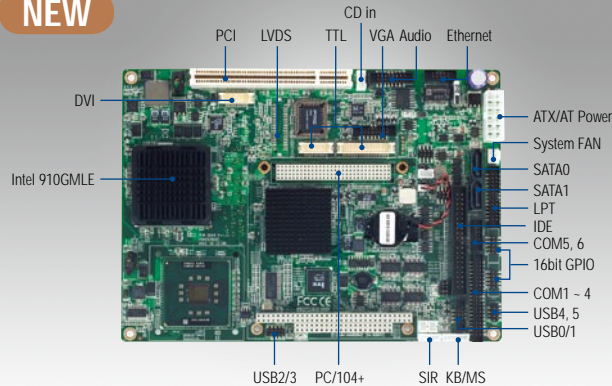


# PCM-9588

Intel® Celeron® M Processor EBX SBC with DVI, TTL, CRT, LVDS, LAN, 6 COM, 2 SATA, 6 USB 2.0, PC/104-Plus

**NEW**



## Features

- Intel® Celeron® M Processor ultra low power
- 10/100 Mbps Ethernet support, UL60601 Design, GIGA LAN optional
- Display combination: CRT + LVDS / DVI + LVDS/ DVI + CRT/ CRT + TTL
- 6 COM (Supports auto flow control), 2 SATA, 6 USB 2.0, 16-bit GPIO ports
- Supports LCD backlight turn-off, brightness control
- Supports embedded software API and utility

