



Products

Computer-On-Module's

- CM-X270
- CM-X255
- CM-iGLX
- CM-F82
- CM-i686M
- CM-i686B
- CM-iVCF
- CM-i886 (NFND)
- CM-i586 (NFND)

PC/104+ & ATX boards

- SBC-X270
- SBC-X255
- SBC-i686
- SBC-iVCF
- SBC-i886 (NFND)
- ATX

Related Topics:

- CoM Comparison
- PC/104 Comparison
- Linux Support
- Evaluation Kits
- Industrial Temperature
- RoHS Compliance

SBC-i886 Board

Mature Product - not for new designs



Top view



Bottom view



View with interface cables

SBC-i886 Highlights

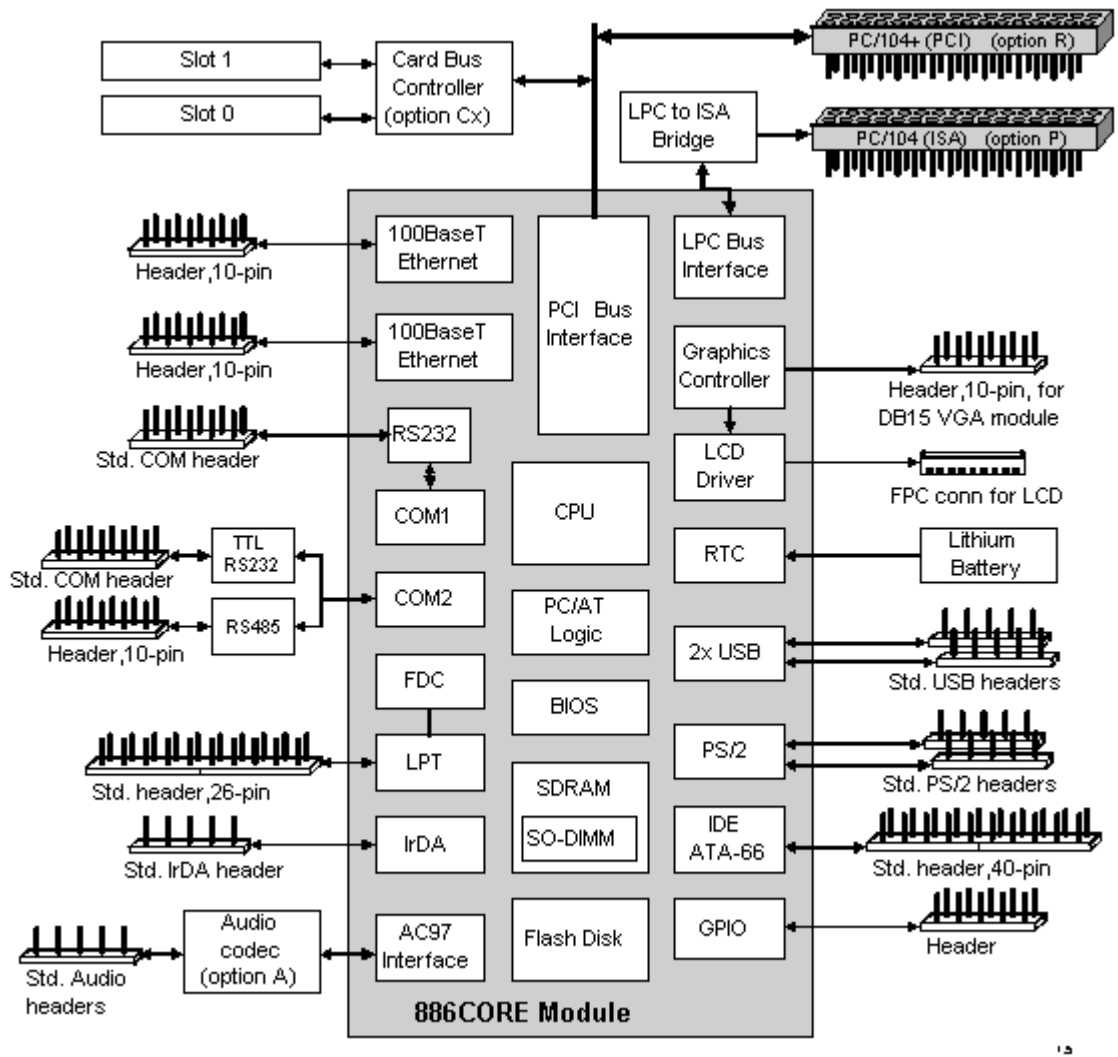
- **PC/104+ Single Board Computer using the [CM-i886 module](#)**
- **Pentium III or Celeron CPU selection, 600 to 1260 MHz**
- **PC/104 (ISA) and PC/104+ (PCI) expansion buses**
- **32 - 384 MB SDRAM**
- **16 - 512 MB Flash Disk**
- **Two COM ports with RS232 / RS485 / TTL driver options**
- **IrDA, LPT, GPIO, PS/2 keyboard and mouse interfaces**
- **2 Host USB ports**
- **Hard and floppy disk interfaces**
- **Sound I/O (optional)**
- **VGA / SXGA graphics controller. Connectors for LCD panel and CRT monitor (optional)**
- **Single or dual 10/100BaseT Ethernet ports (optional)**
- **Single or Dual Card Bus / PCMCIA slots (optional)**
- **Lithium battery for RTC**
- **Small size - 96 mm x 91 mm**

