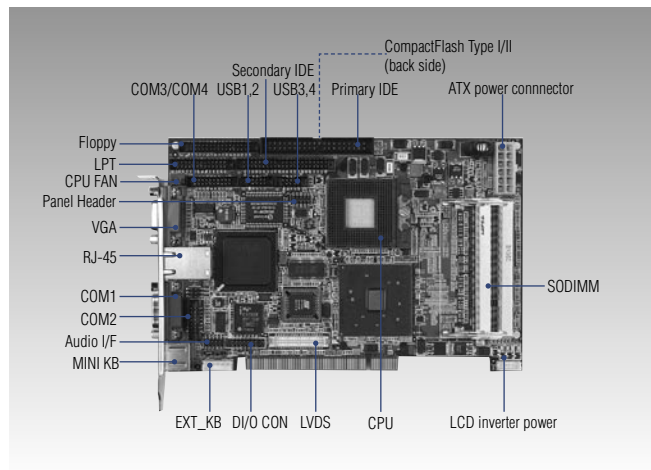


PCI-6881

PCI Intel® Pentium® M/Intel Celeron® M
Half-sized SBC with VGA/LCD/LVDS/Giga LAN/
USB 2.0 and SSD



Specifications

General

- **CPU**
 Embedded Intel Pentium M (Banias/Dothan)/Celeron M Processor supported, up to 2.0 GHz
 Celeron M 600 MHz (512 KB): PCI-6881F-M0A2
 Pentium M 1.1 GHz: PCI-6881F-S0A2
 uFCPGA2 (478pin): PCI-6881F-00A2/PCI-6881FG-00A2
- **2nd Cache Memory**
 1 or 2 MB on Pentium M processor, 512 KB/1 MB on Celeron M
- **System Chipset**
 Intel 855GME + ICH4
- **BIOS**
 AWARD® 4 Mbit Flash BIOS
- **System Memory**
 2 x 200 pin SODIMM x 2, support ECC DDR up to 2 GB
- **Power Management**
 APM 1.2, ACPI supported
- **SSD**
 Supports CompactFlash® Card Type I/II
- **Watch Dog Timer**
 0 ~ 255 sec, System reset or IRQ11
- **Expansion Interface**
 1 x 32-bit PCI slot
- **Battery**
 Lithium 3 V/196 mAh

I/O

- **I/O Interface**
 2 x EIDE (1 x Ultra DMA100, 1 x Ultra DMA33),
 1 x FDD, 1 x K/B, 1x Mouse, 1 x RS-232/422/485,
 3 x RS-232, 1 x LPT
- **USB**
 4 x USB ports, USB 2.0 compliant
- **Audio**
 Supports AC97 Audio with optional PCM-231A-00A1
- **IrDA**
 N/A
- **GPIO**
 8-bit general purpose input/output
- **I/O Expansion**
 PCI

Ethernet

- **Chipset**
 Intel 82541PI (Gigabit), Intel 82551ER/82551QM (optional)
- **Speed**
 10/100Base-T, 10/100/1000Base-T
- **Interface**
 1 x RJ-45
- **Standard**
 IEEE 802.3 z/ab (1000Base-T) or IEEE 802.3u (100 Base-T) protocol compatible
- **Built-in Boot ROM**
 82541PI and 82551QM (optional)

Features

- Embedded new generation Intel® Pentium® M/Intel Celeron® M Processor
- Fanless operation @ 0 ~ 60°C (Celeron M 600 MHz/Pentium 1.1 GHz)
- Supports 400 MHz Front Side Bus
- Supports 200 MHz, 266 MHz and 333 MHz ECC DDR SDRAM
- Supports up to 1000Base-T Ethernet on board
- Supports up to 2 Channel 36 bits LVDS for LCD
- Supports four USB 2.0 ports
- Supports Enhanced Intel SpeedStep technology (Intel Pentium M)

