



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-iVCF Board



With front panel



Without front panel



With interface cables



E

SBC-iVCF Highlights

- **Single Board Computer implemented by combination of [CM-iVCF](#) module and [SB-iVCF](#) baseboard. Two form-factor options:**

- Standard PC/104+ form
- Extended PC/104+ with front panel

- **VIA C3/C7 CPU architecture, up to 1000 MHz**

- **64 - 256 MB DDR**

- **32 - 512 MB Flash Disk**

- **PCI and ISA expansion buses in PC/104+ format**

- **SXGA graphics controller. Connectors for LCD panel, CRT monitor and TV.**

- **Four USB-2 ports**

- **UART's with RS232, RS485, RS422 & TTL driver options**

- **PS/2 keyboard and mouse interfaces**

- **Single or dual 100Mb Ethernet ports (optional)**

- **Sound I/O**

- **Touchscreen interface**

- **High speed hard disk interface through IDE (UDMA133) and SATA**

- **Single or Dual Card Bus / PCMCIA slots (optional)**

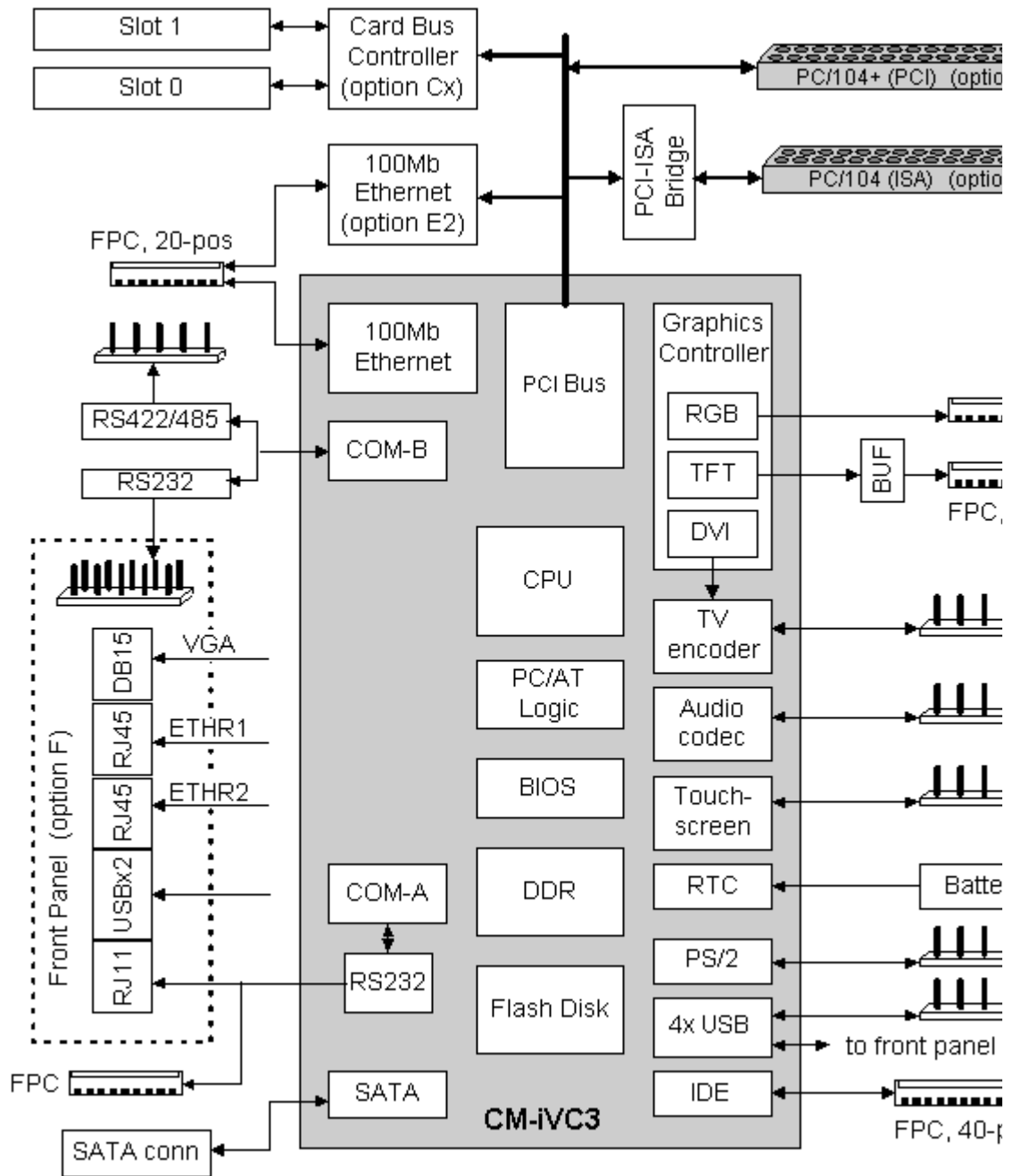
The **SBC-iVCF** is a standard PC/104 single board computer. It is implemented by the [iVCF](#) module providing most of the functions of the [SB-iVCF](#) carrier board providing cost-effective and several additional functions. The price / performance targets of the [SBC-iVCF](#) is customizable according to the user's application.