**Software APIs:**

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

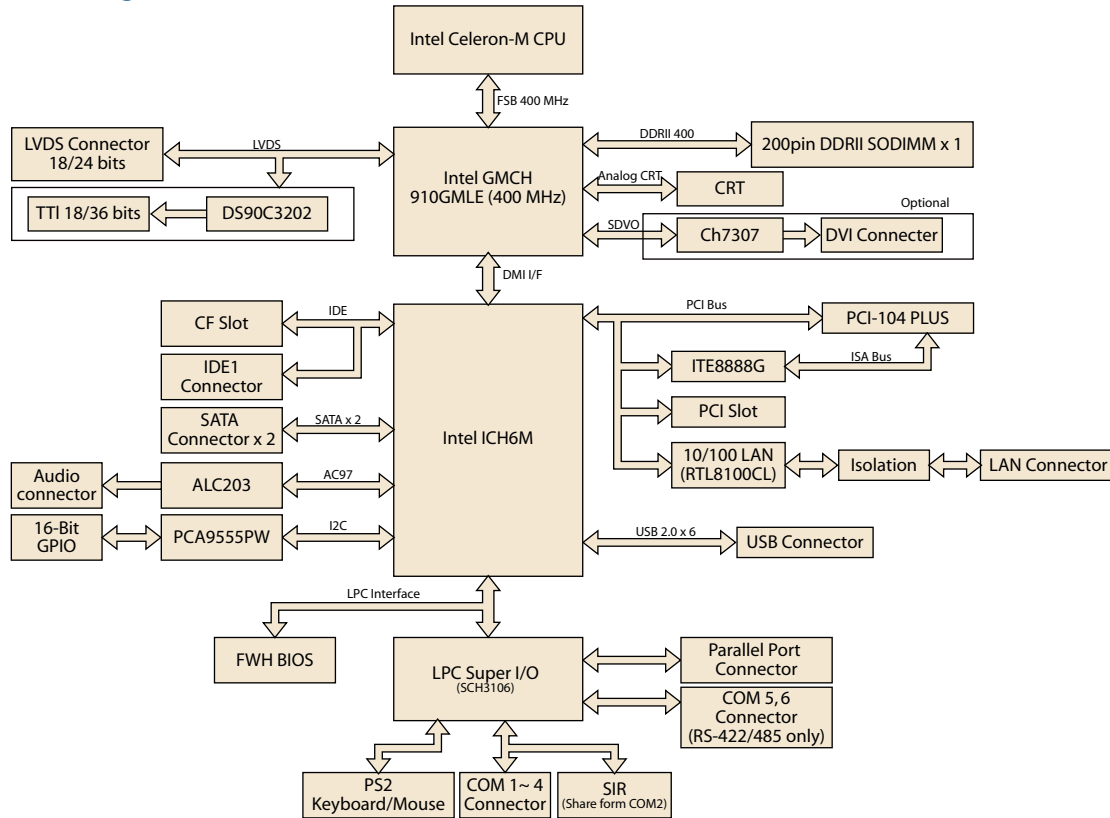
**Utilities:**

- BIOS Flash
- Monitoring

## Specifications

Processor System	CPU	Intel Celeron M Processor 600 MHz	Intel Celeron M Processor 1 GHz
	Front Side Bus	400 MHz	400 MHz
	L2 Cache	512 KB	0 KB
	Chipset	Intel 910GMLE + ICH6M	Intel 910GMLE + ICH6M
	BIOS	Award 4-Mbit	Award 4-Mbit
Memory	Technology	DDR2 400 MHz Downward compatible for DDR2 533/667/800 MHz	
	Max. Capacity	2 GB	
	Socket	1 x 200-pin SODIMM	
Display	Chipset	Intel 910GMLE	
	VRAM	DVMT 3.0 supports up to 128 MB	
	Graphics Engine	Mobile Intel GMA 900 3D/2D engine	
	LVDS	1 x 48-bit LVDS	
	CRT	up to OXGA (2048 x 1536)	
	TTL LCD	18/36-bit TTL (PCM-9588T version)	
	DVI	Yes (PCM-9588F version)	
Ethernet	Dual Display	CRT+ LVDS / DVI+ LVDS/ DVI+ CRT/ CRT+ TTL	
	Speed	10/100 Mbps on LAN (10/100/1000 Mbps is optional)	
	Controller	Realtek RTL8100CL-LF (Optional RTL8110SCL-LF for Giga LAN)	
Audio	Connector	Box header	
	Chipset	AC97, Line-in, Line-out, Mic-in, speaker out (R/L)	
WatchDog Timer	Amplifier	APA4863KI-TRG (Support 8W 1 W or 4W 2 W Speaker for Speaker-out)	
	Output	System reset	
Storage	Interval	Programmable 1 ~ 255 level	
	CompactFlash	Card Type I, Type II	
	SATA	2	
	IDE	1 x EIDE (UDMA 33/66/100)	
	Floppy	1 x FDD (Optional)	
Internal I/O	Serial	4 x RS-232, 2 x RS-232/422/485 (Default RS-422/485, RS-232 by optional request)	
	Ethernet	LAN x 1 (RJ-45 connector through the cable)	
	KB/Mouse	1	
	CRT	1	
	USB	6 x USB 2.0	
	IDE	1 x EIDE (UDMA 33/66/100)	
	Parallel(LPT)	1	
	FDD	Share with LPT (Optional)	
	GPIO	16-bit general purpose input/output	
	IrDA	115 kbps (optional by request) shared from COM2	
Expansion	PC/104-Plus Slot	1	
	MiniPCI Socket	1	
	PCI Slot	1	
Power	Power Type	AT / ATX	
	Power Supply Voltage	ATX: 5 V STB, +5 V ± 5%, ±12 V ± 5%, external 12 V option for LCD Inverter, PCI & PCI-104 Plus AT: 5 V only to boot up, external 12 V option for LCD Inverter, PCI & PC/104 Plus	
	Power Consumption (Typical)	5 V:3.67 A (C-M M 1 G with DDR2 400 1 GB)	
	Power Consumption (Max, test in HCT)	5 V:3.67 A (C-M M 1 G with DDR2 400 1 GB)	
	Power Management	APM, ACPI	
Environment	Battery	Lithium 3 V / 196 Mah	
	Operating	0 ~ 60° C (32 ~ 140° F)	
Physical Characteristics	Non-Operating	95% @ 60° C Relative Humidity	
	Dimensions (L x W)	203 x 146 mm (8" x 5.75") Top side: The highest is PCI slot (15.4 mm), Bottom side: The highest is CF sochet (9.5 mm)	
	Weight	0.85 kg (1.87 lb) (with Heatsink)	

## Board Diagram



## Ordering Information

Part No.	CPU	L2 Cache	Memory	LVDS	TTL	CRT	DVI	10/100 LAN UL60601	Audio	USB 2.0	SATA	RS-232	RS-232/422/485	GPIO	LPT	CF	PC/104+	Thermal Solution	Operating Temp.
PCM-9588T-M0A1E	C-M 600 MHz	512 KB	SODIMM	-	Yes	Yes	-	1	Yes	6	2	4	2	16	1	1	1	Passive	0 ~ 60° C
PCM-9588F-S0A1E	C-M 1.0 GHz	0 KB	SODIMM	48-bit	-	Yes	Yes	1	Yes	6	2	4	2	16	1	1	1	Passive	0 ~ 60° C
PCM-9588L-M0A1E	C-M 600 MHz	512 KB	SODIMM	48-bit	-	Yes	-	1	Yes	6	2	4	2	16	1	1	-	Passive	0 ~ 60° C
PCM-9588Z-1GM0A1E	C-M 600 MHz	512 KB	Bundle 1 GB	-	Yes	Yes	-	1	Yes	6	2	4	2	16	1	1	1	Passive	-20 ~ 80° C
PCM-9588Z2-1GS0A1E	C-M 1GHz	0 KB	Bundle 1 GB	48-bit	-	Yes	Yes	1	Yes	6	2	4	2	16	1	1	1	Passive	-40 ~ 85° C

\*PCM-9588 has insulation feature in LAN for UL60601.

## Packing List

Part No.	Description	Quantity
	PCM-9588 SBC	1
9689000002	Mini Jumper Pack	1
2006958800	Startup Manual	1
2066958811	Utility CD	1
1700001112	ATX Power Cable	
1700006196	AT Power Cable	

## Optional Accessories

Part No.	Description
PCM-10586-9588E	Wiring kit for PCM-9588
1703100260	USB cable (26 cm)
1703100121	USB cable (12 cm)
PCM-110-00A3E	1-slot PCI riser card for 5.25" biscuits
PCM-120-00A3E	2-slot PCI riser card for 5.25" biscuits
PCM-200-00A2E	PCI-104 to PCI bus module

## Embedded OS

Embedded OS	Part No.	Description
Win XPE	2070006672	Image XPE FP2007 PCM-9588 V3.01 ENG
	2070008830	XPE WES2009 for PCM-9588 (Multi) V4.0 ENG