The SBC-i886 is a PC/104+ compliant, single board computer. It uses a [CM-i886 module](#) to implement most of the provided functions and also implements several additional important functions on-board. The rich set of features provided by the SBC-i886 is customizable according to the price / performance targets of the user's application.

The SBC-i886 contains PC/104+ expansion connectors which open it to the wide range of standard peripheral cards. Furthermore, the SBC-i886 contains a PCMCIA / Card Bus controller and slots. A PCMCIA card may be inserted and secured in the slot, with no additional mechanical means. Off-the-shelf PCMCIA modules can extend the system with capabilities such as a larger solid state disk, modem, and wireless LAN.

For more information, see [Developer Resources](#) page.

Block Diagram



13

SBC-i886 Features

The "SB Option" column specifies the P/N code of SB-i886 required to have the particular feature. The "CM Option" column specifies the P/N code of CM-i886 required to have the particular feature. SBC-i886 content is the combination of features provided by the attached CM-i886 and features implemented on the SB-i886. To have a particular feature, both the CM and SB option: that feature must be implemented.

"+" means that the feature is always available, regardless of P/N code.

Feature	Specification	SB Option	CM Optio
CPU SDRAM Flash Disk	See Features List of CM-i886 module		
COM 1	RS-232 levels, standard 10-pin header for DB-9 cable/connector	+	+
COM 2	RS-232 / RS-485 / TTL level options, standard 10-pin header for DB-9 cable/connector	+	+
IrDA	Standard header for SIR LED module	+	+

LPT (Parallel Port)	Standard 26-pin header for DB-25 cable/connector. Shared with FDC	+	+
IDE	PIO and ATA-66 modes. Standard 40-pin header for HDD cable.	+	+
FDC	Routed through LPT header	+	+
Ethernet	One or two 10/100BaseT Ethernet ports. Realtek RTL8139 controller with MAC and PHY functions, PCI interface. 10-pin header per port. Optional interface module with transformer, RJ-45 connector and activity LED's.	+	E1 or E2
CRT Monitor	10-pin header. Optional interface module with HD-15 VGA connector.	+	G1/G:
LCD Panel	51-pos FPC connector for direct interface to certain LCD panels	+	G2
PS/2	Standard headers for PS/2 cable/connector	+	+
GPIO	20 lines, through 50-mil header.	+	+
PCMCIA / Card Bus	TI PCI1420 controller. Support for 16-bit PCMCIA and 32-bit CardBus standards. Single or dual PCMCIA / Card Bus slot with card guides, for card types I, II and III.	C1 or C2	+
USB	2 Host ports, 12 Mbps. Header for Type-A cable/connector.	+	+
Sound I/O	CS4202 audio codec. Header for standard cable/connectors for Microphone (mono), Line input and Speakers (stereo)	A	+
PC104	LPT-to-ISA bridge. PC/104 bus through standard PC/104 connector	P	+
PC104+	PCI bus through standard PC/104+ connector	R	+

Electrical, Mechanical and Environmental Specifications

Power Supply	5.0V @1-8A and 3.3V @1-3A. Current depends on CPU type and spe
Dimensions	96 mm x 91 mm x [30-40] mm. Height ranges from 30 mm to 40 mm, depending on the connectors assembled. Height specified includes the CM-i886 module with heatsink.
Operation temp (case)	Commercial: 0° to 70° C Extended: -20° to 70° C Industrial: -40° to 85° C. Click for availability note
Weight	200 gram
Storage temperature	-40° to 85° C
Relative humidity	10% to 90% (operation) 05% to 95% (storage)
Shock	50G / 20 ms
Vibration	20G / 0 - 600 Hz
MTBF	> 100,000 hours

For more information see:

- [SB-i886 Reference Guide](#)
- [Developer Resources](#)

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