboard Intel® Atom™ N270 Processor

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Embedded Motherboards



## Features

- Onboard Intel® Atom™ N270 Processor (Fanless)
- Intel® 945GSE + ICH7M
- DIMM DDR2 400/533, Max. 2 GB
- Gigabit Ethernet x 2
- CRT, 18-bit Dual-channel LVDS + 24-bit Dual-channel LVDS
- HD 5.1CH Audio S/P DIF, Stereo Amplifier
- SATA 1.5Gb/s x 2, EIDE x 1 & CompactFlash™ Type 2 x 1
- USB2.0 x 8, COM x 6, Parallel x 1
- PCI x 1, Mini-PCI x 1, Mini Card x 1, PCI-E [x1] (Through Riser Card)
- +12V Only Operation
- Onboard SATA Power Connector x 1
- Optional TPM



## Specifications

| System                      |  |
|-----------------------------|--|
| Form Factor                 | Mini-ITX   |
| Processor                   | Onboard Intel® Atom™ N270 Processor 1.6 GHz, FSB 533 MHz                                   |
| System Memory               | 240-pin DDR2 DIMM x 1, Max. 2 GB (DDR2 400/533)  |
| Chipset                     | Intel® 945GSE + ICH7M  |
| I/O Chipset                 | ITE8712  |
| Ethernet                    | 10/100/1000Base-TX x 2, RTL8111C   |
| BIOS                        | Award 8 MB   |
| Wake On LAN                 | Yes  |
| Watchdog Timer              | 255 Levels   |
| H/W Status Monitoring       | Supports power supply voltages and temperature monitoring                                  |
| Expansion Interface         | Mini-PCI x 1, PCI-E [x1] slot x 2 in PCI-E [x4] socket (through Riser Card), Mini-card x 1 |
| Battery                     | Lithium battery  |
| Power Requirement           | DC 12V   |
| Power Consumption (Typical) | Intel® Atom™ N270<br>1.3A @+12V  |
| Board Size                  | 6.7" (L) x 6.7" (W) (170mm x 170mm)  |
| Gross Weight                | 1.2 lb (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)                | 66,000   |
| Display                     |  |
|                             | Supports CRT/LCD, CRT/DVI, LCD/DVI simultaneous/ dual view displays                        |
| Chipset                     | Intel® 945GSE integrated   |
| Memory                      | Shared system memory up to 224 MB / DVMT3.0  |
| Resolutions                 | Up to 2048 x 1536 @ 32bpp colors for CRT<br>Up to 1600 x 1200 @ 18bpp colors for LCD       |
| LCD Interface               | CRT, LVDS 18/24 bit Dual-channel   |
| I/O                         |  |
| Storage                     | EIDE x 1 (UDMA-100 for one device), SATA 1.5Gb/s x 2, CompactFlash™ x 1                    |
| Serial Port                 | RS-232 x 5, RS-232/422/485 x 1   |
| Parallel Port               | SPP/EP/ECP mode  |
| USB                         | USB2.0 x 8   |
| Digital I/O                 | Supports 8-bit (programmable)  |
| IrDA                        | One IrDA Tx/Rx header  |
| PS/2 Port                   | Keyboard x 1, Mouse x 1  |
| Audio                       | —  |

## Packing List

- 1709070500  
SATA Cable
- 1702151200  
Onboard SATA Power Cable
- 9657666600  
Jumper Cap
- M209459000  
Metal I/O Bracket
- Quick Installation Guide
- Product CD
- EMB-9459T Rev. A2.0

## Ordering Information

- **TF-EMB-9459T-A20**  
Mini-ITX, Intel® N270, 2 LCD, DDR2, 2 Gigabit Ethernet, Audio, 6 COM, 8 USB, CompactFlash™, Mini-PCI, PCI, PCI-E, Mini Card, DC 12V, A2.0
- **TF-EMB-9459T-A20-01**  
Mini-ITX, Intel® N270, 2 LCD, DDR2, 2 Gigabit Ethernet, Audio, 6 COM, 8 USB, CompactFlash™, Mini-PCI, PCI, PCI-E, Mini Card, DC 12V, A2.0, Bulk Pack P

## Optional Accessories

- 1701440500  
IDE Cable, 44 p, 2.54 mm, 30 + 20 cm, IDC
- 1709100208  
USB Cable
- 1701260200  
Printer Cable
- 1701100206  
COM Cable
- 1709030150  
SPDIF Cable
- 1700060156  
Audio Cable Support 5.1CH
- TF-PER-R16P-A10  
Riser Card, PCI + PCI-E [x4]
- TF-PER-V30C-A11  
Mini-PCI Single Channel Capture Module with Philips SAA7135
- TF-PER-1110-A10  
Riser Card for PCI, 2-slot