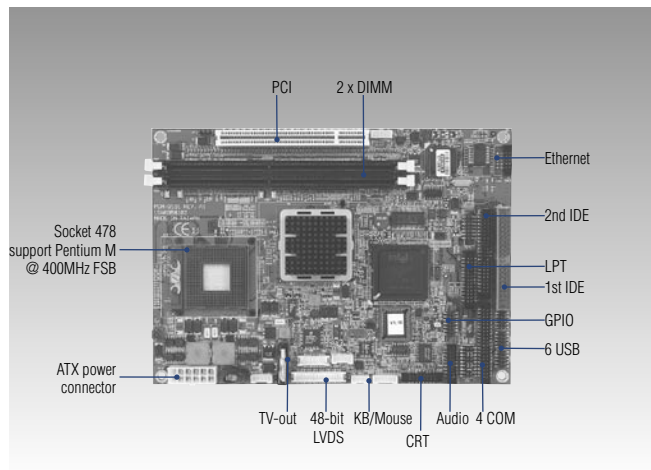


PCM-9581

Onboard Intel® Pentium® M SBC
with Audio, VGA/LCD



Specifications

General

- **CPU**
 - Embedded Intel Pentium M (Banias/Dothan)/Celeron M Celeron M Processor supported
 - Celeron M 600 MHz (512 KB) PCM-9581F-M0A1
 - Pentium M 1.1 GHz PCM-9581F-S0A1, PCM-9581FG-S0A1
 - uFCPGA2 (478 pin) PCM-9581F-00A1, PCM-9581FG-00A1
 - Optional:
 - Pentium M 745 1.8 GHz @ 400 MHz FSB
 - Pentium M 1.6 GHz @ 400 MHz FSB
 - Depends on CPU type from 512 KB to 2 MB
 - Intel 855GME GMCH/ICH4 Chipset
 - AWARD® 512 kbit Flash BIOS
- **2nd Cache Memory**
 - 2 x 184-pin DIMM sockets, support ECC Double Data Rate (DDR) 128 MB to 2 GB, accepts 128/256/512/1024 MB DR200/266/333 DRAM
- **System Chipset**
 - APM 1.2, ACPI Support
- **BIOS**
 - Supports CompactFlash Card TYPE I/II (shared 2nd IDE Channel)
- **System Memory**
 - 255-level timer interval, from 15 sec to 14835 sec, setup by software, jumperless selection, generates system reset
- **Power Management**
 - Supports a PCI2.2 with 32-bit/33 MHz slot and Mini PCI interface
- **SSD**
 - Lithium 3 V/196 mAh
- **WatchDog Timer**
 -
- **Expansion Interface**
 -
- **Battery**
 -
- **I/O**
 -
- **I/O Interface**
 - 2 x EIDE (UDMA 100), 1 x FDD (optional), 1 x K/B, 1 x Mouse, 3 x RS232, 1 x RS232/422/485, 1 x LPT
- **USB**
 - 6 x USB 2.0 compliant ports
- **Audio**
 - ALC202. AC97 3D surround stereo sound
 - Supports Speaker out, CD-input, Line -in, Line-out, Microphone
- **IrDA**
 - SIR115 kbps, IrDA 1.1 Compliant
- **GPIO**
 - 8-bit general purpose input/output
- **Ethernet**
 -
- **Chipset**
 - Intel 82551ER, optional 82551QM, 82540 (Gigabit)
- **Speed**
 - 10/100 Mbps (PCM-9581F), 10/100/1000 Mbps (PCM-9581FG)

Features

- Embedded Intel® Pentium® M 1.1 GHz, 1.6 GHz (optional)/Intel Celeron® M 600 MHz
- Support ECC DDR Memory
- With Vcore 2 phase design for more stable system design
- Supports up to 1000Base-T Ethernet
- Supports 6 x ports Host USB 2.0
- Supports up to 2 channel 48-bit LVDS interface
- Supports Enhanced Intel Speedstep® Technology

- **Interface**
 - RJ45 by cable
- **Standard**
 - IEEE 802.3u 100Base-T and IEEE 802.3z/ab
 - 1000Base-T compatible
 - Built-in boot ROM in Flash BIOS

Display

- **Chipset**
 - Intel 855GME chip integrated. (Extreme Graphics 2)
- **Memory Size**
 - Optimized Shared Memory Architecture, supports up to 64 MB/8 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 support up to UXGA panel resolution with frequency range from 25 MHz to 112 MHz
- **LCD Interface**
 - 2 Channel (2 x 18 -bit) LVDS
- **LVDS**
 - Hirose connector supports up to 2 channel (36-bit) LVDS LCD Panel
- **TV-Out (Cable optional)**
 - Supports both NTSC/PAL, S-video and Composite Video
- **Dual Independent Display**
 - CRT + LVDS

Mechanical and Environmental

- **Dimension (L x W)**
 - 203 x 146 mm (8" x 5.75")
- **Weight**
 - 0.85 kg (weight of total package)
- **Operating Temperature**
 - 0 ~ 60° C (32 ~ 140° F)
- **Operating Humidity**
 - 0% ~ 90% relative humidity, non-condensing

