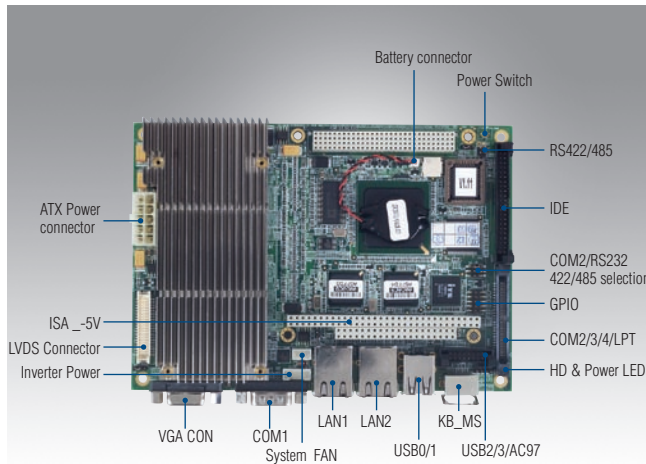


# PCM-4386

**Onboard Intel Celeron® M EPIC  
SBC with VGA/ LVDS/ 2 Ethernet/  
4 COM/ USB2.0/ 8GPIO/ PC/104+**



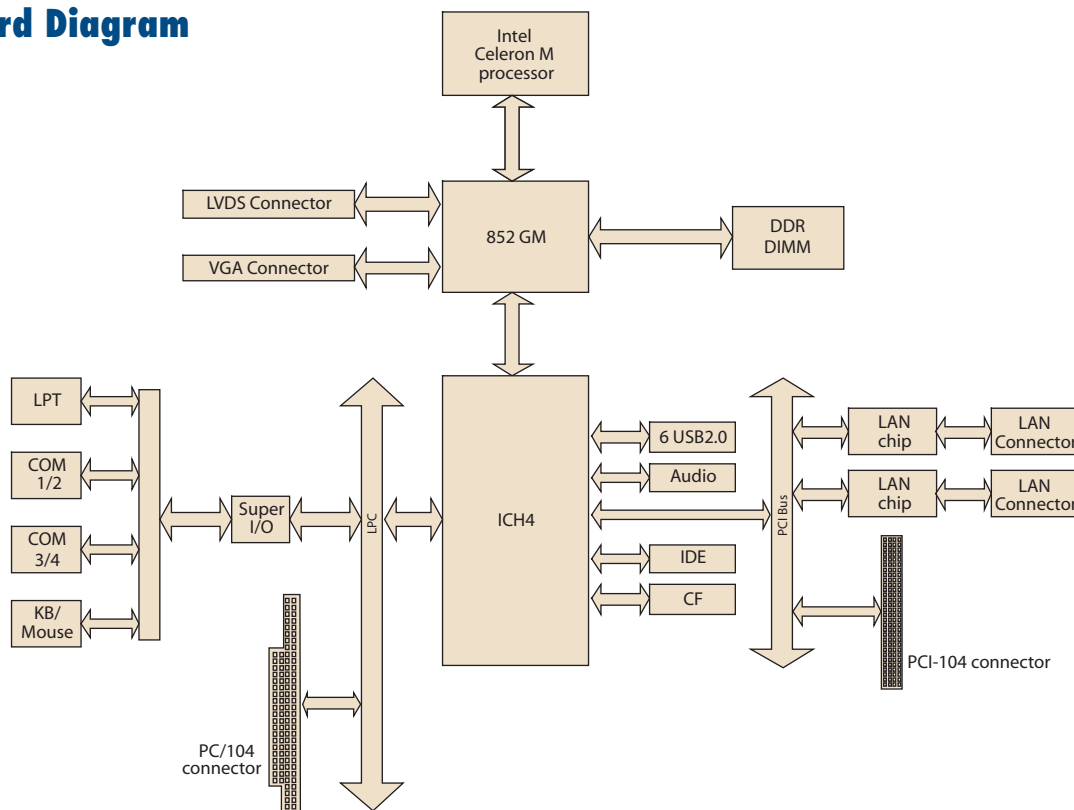
## Features

- EPIC form factor (115 x 165 mm)
- Intel® Celeron® M Processor on board
- SODIMM socket supports up to 1GB DDR 200/266 SDRAM
- Display Combination: CRT + 36-bit LVDS display support
- Supports four COM, six USB 2.0 ports, 8-bit GPIO
- Dual 10/100 Mbps PCI Ethernet interface
- Supports CompactFlash/uDOC (option)
- Supports ATX/ AT power
- PC/104-Plus bus (Fully 8/16 bit ISA bus)

