

WORLD

Embedded PCs for Automation

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EASE YOUR INTEGRATION WORRIES WITH THE SMALLEST COMPLETE PC



MBPC-200 chassis with half-size Biscuit PC, 50 W power supply and 2.5" HDD

In order to simplify the systems integration process, Advantech has designed two biscuit PC-sized chassis: the MBPC-200 and the MBPC-201 MicroBox Biscuit PC Chassis. They were built to provide the maximum flexibility possible enclosed within the minimum amount of space.

Both of these products can accommodate Advantech's full range of half-size biscuit PCs, such as the PCM-3860/3864,

PCM-4820/4822/4824, PCM-4823/4823L and the PCM-4825/4825L series. The case of the MBPC-201, though, is a bit taller than the case of the MBPC-200. This fact allows for greater expansion possibilities, such as the internal installation of an HDD or one or two extra PC/104 modules. It also makes possible the inclusion of a 25 W DC-DC power supply.

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A Compact, Total Solution

The MBPC-200 is a very small chassis (190x114x39.5 mm) which can accommodate a biscuit PC and one PC/104 module within the case, and a 2.5" HDD attached on the top of the case. This chassis can be ordered separately or with biscuit PC included. An optional HDD cover can also be provided for aesthetic purposes. In addition, compact Advantech power modules can also be ordered which convert 100-240 VAC to 50 W +5/+12 VDC. In the near future, DC-DC power modules will also be made available. Also in the future, by March 1998, is an expanded version of the MBPC-200, to be called MBPC-202. It will provide extra space inside the chassis for an additional PC/104 module or the 2.5" HDD.

Another Solution

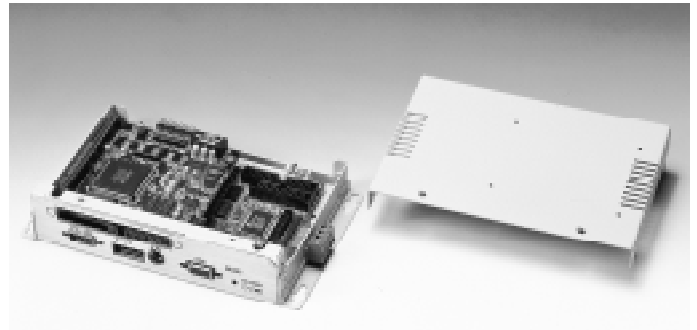
The MBPC-201 is a larger, yet still compact, chassis with dimensions of 91.5 x 196 x 124 mm (or 95 x 196 x 124 mm, depending on the biscuit PC used). Within the chassis, there is enough room for a half-size biscuit PC and a combination of two PC/104 modules and one 2.5" HDD. Also included within the chassis is a 25-watt DC-DC power supply.



MBPC-201 chassis with 25 W DC-DC power supply

Ease Your Integration Worries

The strong points of these two products are that they have been custom designed for Advantech's half-size Biscuit PCs and PC/104 modules and that they are ultra-compact. When buying biscuit or half-size card PCs, it is often difficult to find or construct appropriate chassis, but with Advantech's MBPC series of chassis, this is no longer a problem. Also, with chassis this



MBPC-200 chassis with half-size biscuit PC

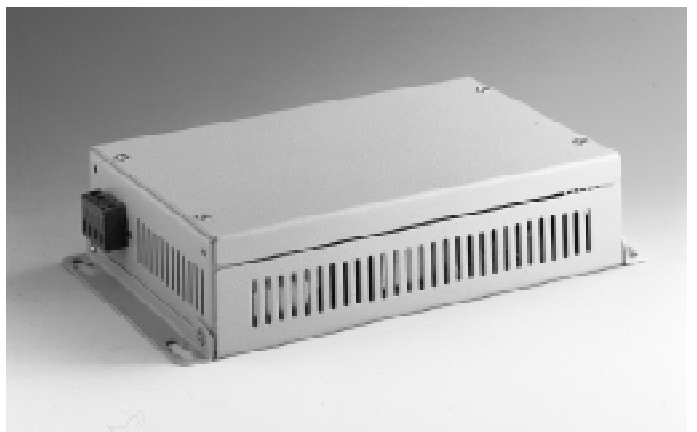
small that can contain an entire operating system and can be mounted almost anywhere, space should no longer be a constraining factor in any of your computations. Potential applications which utilize this space savings include car computers with GPS and small size LCD displays, tiny networking boxes, security stations, and many other such small-sized and/or mobile applications.

