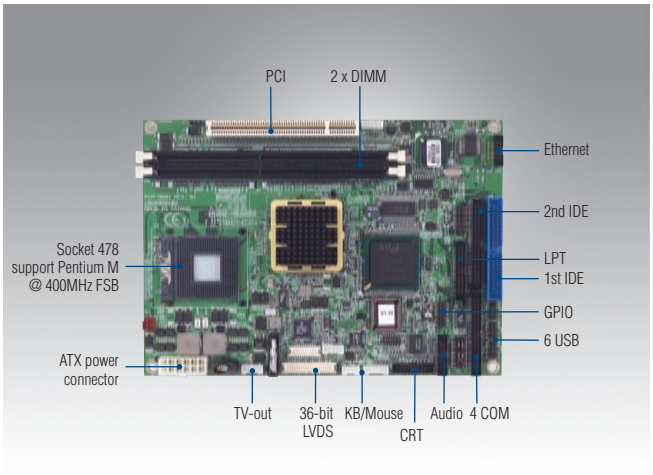
PCM-9581

Onboard Intel® Pentium® M CPU 5.25" SBC with LAN/LVDS/VGA/Audio/6 x USB 2.0/ 4 x COM/Wide Temperature



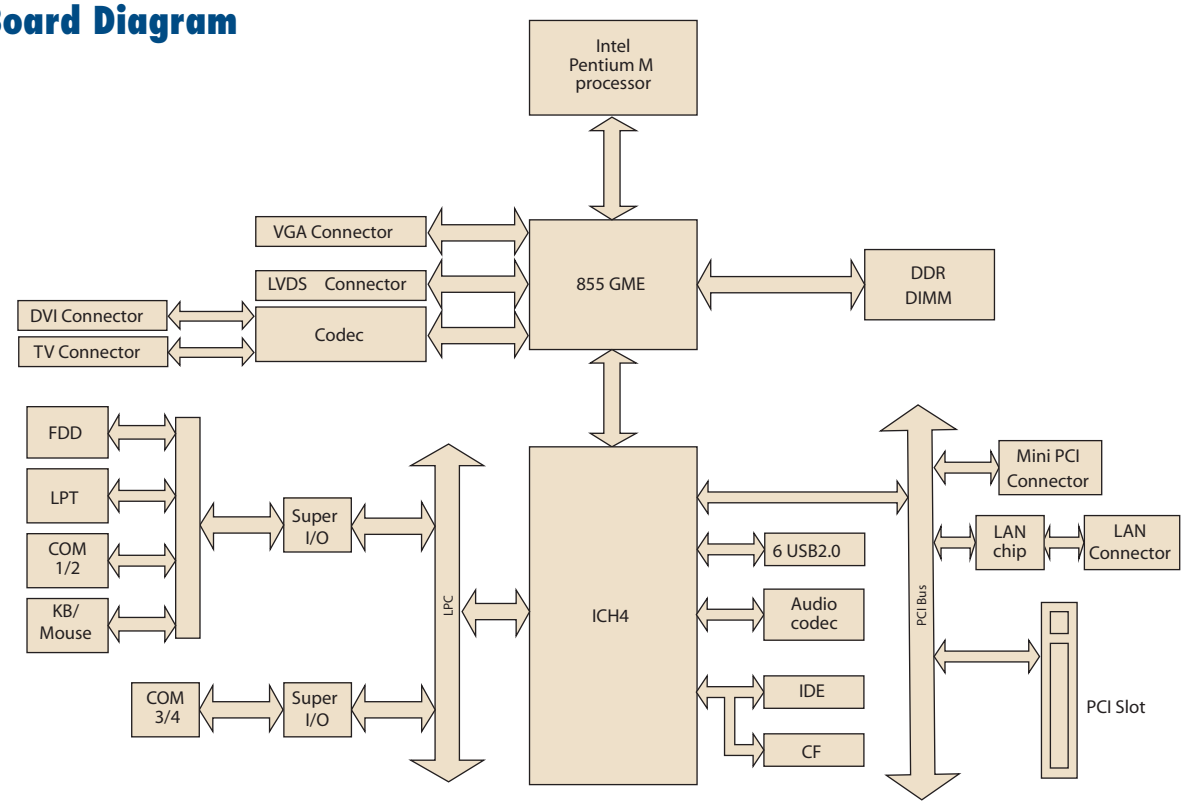
Features

- Intel® Pentium® M/Intel Celeron® M
- Supports ECC DDR Memory 128 MB to 2 GB, accepts 128/256/512/1024 MB DDR200/266/333 DRAM
- With Vcore 2 phase design for more stable system design
- Supports up to 1000Base-T Ethernet
- Supports six USB 2.0 ports, four COM, 8bit GPIO
- Supports up to two channel 36-bit LVDS interface
- Supports enhanced Intel Speedstep® Technology
- Wide temperature optional

