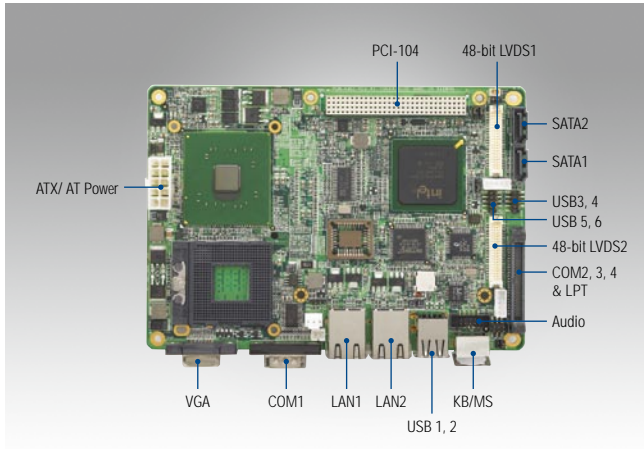


# PCM-4381

Intel® Pentium® M EPIC SBC with CRT,  
2 LVDS, Dual Giga LAN, PCI-104



## Features

- Intel® Pentium® M/ Celeron® M Processor on board/ Socket type
- Display combination: 48-bit LVDS1 + 48-bit LVDS2, CRT + 48-bit LVDS
- Dual 10/100/1000 Mbps Ethernet
- 16-bit GPIO, 4 COM (Supports Auto flow control), 2 SATA, 6 USB 2.0
- Supports embedded software APIs and utilities

**Software APIs:**

- GPIO
- H/W Monitor
- Brightness
- Watchdog
- Backlight On/Off
- SMBus
- CPU Speed
- System Throttling