Friendly and Easy to Use

One other important feature of this chassis family is its user friendliness. All connectors are easily accessible and clearly labeled. When ordering, simply indicate which biscuit PC you intend to use, and the correct backplane with labeling will be supplied to you.

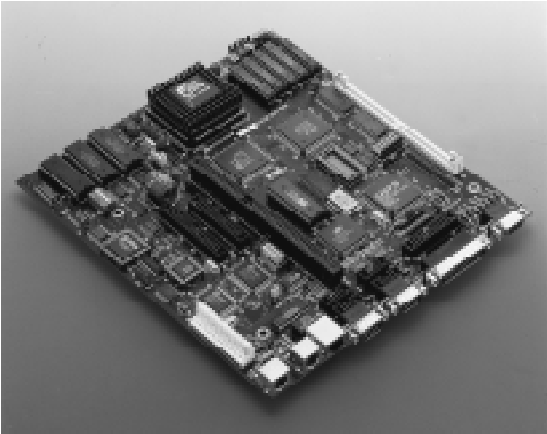
Your Best Choice

One can clearly see that if convenience, compactness, and user-friendliness are important to you, then Advantech's MBPC-200 and MBPC-201 family of MicroBox PC chassis is the perfect solution for one's system designing problems. If interested, please contact your local Advantech representative today.



PS-50A 50 W power supply

New POS-460-A2 Being Phased In



POS-460-A2

Due to the fact that two on-board chipsets have now gone out of production, Advantech has taken this opportunity to replace these chipsets and add a few extra features as well. The POS-460-A1, a 486 control board for POS applications, is being phased into the POS-460-A2. The two chipsets being replaced are the NET-IC chipset (from UMC9007 to UMC9008) and the Clock IC chipset (from MX8318 to ICS9154A).

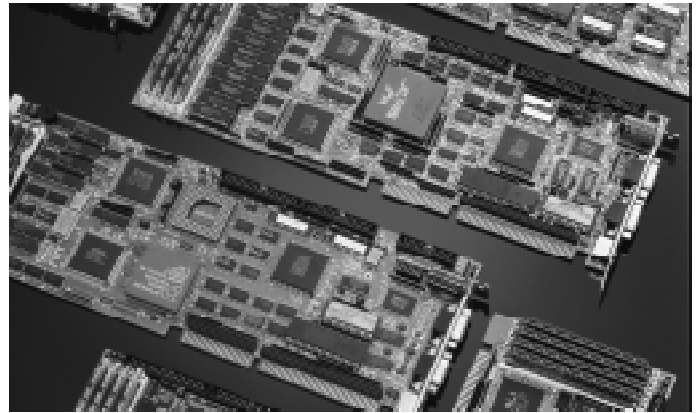
Expanded Features without Expanded Price

The main improvements made are the addition of an NET Super BNC connector (used for peer-to-peer communication purposes) and the increased selectability of COM3 from one choice (RS-232) to three (RS-232/422/485). Also, the new version can directly support a DiskOnChip Flash disk module, which can provide up to 72 MB of SSD memory. Please refer to the table below for addition changes. The POS-460-A2 is now in production and sells for the same price as the POS-460-A1. Starting January 1998, the POS-460-A1 will be subject to availability and confirmed advance booking only.