Unique mechanical design of [SBC-iVCF](#) allows selection between two popular form factors: standard PC/104+ with headers, or PC/104+ with front panel connector:

The [SBC-iVCF](#) contains a PC/104+ connectors which opens it to the wide range of standard peripheral cards. Furthermore, the [iVCF](#) contains a PCMCIA / Card Bus and slots. A PCMCIA card may be secured in the slot, with no additional means. Off-the-shelf PCMCIA modules can extend the system with capabilities: larger solid state disk, modem, and

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

Block Diagram



SBC-iVCF Features

"SB Option" column specifies the P/N code of SB-iVCF required to have the particular feature. The "CM" column specifies the P/N code of CM-iVCF required to have the particular feature. The SBC-iVCF combination of features provided by the attached CM-iVCF and features implemented on SB-iVCF. For a particular feature, both CM and SB options of that feature must be implemented. "+" means that the feature is always available, regardless of P/N code.

Feature	Specification
CPU	

DRAM Flash Disk	See Features List of CM-iVCF module
COM 1	RS-232 levels. Interface options: - FPC connector >> cable >> DB-9 module - RJ11 connector on front panel
COM 2	RS232 or RS422/485 drivers. Interface through 100-mil header on front panel
Harddisk	PIO and UDMA-133 modes. IDE and S-ATA interfaces: FPC connector >> cable >> standard 40-pin IDE header
Ethernet	One or two 100Mb ports. RTL8139 controller. Interface options: - FPC conn >> cable >> module with RJ45 conn and LEDs. - RJ45 connectors and LEDs on front panel
CRT Monitor	Interface options: - FPC connector >> cable >> module with HD15 VGA conn. - HD15 VGA connector on front panel
LCD Panel	51-pos FPC connector for interface to TFT panels
PS/2	Headers for PS/2 cable/connector
PCMCIA / Card Bus	TI PCI1520 controller. Support for 16-bit PCMCIA and 32-bit CardBus standards. Single or dual PCMCIA / Card Bus slot with card guides, for cards type I, II and III.
USB	4 x USB-2 ports, 480 Mb/s. Interface options: - Headers to USB cable with connector (2 ports) - USB connectors on front panel (2 ports)
Sound	Header for standard cable/connectors for Microphone (mono), Line input and Speakers (stereo)
Touchscreen	Header for interface to resistive touch screens
PC104	ISA bus through standard PC/104 connector
PC104+	PCI bus through standard PC/104+ connector

Electrical, Mechanical and Environmental Specifications

Power Supply	5.0V @1A and 3.3V @1A (typical)
Dimensions	Without front panel - 96 mm x 91 mm With front panel - 111 x 91 mm Height ranges from 10 mm to 30 mm, depending on the connectors assembled. Height specified includes the CM-iVCF module.
Operation temp (case)	Commercial: 0° to 70° C Extended: -20° to 70° C Industrial: -40° to 85° C. Click for availability note
Weight	100 - 300 gram, depending on connectors and heatsink assembling.
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-iVCF Reference Guide](#)

- [Developer Resources](#)

Contact Copyright (C) CompuLab 1999-2006