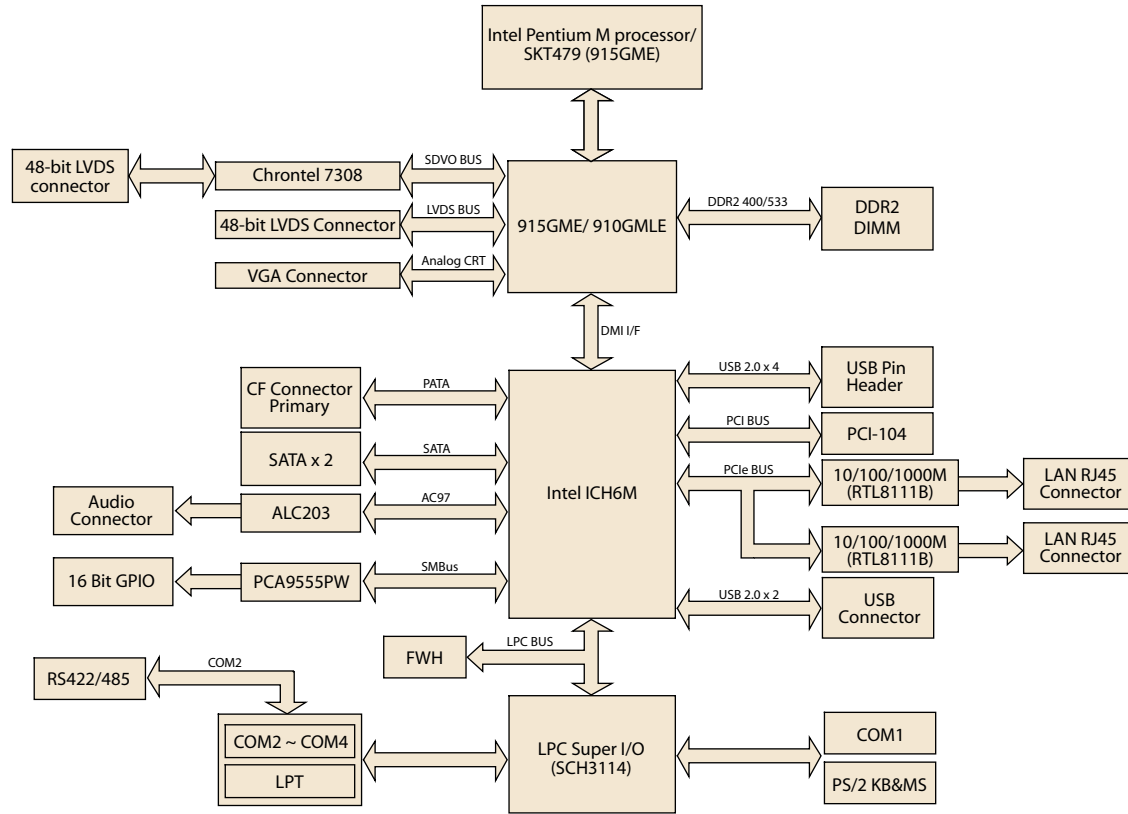
**Utilities:**

- BIOS Flash Monitoring

## Specifications

Processor System	CPU	Celeron M 600 MHz	Celeron M 1.0 GHz	Pentium M Socket type 479
	Front Side Bus	400 MHz	400 MHz	400/533 MHz
	L2 Cache	512 KB	0 KB	depends on CPU
	Chipset	Intel 910GMLE + ICH6M	Intel 910GMLE + ICH6M	Intel 915GME + ICH6M
	BIOS	Award 4-Mbit		
Memory	Technology	DDR2 400 MHz (910GMLE), 400/533 MHz (915GME)		
	Max. Capacity	2 GB		
	Socket	1 x 200-pin SODIMM		
Display	Chipset	Intel 910GMLE/ 915GME		
	VRAM	DVMT 3.0 supports up to 128 MB		
	Graphics Engine	Mobile Intel GMA 900 3D/2D engine		
	LVDS	1 x 48-bit LVDS1, 1 x 48-bit LVDS2 (optional)		
	CRT	Up to QXGA (2048 x 1536)		
Ethernet	Dual Display	CRT + LVDS, LVDS1 + LVDS2		
	Speed	10/100/1000 Mbps on LAN1, LAN2		
	Controller	2 x Realtek RTL8111B-GR		
Audio	Connector	RJ-45		
	Chipset	AC97, Line-in, Line-out, Mic-in		
WatchDog Timer	255-level interval timer, Programmable 1 ~ 255 sec, setup by software, jumperless selection, generates system reset			
Storage	CompactFlash	Card Type I, Type II		
	SATA	2		
	Floppy	1 x FDD (Optional)		
Rear I/O	Serial	1 x RS-232		
	Ethernet	2		
	KB/Mouse	1		
	CRT	1		
	USB	2		
Internal I/O	USB	4 x USB 2.0 (2 via USB DOM connector)		
	Serial	2 x RS-232, 1 x RS-232/422/485		
	Parallel(LPT)	1		
	FDD	Share with LPT (Optional)		
	GPIO	16-bit GPIO		
Expansion	PCI-104 slot	1		
Power	Power Type	AT / ATX		
	Power Supply Voltage	ATX: +5 V ± 5%, ±12 V ± 5% AT: 5 V only to boot up, 12 V optional for LCD Inverter and PC/104+		
	Power Consumption (Typical)	2.59 A @ 5 V, 0.01 A @ 12 V (Celeron M 1G with DDR2 256 MB)		
	Power Consumption (Max, test in HCT)	3.22 A @ 5 V, 0.01 A @ 12 V (Celeron M 1G with DDR2 256 MB)		
	Power Management	APM, ACPI		
	Battery	Lithium 3 V 196 mAH		
Environment	Operating	0 ~ 60° C (32 ~ 140° F)		
	Non-Operating	95% @ 60° C Relative Humidity		
Physical Characteristics	Dimensions (L x W)	115 x 165 mm (4.5" x 6.5")		
	Weight	0.35 kg (0.77 lb) (with Heatsink)		

## Board Diagram



## Ordering Information

Number	CPU	L2 Cache	Chipset	Memory	Giga LAN	LVDS1	LVDS2	VGA	USB 2.0	COM	GPIO	LPT	CF	SATA	Audio	PCI-104	Thermal Solution	Operating Temp.
PCM-4381L-M0A1E	Celeron M 600 MHz	512 KB	910 GMLE	SODIMM	1	48-bit	-	1	6	4	16	1	Yes	2	Yes	Yes	Passive	0 ~ 60° C
PCM-4381F-S0A1E	Celeron M 1.0 GHz	0 KB	910 GMLE	SODIMM	2	48-bit	48-bit	1	6	4	16	1	Yes	2	Yes	Yes	Passive	0 ~ 60° C
PCM-4381F-00A1E	SKT 479	-	915GME	SODIMM	2	48-bit	48-bit	1	6	4	16	1	Yes	2	Yes	Yes	Active	0 ~ 60° C
PCM-4381Z-1GS0A1E	Celeron M 1 GHz	0 KB	910 GMLE	1G bundle	2	48-bit	48-bit	1	6	4	16	1	Yes	2	Yes	Yes	Passive	-20 ~ 80° C
PCM-4381Z2-1GS0A1E	Celeron M 1 GHz	0 KB	910 GMLE	1G bundle	2	48-bit	48-bit	1	6	4	16	1	Yes	2	Yes	Yes	Passive	-40 ~ 85° C

Note: For wide temperature, please contact sales rep.

## Packing List

Part No.	Description	Quantity
	PCM-4381 SBC	1
9689000002	Mini Jumper Pack	1
2006438100	Startup Manual	1
2066438101	Utility CD	1
1700002034	3 COM ports and LPT cable	1
1700002055	ATX power cable	1
1700060202	6P-6P-6P PS/2 KB/MS	1
1700004891	USB cable 2 port/20-pin	1
1700001267	USB cable 2 port/10-pin	1
1700003931	AT power cable	1
1700008902	Audio cable 10P 2.0 mm 15 cm	1
1700008894	SATA cable 7P/7P 30 cm	1

## Optional Accessories

Part No.	Description
PCM-410C-00A1E	COM/LPT daughter board for EPIC
1700004891	USB cable 20 Pin TO 2 Port L= 30 cm PCM-43 series
17000090301	Cable ASSY COM Port 30 cm D-SUB 9P TO 4P 2.0 mm

## Embedded OS

Embedded OS	Part No.	Description
WinCE	2070004209	CE60 Pro PCM-4381 V3.01 ENG
Win XPE	2070006749	XPE FP2007 PCM-4381 V3.01 ENG (621.19 MB)

