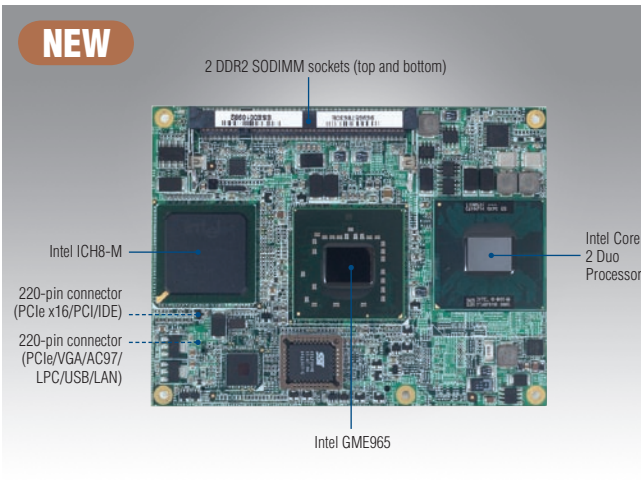


SOM-5786

Intel® Core™ 2 Duo GME965 COM-Express CPU Module

NEW



Features

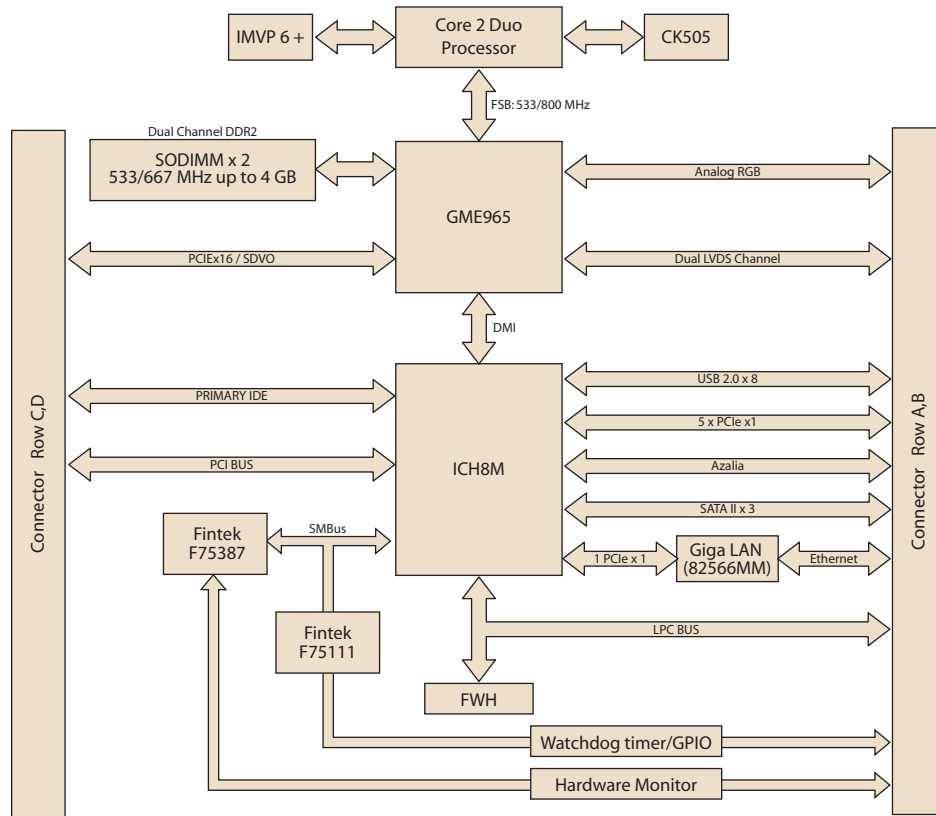
- Embedded Intel® Core™ 2 Duo/Celeron® M processor
- Intel GME965/ICH8-M Chipsets
- Supports dual DDR2 SODIMM up to 4 GB
- Mobile Intel GMA X3100 3D/2D engine
- Display type: 2 x 24-bit LVDS/VGA/2 SDVO or PCIe x16
- Intel 10/100/1000 Mbps LAN
- Expansion: 5 PCIe x1, 4 PCI master, LPC
- 8 x USB 2.0, 3 SATAII, 1 EIDE, 8-bit GPIO