Specifications

Processor System	CPU	Intel Pentium M 1.1 GHz, LV Pentium M 1.4 GHz, Celeron M 600 MHz, uFCPGA2 (478-pin)
	Front Side Bus	400/533 MHz
	L2 Cache	512 KB ~ 2 MB
	Chipset	Intel 855GME/GMCH + ICH4
	BIOS	Award 4 Mbit
Memory	Technology	DDR 200/266/333
	Max. Capacity	2 GB
	Socket	2 x 184-pin DIMM
SSD	CompactFlash	Card Type I, Type II (shared 2nd IDE Channel)
I/O Interface	LPT	1
	FDD	1 (optional)
	RS-232	3
	RS-232/422/485	1
	K/B	1
	Mouse	1
	USB	6 x USB 2.0
	Audio	AC97, Speaker out, CD-input, Line-in, Line-out, Mic-in
	GPIO	8-bit general purpose input/output
	SMBus	-
	IrDA	115 kbps
EIDE	Mode	UDMA 100
	Channel	2
Expansion Slot	PCI	1
	miniPCI	1
Ethernet	Speed	10/100Mbps (PCM-9581F); 10/100/1000Mbps (PCM-9581FG)
	Controller	Intel 82551ER, optional 82551QM, 82541PI (GbE)
	Interface	RJ-45 by cable
Display	Controller	Intel 855GME
	VRAM	Optimized Shared Memory Architecture up to 32 MB system memory
	LVDS LCD	1 x 36-bit LVDS
	TV-Out	Supports both NTSC/PAL, S-video and Composite Video
	Dual Independent Display	CRT + LVDS, CRT + DVI
Environment	Operation Temperature	0 ~ 60° C (32 ~ 140° F)
	Operating Humidity	0% ~ 90% relative humidity, non-condensing
Power	Power Type	AT / ATX
	Power Supply Voltage	+5 V ±5%, +12 V ±5%
	Power Consumption: Typical	Average: +5 V @ 3.22 A, +12 V 0.2 A(Pentium M 1.6 G, 256 M DDR 300)
	Power Consumption: Max, test in HCT	Max: +5 V @ 3.8 A, +12 V @ 0.4 A(Pentium M 1.6 G, 256 M DDR 300)
	Power Management	APM, ACPI
	Battery	Lithium 3 V / 196 mAH
Watchdog Timer	Output	System reset
	Interval	Programmable 1 ~ 255 sec
Physical Characteristics	Dimensions (L x W)	203 x 146 mm (8" x 5.75")
	Weight	0.85 kg (1.87 lb) (weight of total package)

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	Mini PCI	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-M0A1E	Celeron M 600 MHz	512 KB	Yes	36-bit	Yes	1	--	Yes	6	3	1	Yes	Yes	1	1	Passive	0 ~ 60° C
PCM-9581Z-M0A1E	Celeron M 600 MHz	512 KB	Yes	36-bit	Yes	1	--	Yes	6	3	1	Yes	Yes	1	1	Passive	-20 ~ 80° C
PCM-9581F-S1A1E	Celeron M 1 GHz	512 KB	Yes	36-bit	Yes	1	--	Yes	6	3	1	Yes	Yes	1	1	Passive	0 ~ 60° C
PCM-9581Z2-S1A1E	Celeron M 1 GHz	512 KB	Yes	36-bit	Yes	1	--	Yes	6	3	1	Yes	Yes	1	1	Passive	-40 ~ 85° C
PCM-9581F-S4A1E	LV Pentium M 1.4 GHz	2 MB	Yes	36-bit	Yes	1	--	Yes	6	3	1	Yes	Yes	1	1	Passive	0 ~ 60° C
PCM-9581Z2-S4A1E	LV Pentium M 1.4 GHz	2 MB	Yes	36-bit	Yes	1	--	Yes	6	3	1	Yes	Yes	1	1	Passive	-40 ~ 85° C

Optional Accessories

Part No.	Description
PCM-10586-6100E	Wiring kit for PCM-9581F/9586
PCM-10586-6A00E	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)
PCM-120-00A3E	2-slot PCI riser card for 5.25" biscuits
MIO-3110-00A1E	Mini PCI to USB interface connection hub
MIO-3120-00A1E	Mini PCI interface to Wireless 802.11 b/g communication module
MIO-3121-00A1E	Mini PCI to 4 COM Module
MIO-3140-00A1E	Mini PCI interface to SATA storage module
MIO-3150-00A1E	Mini PCI interface to video capture module
MIO-3130-00A1E	Mini PCI Interface to Dual LAN Communication Module
MIO-3131-00A1E	Mini PCI Interface to Single Giga LAN Communication Module

Packing List

Part No.	Description	Quantity
	PCM-9581 SBC	1
9689000002	Mini Jumper Pack	1
	Startup Manual	1
	Utility CD	1
1700001112	ATX Power Cable	1
	Heat sink 50 x 50 x 30 mm (PCM-9581F-S4A1E, PCM-9581F-S1A2E, PCM-9581F-M0A1E only)	1
	Cooler 50 x 50 x 35 mm (PCM-9581F-00A1E, PCM-9581FG-00A1E only)	1