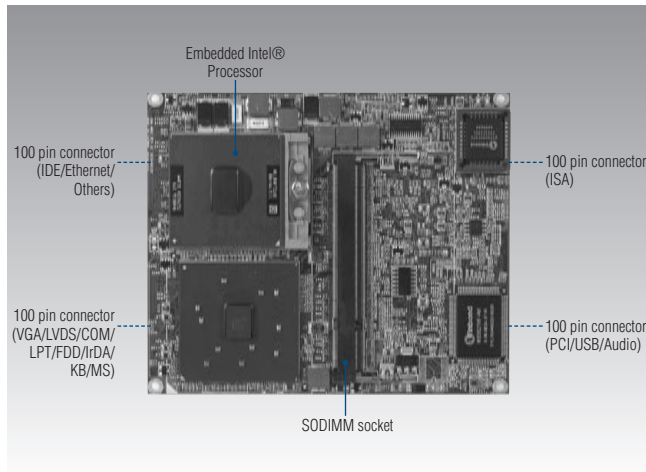


SOM-4481 Series

**Intel® Pentium® M / Celeron® M
Processor SOM-ETX Module with
CPU, VGA/LVDS, Audio & LAN**



Specifications

- **CPU** Embedded Intel Pentium M or Celeron M processor w/64 KB primary cache memory
- **System Memory** 1 x 200-pin SODIMM sockets, support ECC Double Data Rate (DDR) 128 MB to 1 GB, accept 128/256/512/1024 MB DDR200/266/333 DRAM.
- **2nd Cache Memory** 1 or 2 MB on the Pentium M processor or 512 KB on the Celeron M processor
- **System Chipset** Intel 855GME GMCH/ICH4 Chipset 400 MHz PSB
- **BIOS** AWARD™ 4 Mbit Flash BIOS
- **WatchDog Timer** 256 levels timer interval, from 1 to 255 sec or min setup by software, jumperless selection, generates system reset
- **Expansion Interface** Support PCI & ISA interface

I/O

- **MIO** 2 x EIDE (UDMA 66), 1 x LPT/FDD (shared), 1 x Keyboard, 1 x Mouse, 2 x RS-232,
- **IrDA** 115 kbps, IrDA 1.1 compliant.
- **USB** 4 x USB 2.0 compliant ports

Ethernet

- **Chipset** Intel 82562 10/100Mbps Ethernet Chip
- **Ethernet Interface** IEEE 802.3u 100Base-T compatible

Features

- Embedded Intel® Pentium® M/Celeron® M processor
- Supports ECC DDR Memory
- With Vcore two phase design for more stable system
- Four USB 2.0 ports
- Supports dual channel LVDS panels