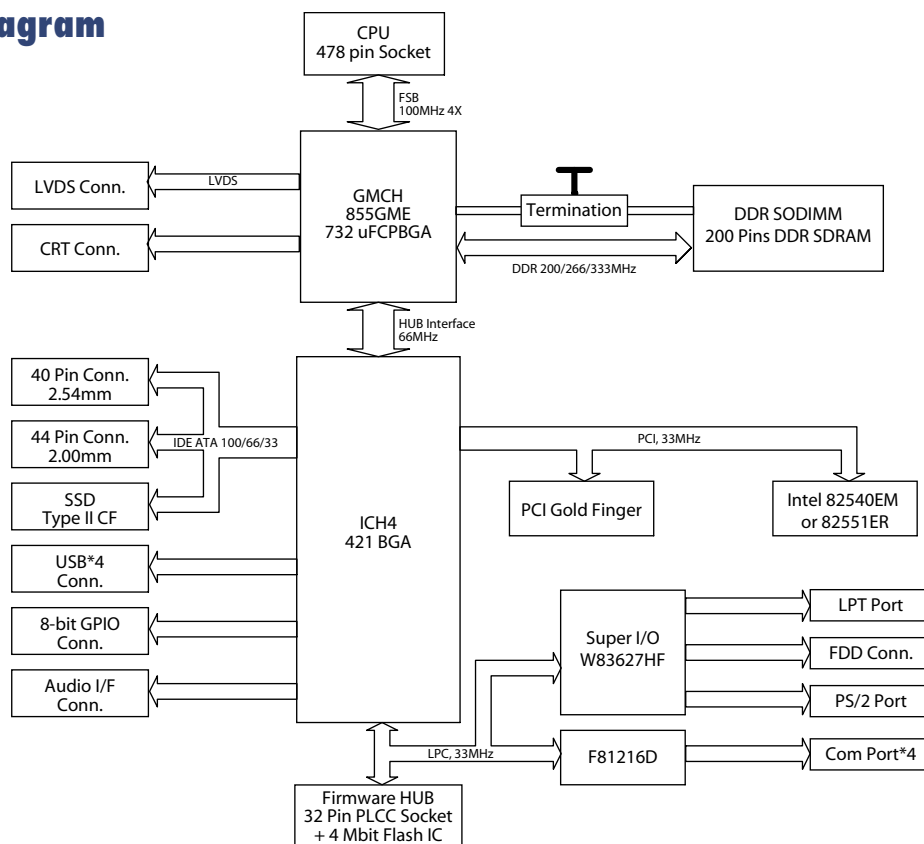
Display

- **Chipset**
 Intel 855GME chip integrated. (Extreme Graphics 2)
- **Memory Size**
 Optimized Shared Memory Architecture, supports up to 64 MB frame buffer using system memory
- **Resolution**
 CRT Mode: up to 2048 x 1536 @ 75 Hz
 LVDS Mode: up to 1280 x 1024 @ 36 bpp, up to UXGA panel resolution with frequency range from 25 MHz to 112 MHz
- **LCD Interface**
 2 Channel LVDS (36-bit)
- **LVDS Interface**
 Hirose connector supports dual channel LVDS panel
- **TV-Out**
 N/A
- **Dual Independent Display**
 CRT + LVDS

Mechanical and Environmental

- **Dimension (L x W)**
 185 x 122 mm (7.3" x 4.8")
- **Weight**
 0.27 kg (weight of total package)
- **Operating Temperature**
 0 ~ 60° C (32 ~ 140° F), operation
- **Operating Humidity**
 0% ~ 90% relative humidity, non-condensing
- **Power Supply Voltage**
 +5 V, +12 V ±5%
- **Power Consumption**
 Max: 6 A @ 5 V, 0.5 A @ 12 V,
 Typical: 5.2 A @ 5 V
 0.25 A @ 12 V (w/PentiumM 1.6 GHz + 512 MB)

Board Diagram



Packing List

- 1 x PCI-6881 SBC
- 1 x Y Cable for PS/2 Keyboard, PS/2 Mouse (p/n:1700060202)
- 1 x E-IDE (HDD) Cable (p/n:1701400452)
- 1 x FDD Cable (600 mm) (p/n:1701340603)
- 1 x Parallel Port Cable (p/n:1700260250)
- 1 x Power Cable (p/n:1700000265)
- 1 x ATX Feature Cable (p/n:1700001276)
- Mini Jumper (p/n:1653302122)
- 1 x Startup Manual
- 1 x Utility CD

Optional Accessories

- **IPC-644P4-15ZE** 4-slot PCI chassis w/backplane & 150 W power supply
- **IPC-6806BP-20ZBE** PCI chassis with 200 W power supply
- **IPC-6606P5-30ZE** 5-slot PCI chassis w/backplane & 200 W power supply
- **PCA-6104P4-0B2E** 4-slot PCI backplane
- **PCA-6105P5-0B2E** 5-slot PCI backplane
- **1703100260** USB cable adapter (2.00 mm)
- **CF-HDD-ADP** CompactFlash 50-pin to IDE 44-pin adapter
- **PCM-231A-00A1E** Audio module with Line-in, Line-out, Mic
- **1701140201** COM2 cable (2.00 mm)
- **1700001166** COM3 & COM4 cable with bracket (2.00 mm)

Ordering Information

Standard	CRT	LVDS	10/100	Giga	USB	RS-232	RS-232/422/485	LPT	GPIO	CF
PCI-6881F-00A2E	1	1	1	--	4	3	1	1	8-bit	Type I/II
PCI-6881FG-00A2E	1	1	--	1	4	3	1	1	8-bit	Type I/II
PCI-6881F-M0A2E	1	1	1	--	4	3	1	1	8-bit	Type I/II
PCI-6881FG-M0A2E	1	1	--	1	4	3	1	1	8-bit	Type I/II
PCI-6881F-S0A2E	1	1	1	--	4	3	1	1	8-bit	Type I/II
PCI-6881FG-S0A2E	1	1	--	1	4	3	1	1	8-bit	Type I/II