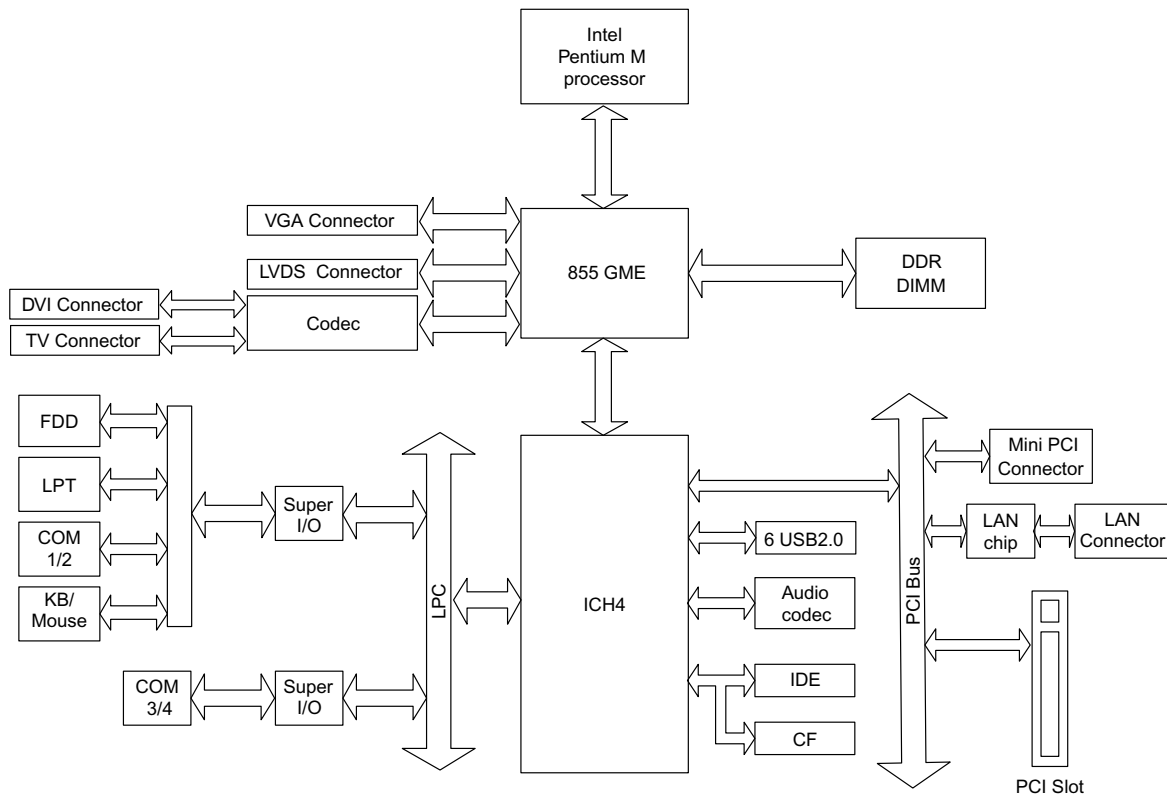
Power

- **Power Supply Voltage**
 - +5 V ± 5%, +12 V ± 5%
- **Power Consumption**
 - (Pentium M 1.6 G, 256 M DDR 300)
 - Max: +5 V @ 3.8 A, +12 V @ 0.4 A
 - Average: +5 V @ 3.22 A, +12 V 0.2 A

Packing List

- 1 x PCM-9581 SBC
- 1 x Mini Jumper Pack (p/n:9689000002)
- 1 x Startup Manual
- 1 x Utility CD
- 1 x ATX Power Cable (p/n:1700000265)

Board Diagram



Ordering information

Part No.	CPU	L2 Cache	CRT	LVDS	TV out	10/100	Giga LAN	Audio	USB2.0	RS-232	RS-232/422/485	LPT/FDD/KB/MS	CF	PCI Slot	miniPCI	Thermal Solution	Operation Temp.
PCM-9581F-00A1E	Socket 479	-	Yes	36 bit	Yes	1	--	Yes	6	3	1	Yes	Yes	1	1	Active	0 ~ 60° C
PCM-9581FG-00A1E	Socket 479	-	Yes	36 bit	Yes	--	1	Yes	6	3	1	Yes	Yes	1	1	Active	0 ~ 60° C
PCM-9581F-S0A1E	LV Pentium M 1.1 GHz	1 MB	Yes	36 bit	Yes	1	--	Yes	6	3	1	Yes	Yes	1	1	Passive	0 ~ 60° C
PCM-9581FG-S0A1E	LV Pentium M 1.1 GHz	1 MB	Yes	36 bit	Yes	--	1	Yes	6	3	1	Yes	Yes	1	1	Passive	0 ~ 60° C
PCM-9581F-M0A1E	Celeron M 600	512 KB	Yes	36 bit	Yes	1	--	Yes	6	3	1	Yes	Yes	1	1	Passive	0 ~ 60° C

Optional Accessories

- **PCM-10586-6100** Wiring kit for PCM-9581F/9586
- **PCM-10586-6A00** Wiring kit for PCM-9581FG
- **CF-HDD-ADP** CompactFlash 50 pin to IDE 44-pin adapter
- **1703050306** TV-out cable
- **1703100260** USB cable (26 cm)
- **1703100121** USB cable (12 cm)