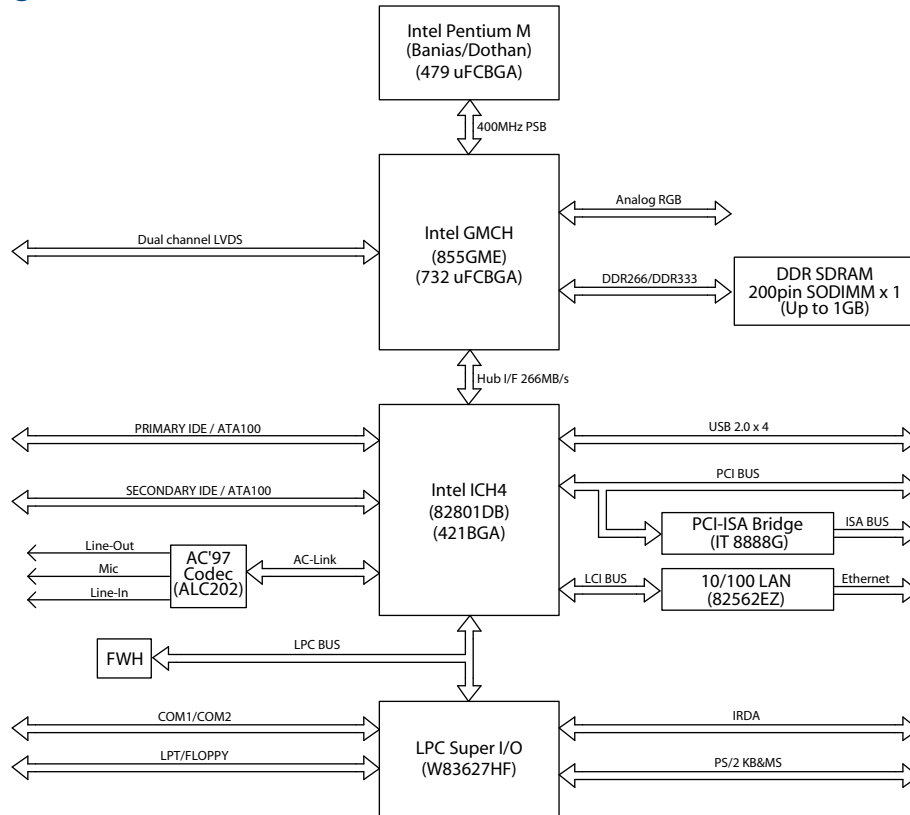
Display

- **Chipset** Intel 855GME
- **Memory Size** Optimized shared memory architecture, supports up to 32 MB frame buffer using system memory
- **Resolution**
 - * CRT Display Mode Pixel resolution up to 1600 x 1200 at 85 Hz and 2048 x 1536 at 75 Hz
 - * LCD Display Mode Dual channel LVDS panel supports up to UXGA panel resolution with frequency range from 25 MHz to 112 MHz

Mechanical and Environmental

- **Dimensions (L x W)** 95 x 114 mm (3.74" x 4.5")
- **Power Supply Voltage** +5 V power only
- **Power Requirement** Max: +5 V @ 4 A,
Typical (256MB DDR333):
+5 V @ 2.64 A (Pentium M LV 1.1 GHz)
+5 V @ 2.53 A (Pentium M LV 738 1.4 GHz)
+5 V @ 2.24 A (Celeron M ULV 373 1.0 GHz)
+5 V @ 3.19 A (Celeron M 320 1.3 GHz)
+5 V @ 2.17 A (Celeron M ULV 600 MHz)
- **Operating Temperature** 0 ~ 60° C (32 ~ 140° F)
- **Operating Humidity** 0% ~ 90% relative humidity, non-condensing

Board Diagram



Ordering Information

Part No.	CPU	Operation temp.
SOM-4481FL-00A3E	Socket 478	0 ~ 60° C
SOM-4481FL-M0A3E	Intel Celeron M ULV 600 MHz	0 ~ 60° C
SOM-4481FL-R0A3E	Intel Celeron M ULV 373 @1.0 GHz	0 ~ 60° C
SOM-4481FL-S0A3E	Intel Pentium M LV 1.1 GHz	0 ~ 60° C
SOM-4481FL-S3A3E	Intel Celeron M 320 @ 1.3 GHz	0 ~ 60° C
SOM-4481FL-S4A3E	Intel Pentium M LV 738 @ 1.4 GHz	0 ~ 60° C
SOM-4481Z-R0A3E	Intel Celeron M ULV 373 @1.0 GHz	-20 ~ 80° C
SOM-4481Z-S0A3E	Intel Pentium M LV 1.1 GHz	-20 ~ 80° C
SOM-4481Z-S4A3E	Intel Pentium M LV 738 @ 1.4 GHz	-20 ~ 80° C
SOM-4481Z2-R0A3E	Intel Celeron M ULV 373 @1.0 GHz	-40 ~ 85° C
SOM-4481Z2-S0A3E	Intel Pentium M LV 1.1 GHz	-40 ~ 85° C
SOM-4481Z2-S4A3E	Intel Pentium M LV 738 @ 1.4 GHz	-40 ~ 85° C