Features	POS-460-A1	POS-460-A2
COM3	RS-232	RS-232/422/ 485
COM3, COM4, LPT2 Enable/Disable Selection	By software	By jumpers
NET Super BNC Connector	No	Yes
DOC 2000 Support	Special BIOS update required	On-board
Watchdog Enable/Disable	Enabled only	Both enable and disable

Slot PC Upgrading

Three of Advantech's card PCs (PCA-6134P, PCA-6143P, and PCA-6144V) are being phased out because of either out-of-production chipsets or new, enhanced features. These three cards are being replaced with the PCA-6135L, PCA-6144S and PCA-6145L. Unlike the older versions, all of these new versions can support M-Systems' DiskOnChip 2000 Flash disk chip, which now can supply up to 72 MB of memory. Also, the watchdog timer in each of these products has been improved so that 63 levels (verses a previous 12 levels) of timing can be chosen.

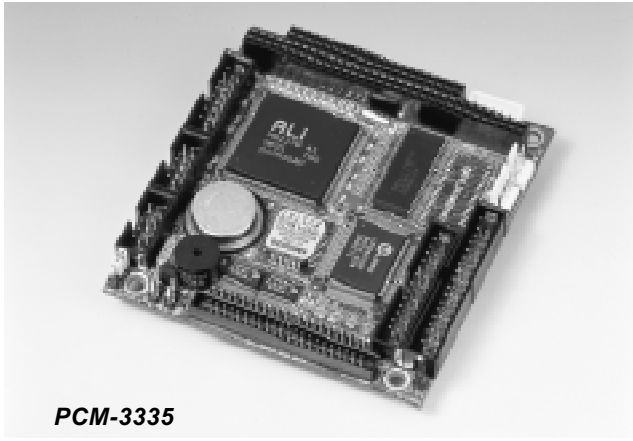


A Better Product at the Same Price

Individual improvements have also been made. The PCA-6135L comes with built-in CPU (unlike the older PCA-6134P), while the PCA-6145L supports both VGA CRT and LCD (the PCA-6144V only support CRT). All of these new products sell for the same price as the older models except for the PCA-6145L, which is almost 10% cheaper than its older model. Refer to the table below for more detailed information.

Old	New	Differences
PCA-6134P	PCA-6135L	New chipset (ALi 6117) Now has built-in CPU RAM increased from 16 to 32 MB Supports DOC2000 SSD (up to 72 MB) Watchdog timer now has 63 levels (vs. 12)
PCA-6143P	PCA-6144S	New chipset (VIA 82C496G) BIOS changed from AMI to Award, PnP Cache of 128 KB added RAM increased from 32 to 64 MB Supports DOC2000 SSD (up to 72 MB) Watchdog timer now has 63 levels (vs. 12)
PCA-6144V	PCA-6145L	Unchanged chipset (VIA 82C496G) Unchanged cache of 128 KB RAM changed from 64 to 32 MB Supports both CRT and LCD Supports DOC2000 SSD (up to 72 MB) Watchdog timer still has 63 levels

New Ultra-compact SBC Now Available



PCM-3335

The new PCM-3335 is a 386SX CPU PC/104 module with flat panel/CRT interface. Its palm-size dimensions are 90 x 96 mm (3.6" x 3.8"). Even though this product is only a PC/104 module, it is still a full-function, 386SX-40 single board computer. Its very low price and PC/104 compatibility make this item an attractive solution.

Brimming with Features

Besides the on-board processor, the PCM-3335 also has 2 or 4 MB DRAM, a C&T 65545 VGA chipset, and ports which can support up to 2 HDDs, 2 FDDs, 2 serial and 1 parallel ports, and 1 standard PC/AT keyboard. The on-board C&T chipset supports CRT and flat panel displays, and comes with 512 KB of on-board display memory.

PC/104 compatibility

One attractive feature of this board is its total compatibility with PC/104 modules. Some other companies that claim compatibility often have components on the board which actually block the successful installation of a PC/104 module. But Advantech's PCM-3335, on the other hand, has no on-board physical impediments for PC/104 modules.