## Specifications

Processor System	CPU	Intel ULV Celeron M 600 MHz/ 1.0 GHz
	Front Side Bus	400 MHz
	L2 Cache	512 KB/ 0 KB
	Chipset	Intel 852GM + ICH4
	BIOS	Award 4 Mbit
Memory	Technology	DDR 200/266
	Max. Capacity	1 GB
	Socket	1 x 200-pin SODIMM
SSD	CompactFlash	Card Type I, UDOM
I/O Interface	LPT	1
	RS-232	3
	RS-232/422/485	1
	K/B	1
	Mouse	1
	USB	6 x USB 2.0 (2 via USB DOM connector)
	Audio	AC97, Line-in, Line-out, Mic-in (optional with PCM-410)
	GPIO	8-bit general purpose input/output
EIDE	SMBus	Supported
	Mode	UDMA 33
Expansion Slot	Channel	1
	PC/104-Plus	1
Ethernet	Speed	10/100Mbps
	Controller	2 x Intel 82551ER, 82541PI (optional)
	Interface	2 x RJ-45
Display	Controller	Intel 852GM
	VRAM	Optimized Shared Memory Architecture up to 32 MB system memory
	LVDS LCD	1 x 36-bit LVDS
Environment	Dual Independent Display	CRT + LVDS
	Operation Temperature	0 ~ 60° C (32 ~ 140° F)
	Operating Humidity	0% ~ 90% relative humidity, non-condensing
Power	Power Type	AT / ATX
	Power Supply Voltage	ATX, +5 V ± 5%, ±12 V ± 5% AT, 5 V only to boot up, 12 V for LCD inverter and PC/104 module (12 V optional for PC/104 add on card and LCD inverter)
	Power Consumption: Typical	2.62 A @ 5 V, 0.03 A @ 12 V, 0.49 A @ 3.3 V, 1.08 A @ 5 VSB (Celeron M 600 with 256 MB DDR266)
	Power Consumption: Max, test in HCT	2.63 A @ 5 V, 0.03 A @ 12 V (Celeron M 600 with 256 MB DDR266)
	Power Management	APM, ACPI
Watchdog Timer	Battery	Lithium 3 V / 196 mAH
	Output	System reset
Physical Characteristics	Interval	Programmable 1 ~ 255 sec
	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	10/100	LVDS	USB 2.0	COM	GPIO	LPT	CF	USB-DOM	Audio	PC/104-plus	Operation Temp.	Thermal Solution
PCM-4386F-M0A2E	Celeron M 600 MHz	512K	852GM	2	2 channel 36-bit	4	4 ports	8	1	Yes	--	Optional	Yes	0 ~ 60° C	Passive
PCM-4386F-S0A2E	Celeron M 1.0 GHz	0	852GM	2	2 channel 36-bit	4	4 ports	8	1	Yes	--	Optional	Yes	0 ~ 60° C	Passive
PCM-4386U-S0A2E	Celeron M 1.0 GHz	0	852GM	2	2 channel 36-bit	4	4 ports	8	1	--	Yes	Optional	Yes	0 ~ 60° C	Passive
PCM-4386FY-S0A2E	Celeron M 1.0 GHz	0	852GM	2	2 channel 36-bit	4	4 ports	8	1	Yes	--	Optional	Yes	-40 ~ 85° C	* Passive
PCM-4386Z-S0A2E	Celeron M 1.0 GHz	0	852GM	2	2 channel 36/48-bit	4	4 ports	8	1	Yes	--	Optional	Yes	-20 ~ 80° C	** Passive

\* PCM-4386FY-S0A1E is Phoebus -40 ~ 85° C design-in, operates continuously under -40 ~ 85° C for at least 8 hrs.

\*\* PCM-4386Z-S0A2E passed 16 hrs of dynamic burn-in test, perfect for fast-changing environments.

For details, please visit <http://www.advantech.com.tw/epc/RuggedizedSolutions/>

Note: Support for 48-bit LVDS is possible upon evaluation, please contact Advantech for more detail

### Optional Accessories

Part No.	Description
PCD-USBH11-MS0256	USB-DOM, 256 MB, -40 ~ 85° C
PCD-USBH11-MS0512	USB-DOM, 512 MB, -40 ~ 85° C
PCD-USBH11-MS1024	USB-DOM, 1 GB, -40 ~ 85° C
PCD-USBH11-MS2048	USB-DOM, 2 GB, -40 ~ 85° C
9696290100	IDE to CF module
PCM-410A-00A1E	AC 97 Audio/USB module for PCM-4380/4386 series
PCM-410C-00A1E	COM/LPT daughter board for EPIC
1700090301	COM2 RS-422/485 D-sub 9P to 4P cable, 30 cm

### Packing List

Part No.	Description	Quantity
	PCM-4386 SBC	1
9689000002	Mini Jumper Pack	1
	Startup Manual	1
	Utility CD	1
1700002034	3 COM and LPT cable	1
1700002055	ATX power cable	1
1700060202	6P-6P-6P PS/2 KB/MS	1
1700004891	USB cable 2 port/20pin	1
1701440504	IDE cable	1
1700003931	AT power cable	1