

Introduction

Advantech's new PC/104 module, the PCM-3345, is truly an all-in-one CPU board, yet its form factor is only that of a standard PC/104 module (90 x 96 mm). This makes it one of the smallest complete SBCs on the market.

Even though this module is so tiny, it still contains everything that a full-fledged computer requires. Its on-board CPU is a 486 DX 66 MHz equivalent from ST Thompson (STPC). It is unique for a 486-based CPU in that its front side bus runs at 66 MHz, instead of only 33 MHz like Intel 486 CPUs. Also, since it's integrated on board, there is no need to configure CPU frequency or voltage. It supports 16, 32 MB EDO SO DIMM (optional). Extra memory comes in handy because of this board's shared VGA memory capability.

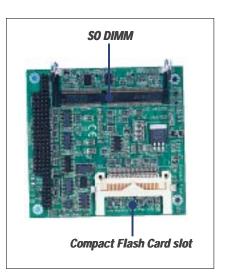
This module supports ATX power (allowing for remote power-on) and watchdog timer protection. Its small size doesn't limit the number of ports or connectors, either. On board, there are two serial and one parallel ports, one FDD connector and one IDE connector, allowing for as much peripheral expansion as most much larger size SBCs. This board also supports one compact Flash card for use as an emulated HDD. Advantech provides several size options of compact Flash cards (up to 40 MB).

Specifications

- On-board CPU: ST Thomson DX-66 STPC Client
- BIOS: 128 KB AMI Flash BIOS
- Supports 16 or 32 MB EDO SO DIMM (optional)
- SSD: Supports one compact Flash card as an emulated HDD
- Green function: Supports Advanced
 Power Management
- Modem ring-on
- ATX power
- Watchdog timer
- One EIDE interface
- One PC-AT keyboard connector
- One FDD interface
- · 2 series ports, one parallel port
- Graphics: High Performance 64-bit windows accelerated (UMA) shared memory VGA, 1280 X 1024 @ 75 Hz refresh rate
- ± 12 V, ± 5 V power connectors
- PC/104 expansion: 16-bit PC/104
 module connectors
- Mechanical and Environmental
- Operating temperature: 0 ~ 70 °C
- Dimensions: 96 mm X 90 mm
- Weight: 0.11 kg

Ordering Information

- PCM-3345-00A2: PC/104 486 DX66 CPU Module
- DIMM 144-1600-E0: 144-pin 16 MB EDO SO DIMM module
- DIMM 144-3200-E0: 144-pin 32 MB EDO SO DIMM module
- PCM-3521-00A1: Fat panel/CRT display module

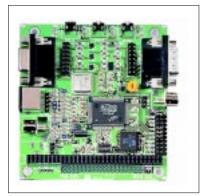


Back view



PC/104

PCM-3523VGA to TV Signal ConverterPCM-3840DiskOnChip® 2000 Flash Disk ModulePCM-3521Flat Panel/CRT Display Module



CE PCM-3523 VGA to TV Signal Converter

The PCM-3523 converts RGB video and sync from a standard VGA source into broadcast quality NTSC and PAL video.

Composite and S-Video outputs are compliant with SMAPTE-170M and CCIR-656 specifications. A fully integrated 3-line adaptive flicker filter provides three selectable operating modes. Supported VGA formats are 640 x 480 at 60 Hz for NTSC and PAL-M, and 640 x 480 and 800 x 600 at 50 Hz for PAL B/G/H/I.

- Flicker free VGA to TV signal converter
- 3-channel 8-bit input conversion
- Multiple input formats
 640 x 480 @ 50/60 Hz, 800 x 600 @ 50 Hz
- Multiple output formats
 NTSC, NTSC-EIA, PAL-B/G/H/I, PAL-M
- Composite and S-video output formats
- Horizontal and vertical positioning control
- · Configuration set by switches
- Internal color bar
 Blanks to blue or black

Ordering Information

PCM-3523-0000: VGA to TV Signal Converter





C E PCM-3840 DiskOnChip[®] PCM-2000 Flash Disk Module CDT I

The PCM-3840 DiskOnChip® 2000 Flash Disk card is a single-chip Flash disk that uses a new Flash technology called NAND. These high density, low cost components enable faster read/write speeds and higher capacities at lower prices than previous generations of Flash components.

- 2 ~ 144 MB DOC[®] 2000 support
- · Simple, easy to use interface
- 32-pin DIP JEDEC standard SRAM/ EPROM/FLASH compatible package
- · High-speed reading and writing
- System bootable
- Economical solution for making your embedded computer system bootable

Ordering Information

□ PCM-3840-BARE: DiskOnChip[®] 2000 Flash Disk

€ PCM-3521 Flat Panel CRT Display Module

The PCM-3521 flat panel/CRT display PC/104 module supports a wide range of popular flat panel displays and traditional analog CRT monitors in high resolution display modes, while maintaining complete register, gate and BIOS compatability with the IBM VGA standard. It also supports the use of a flat-panel display and a CRT VGA display at the same time.

- Standard 16-bit PC/104 form factor
- C&T 65545 chip
- · On-board 1 MB video memory
- On-board 512 KB frame buffer
- On-board DC-DC converter supplies LCD bias voltage ($V_{\rm FF}$) from -35 ~ +35 V
- On-board variable resistor for panel contrast adjustment (may be extended through wires to display)
- Supports 3.3 V / 5 V LCD power
- · High resolution display:
 - -B/W panel: 800 x 600 @ 61 gray scales
 - -Color panel: 800 x 600 @ 256 colors
 - -CRT: 800 x 600 @ 256 colors

Ordering Information

Display Module