Complete, compact system

Since the PCM-3335 itself is a PC/104 module, a combination of a PCM-3335 and another PC/104 unit would be very compact. Using a PCM-3840 (DiskOnChip2000 Flash Disk Module, 2 ~ 72 MB), which is one of Advantech's PC/104 modules, in conjunction with a PCM-3335 provides one with a complete computing system (processor, RAM, video chipset and RAM, and virtual HDD). All this in a package you can hold in one palm and can afford without much of a second thought.

Compact System Tolerates the Harshest Environmental Conditions Around

A Finnish company has created a powerful yet compact computer system with all of its components, LCD display and keyboard contained within a single case. This system can tolerate extremes in temperatures, humidity, vibrations, and knocks. In fact, if one so desires, this unit can even be operated underwater!

Why Advantech?

During the research, development, and testing phase for this product, this Finnish company searched for components which were compact and durable enough for its system. Advantech's PCM-4862 (486 SBC with VGA/LCD, Ethernet and SSD) and, later, the PCM-5862 (Pentium MMX SBC with VGA/LCD, Ethernet and Audio) both met their specifications. These two boards are very compact, taking up only the size of a 5.25" floppy drive. They are also very durable, built to the strict, industrial-class specifications of which Advantech prides itself.

Packed with Possibilities

Not only are these two boards compact and tolerant to harsh environmental conditions, they are also powerful. Both boards accept either a 486 or Pentium processor and sport on-board

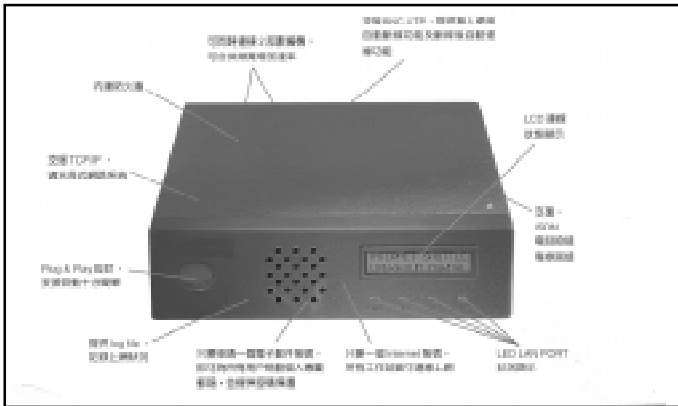
VGA/LCD chipset and LAN capabilities. The PCM-4862 in addition has an on-board SSD of up to 72 MB of Flash



memory, while the PCM-5862 has built-in 16-bit, Sound Blaster-compatible audio. These two Biscuit PC are compact, powerful and versatile enough to fit nearly any application. If one of these products sounds like a solution for you, then please contact your nearest Advantech distributor today.

Advantech Slot PC at the Heart of Internet Mini-gateway

Advantech's PCA-6145B, a 486 half-size CPU card with LCD/CRT, Ethernet and Solid State Disk, was chosen to serve as the core component of an internet mini-gateway product. This gateway helps save phone bills by sharing each telephone line among many users at any one time. It also can act as an email server and, because it is PnP, it is very easy to install. It is ideal for small offices or schools with ten or fewer users.



First Choice: Advantech

Advantech's PCA-6145B was chosen because it comes with built-in Ethernet and solid state disk. Its Ethernet connects to the server, while its COM1 and COM2 ports connect to two modems. Another reason why Advantech's slot PC was chosen was because it is cost effective and easy to upgrade. Express service was also important for this particular company.

Alternative Application Ideas

Besides this example, there are several similar kinds of applications in which Advantech products can be used efficiently and effectively. For example, modem servers, global positioning systems, medical measurement systems, and multimedia stations all incorporate communications and networking capabilities. They also employ techniques to communicate with other machines and sensors.

Your Total Solution

These kinds of applications only touch the tip of the iceberg of potential uses for Advantech's large array of industrial grade computing products. These powerful, flexible, yet inexpensive components can serve as the solution for nearly any systems integration problem that you may have. Contact your Advantech representative for more detailed information.

