



Supports
65nm Intel®
Core™ Duo /
Core™ 2 Duo
/ Celeron® M
CPU

Features

- Supports 65nm Intel® Core™ Duo/ Core™ 2 Duo/ Celeron® M CPU
- Intel® 945GME/ ICH7-M Chipset
- One 200-pin SODIMM Up to 2GB DDR2 400/ 533/ 667 SDRAM
- Dual View, Dual-channel 18/ 24-bit LVDS
- Intel® High Definition Audio
- Marvell 88E8053 Gigabit Ethernet
- 4 PCI, 1 PCIe16, 3 PCIe1, 2 SATA, 8 USB, 8-bit GPIO
- Type 2 Pin-out

Specifications

System

| | |
|------------------|--|
| • CPU | Intel® Core™ 2 Duo/ Core™ Duo/ Celeron® M CPU Socket Onboard Intel® Core™ 2 Duo L7400 1.5GHz CPU/ Onboard Intel® Celeron® M ULV 423 1.06GHz CPU Note: Available in Different CPU Speed by Request |
| • BIOS | Award 4Mbit Flash BIOS |
| • System Chipset | Intel® 945GME/ ICH7-M |
| • System Memory | One 200-pin SODIMM Socket Supports Up to 2GB DDR2 400/ 533/ 667 SDRAM |
| • Expansion | 4 x PCI (PCI Rev. 2.3 Compliant), 3 x PCIe1, 1 x PCIe16 |

I/O

| | |
|-------|------------------------------------|
| • MIO | 1 x EIDE (Ultra DMA 100), 2 x SATA |
| • USB | 8 x USB 2.0 |
| • DIO | 4-bit GPI and 4-bit GPO |

Display

| | |
|--------------------|--|
| • Chipset | Intel® 945GME GMCH Integrated Extreme Graphics Controller |
| • Display Memory | Intel® DVMT 3.0 Supports Up to 224MB Shared Video Memory |
| • Resolution | CRT Mode: 2048 x 1536 @ 32bpp (75Hz) LCD/ Simultaneous Mode: 1600 x 1200 @ 16bpp (60Hz) |
| • Multiple Display | CRT + LVDS |
| • LVDS Interface | Dual-channel 18/ 24-bit LVDS |

Audio Interface

| | |
|-------------|------------------------------|
| • Chipset | Intel® ICH7-M |
| • Interface | Intel® High Definition Audio |

Ethernet

| | |
|----------------------|--|
| • LAN | Marvell 88E8053 |
| • Ethernet Interface | 1000 Base-Tx Gigabit Ethernet Compatible |

Mechanical & Environmental

| | |
|-------------------------|--|
| • Power Requirement | +12V @ 2.28A, +5Vsb @ 0.43A (with Intel® Core™ Duo T2300 2.0GHz & 1GB DDR2 533 SDRAM) |
| • Power Type | ATX |
| • Operating Temperature | 0 ~ 60°C (32 ~ 140°F) |
| • Storage Temperature | -40 ~ 75°C (-40 ~ 167°F) |
| • Operating Humidity | 0% ~ 90% Relative Humidity, Non-condensing |
| • Size (L x W) | 5" x 3.7" (125mm x 95mm) |
| • Weight | 0.44lbs (0.2kg) |

Ordering Information

• ESM-945GME

Intel® Core™ 2 Duo/ Core™ Duo/ Celeron® M COM Express Module with Intel® 945GME + ICH7-M Chipset

• ESM-945GME-L74

Intel® Core™ 2 Duo L7400 1.5GHz CPU COM Express Module with Intel® 945GME + ICH7-M Chipset

• ESM-945GME-423

Intel® Celeron® M ULV 423 1.06GHz CPU COM Express Module with Intel® 945GME + ICH7-M Chipset

• EEV-EX13

COM Express Carrier Board for Evaluation

• ACC-HSP-2852-1R

Heat Spreader for ESM-945GME/ GME965 Series with PGA Type, 125 x 95 x 11mm

• ACC-HSP-2852-2R

Heat Spreader for ESM-945GME/ GME965 Series with BGA Type, 125 x 95 x 11mm