Specifications

| | | | |
|--------------------------------------|---|---|---|
| Form Factor | COM-Express, Module Pin-out Type II | | |
| Processor System | CPU | Intel Core 2 Duo Processor | |
| | Front Side Bus | 533/800 MHz | |
| | System Chipset | Intel GME965 GMCH/ICH8-M | |
| | BIOS | AWARD 4 Mbit Flash BIOS | |
| Memory | Technology | DDR2 533/667 MHz | |
| | Max. Capacity | up to 4 GB | |
| | Socket | 2 x 200-pin SODIMM sockets | |
| Display | Chipset | Intel GME965 | |
| | VRAM | DVMT 4.0 supports up to 384 MB | |
| | Graphics Engine | Mobile Intel GMA X3100 3D/2D engine | |
| | LCD | 2 x 24-bit LVDS | |
| | VGA | up to 2048 x 1536 | |
| | SDVO | 2 SDVO Ports | |
| | Dual Display | CRT + LCD (Note: SDVO function is supported by customized BIOS) | |
| Ethernet | Chipset | Intel 82566MM Gigabit Ethernet | |
| | Speed | 10/100/1000 Mbps | |
| WatchDog Timer | 256 timer intervals, from 0 to 255 sec or min setup by software, jumperless selection, generates system reset | | |
| Expansion | LPC, PCIe x16, 5 PCIe x1, 4 PCI master | | |
| I/O | PATA | 1 x EIDE (UDMA 100) | |
| | SATA | 3 x SATAII | |
| | USB | 8 x USB 2.0 | |
| | Audio | High definition audio interface | |
| | GPIO | 8-bit GPIO | |
| Power | Power Type | ATX, AT | |
| | Power Supply Voltage | +12 V and +5 VSB for ATX, +12V for AT | |
| | Power Consumption (Typical) | Typical: (1 GB DDR2 667) | +12 V @ 1.22 A (Intel Core 2 Duo U7500) |
| | | +12 V @ 1.56 A (Intel Core 2 Duo T7500) | |
| Power Consumption (Max, test in HCT) | Max: (1 GB DDR2 667) | +12 V @ 1.64 A (Intel Core 2 Duo U7500) | |
| | +12 V @ 3.03 A (Intel Core 2 Duo T7500) | | |
| Environment | Operating Temperature | 0 ~ 60° C (32 ~ 140° F) | |
| | Operating Humidity | 0% ~ 90% relative humidity, non-condensing | |
| Mechanical | Dimensions | 125 x 95 mm (4.92" x 3.74") | |

Board Diagram



Ordering Information

| Part No. | CPU | L2 Cache | Chipset | LVDS | VGA | SDVO | Giga LAN | HD Audio | PCIe x 16 | PCIe x 1 | PCI | USB 2.0 | SATA | LPC | SMBUS | ATX Power | AT Power | Thermal Solution | Operating Temp. |
|------------------|---------------------------------|----------|--------------|------------|-----|------|----------|----------|-----------|----------|-----|---------|------------|-----|-------|-----------|----------|------------------|-----------------|
| SOM-5786FG-00A1E | Socket 478 | CPU | Intel GME965 | 2 x 24-bit | Yes | 2 | 1 | Yes | 1 | 5 | 4 | 8 | 3 x SATAII | 1 | 1 | Yes | Yes | Active | 0 - 60° C |
| SOM-5786FG-S0A1E | Intel Core 2 Duo U7500 1.06 GHz | 4 MB | Intel GME965 | 2 x 24-bit | Yes | 2 | 1 | Yes | 1 | 5 | 4 | 8 | 3 x SATAII | 1 | 1 | Yes | Yes | Active | 0 - 60° C |
| SOM-5786FG-S6A1E | Intel Core 2 Duo L7500 1.6 GHz | 4 MB | Intel GME965 | 2 x 24-bit | Yes | 2 | 1 | Yes | 1 | 5 | 4 | 8 | 3 x SATAII | 1 | 1 | Yes | Yes | Active | 0 - 60° C |

Development Board

| Part No. | Description |
|-------------------|---|
| SOM-DB5700G-00A2E | Development Board for COM-Express with GLAN |

Optional Accessories

| Part No. | Description |
|----------------|---|
| 1960019182T00B | Semi- Cooler 95 x 125 x 22 mm with 12 V Fan |

Packing List

| Part No. | Description | Quantity |
|------------|--|----------|
| | SOM-5786 CPU Module | 1 |
| | Utility CD | 1 |
| 1960005316 | Heatspreader (SOM-5786FG-00A1E only) | 1 |
| 1960005315 | Heatspreader (SOM-5786FG-S0A1E and SOM-5786FG-S6A1E) | 1 |