American Digital Analyzer Uses Biscuit PC from Advantech



When an American electronics company designing a product which combined all of the functions and flexibility of a computer which the thoroughness of a digital analyzer, it considered computer boards from many different manufacturers. After a comprehensive review and testing period, Advantech's PCM-5860 was chosen.

Advantech's PCM-5860 Has it All

The PCM-5860 is a Pentium processor based single board computer with SVGA/LCD and Ethernet capabilities. Also important was this board's PC-based hardware, which meant that it had standard PC/IO, it would be easy to maintain and upgrade, and it was cost-effective. Windows 95-based software is also user-friendly, easy to learn, and easy to upgrade. This board in particular was chosen because of its compact size, its power, and the general reliability of SBC's from Advantech.

The actual digital analyzer in question is built around the PCM-5860. Connected to it is an acquisition module that itself connects to an array of probe modules. Also attached to the PCM-5860 is a keyboard module, an HDD, and LCD, and a PCM-3110A PCMCIA module. If one so desires, even a printer, or a mouse, or another monitor can be connected. For remote or group monitoring, an Ethernet connection can be made.

Similar Application Examples

Other similar applications include medical equipment, industry controllers, measurement instruments and various other types of testers, monitors, and controllers. Advantech products come in various size and function categories to meet nearly any application you may have. For more information, please get in touch with your local Advantech distributor.

Sales Guides For New Products To Be Introduced

Beginning in 1998, Advantech will begin sending short sales guides by mail, email, and/or fax to its distributors in order to provide more information on the product and its sales strategy. Specifically, it will provide information on each products strong selling points, peripheral support, target markets, and competitive products and their weaknesses. This information should help Advantech's distributors and representatives to better market and sell these products.

Catalog on CD-ROM Is Coming

Advantech's 1998 Master Catalog has now been compiled on CD-ROM and will be sent to distributors and representatives around the world by the end of January 1998. The reference material and graphics included on this CD-ROM can help increase the speed and efficiency of the localized production of brochures, catalogs, direct mail fliers and so on. This should also simplify and streamline the communication process between these distributors and representatives and Advantech's home office..

February AE Training Planned

Because Advantech believes that technical support and information exchange is very important, it will host another round of AE training in Taiwan on Feb.24-27, 1998. Some of the main points to be covered include building effective communication networks, systemizing technical service, and developing regional technical databases. Interface problem uncertainties will also be discussed, and a workshop will give participants more hands-on instruction.

1998 Q1 Trade Show Schedule

Trade Show	Region	Period
Real Time Systems	France	Jan.14-16
Embedded Systems	Germany	Feb.18-20
CeBit '98	Germany	Mar.19-25
Embedded System East Conference	US	Mar.31-Apr.2
KOFA	Korea	Mar.27-30

Application Stories CD-ROM Compiled

Advantech has gathered together 20 of its most interesting and insightful application case stories and put them on one CD-ROM. Each story includes background information, the winning points of the particular Advantech product used, a function block diagram, and other similar application possibilities and development paths. Also included on the CD-ROM is general Advantech company and product line information. The slides of the new version of the CD-ROM will be sent to our key distributors and branches in the first quarter.

Advantech Introduces New Portable Demo Kit

Advantech estimates that by February 1998, it will be able to make available to its distributors a new portable product demo kit. This easy-to-use kit is installed within a standard briefcase. It contains a mounted LCD, speakers, hard drive and power supply. The particular Biscuit PC or CPU Card to be demonstrated can be plugged into a socket and its connectors can be hooked up to a corresponding plate which is clearly labeled. To demonstrate a different product, simply replace the actual Biscuit or CPU Card and its plate with the next one to be shown. This modular flexibility, along with its portability and ease of use, will surely make the salesperson's job much more efficient and productive. Please place your order with your sales representative starting February.

US\$1499 each, Order NOW !



Portable Embedded PC Demo kit--PCM-5862