IPC-644

4-slot Ultra-compact Wallmount/Desktop Chassis with 150 W ATX Power Supply

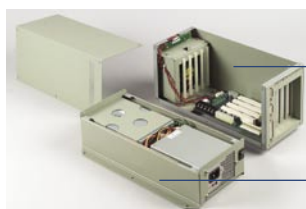


Features

- Ultra-compact wallmount/desktop IPC chassis
- Supports up to 4 half-sized cards
- Supports one 3.5" FDD and one internal 3.5" HDD
- Power switch on the rear plate
- One 53-CFM cooling fan
- Equipped with 150 W ATX power supply
- Easy-to-replace fan filter
- Reserved I/O port openings (two 9-pin and one 25-pin) on the rear plate

Specifications

Drive Bay		Front-accessible	Internal
	3.5"	1	1
Cooling	Fan	1 (53 CFM)	
	Air Filter	Yes	
Miscellaneous	Control	Power on/off switch and system reset button	
	Indicators	Power status and HDD activity	
	Rear Panel	Reserved two 9-pin COM and one 25-pin printer port openings	
Environment		Operating	Non-Operating
	Temperature	0 ~ 40° C (32 ~ 104° F)	-20 ~ 60° C (-4 ~ 140° F)
	Humidity	10 ~ 85 % @ 40° C, non-condensing	10 ~ 95 % @ 40° C, non-condensing
	Vibration (5 ~ 500 Hz)	1 Grms	2 G
	Shock	10 G (with 11 ms duration, half sine wave)	30 G
	Acoustic Noise	Less than 52 dB sound pressure at 5 ~ 28° (41 ~ 82° F)	
	Altitude	0 to 3,048 m (0 ~ 10,000 ft)	
Physical Characteristics	Dimensions (W x H x D)	135 x 209 x 305 mm (5.3" x 8.2" x 12")	
	Weight	5.0 kg (11.4 lb)	



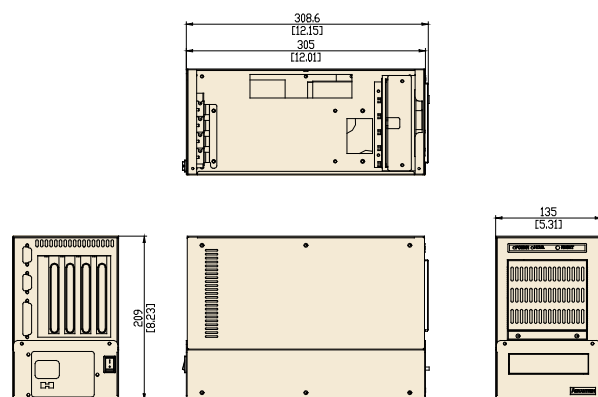
Upper cage to hold
4 half-sized cards

Lower deck for
one 3.5" FDD, one
internal 3.5" HDD
& power supply



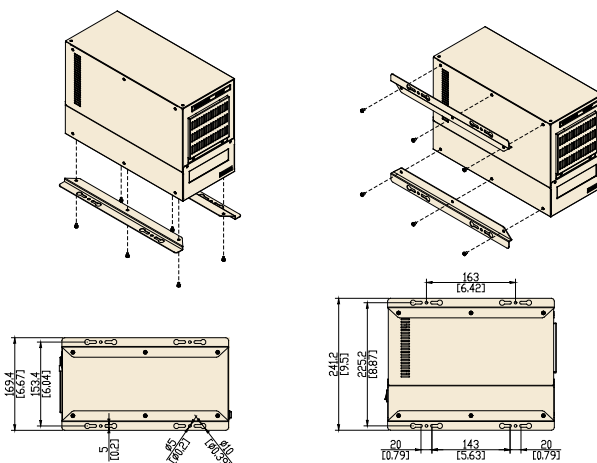
Easy-to-maintain
cooling fan

Dimensions



Unit: mm (inch)

Installation



Unit: mm (inch)

Power Supply Options

Part Number	Specifications					
	Watt	Input	Output	Mini-load	Safety	MTBF
1757000170G (ATX, PFC)	150 W	AC 115/230 V (selectable)	+5 V @ 15 A, +3.3 V @ 17 A, +12 V @ 8 A, -12 V @ 0.8 A, -5 V @ 0.5 A, +5 Vsb @ 2 A	+5 V @ 1 A +3.3 V @ 0.5 A, +12 V @ 2 A, +5 Vsb @ 0.1 A	UL/ TUV/CB	100,000 hrs @ 25° C

Accessories

Part Number	Description
1999806020	Fan filter 100 x 90 x 3 mm

Ordering Information

Part Number	Power Supply	Backplane	Regulation	Switch
IPC-644BP-15ZE	1757000170G	-	CE	AT