

Prime News

[Advantech Hardware & Windows® CE Support Machinery and Fabrication Collaborative Manufacturing](#)

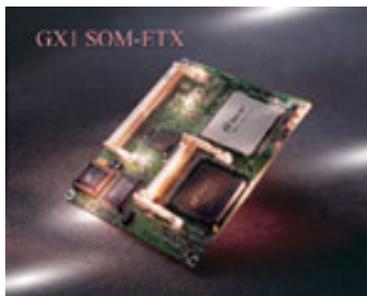
Advantech continues to position itself well in the \$7 billion a year factory controls market by offering multiple PC-based hardware platforms and Microsoft Windows® CE 3.0 support and training. In a market dominated by programmable logic controllers (PLCs), Windows CE's real-time performance and ability to act as a common platform from factory floor to front office to Internet (customer), has the industry excited about all the new capabilities, benefits and potential for increased innovation.



New Product

[New Geode™ GX1 SOM-ETX System On Module Available Now](#)

Advantech's SOM-4450 is our introduction SOM-ETX model. The SOM-4450, has a GX1-300 processor, VGA, LCD or LVDS/ LAN /Audio. Advantech's ETX form factor System On module series provides scalable solutions that meet customers' advanced CPU and application development needs. Maintaining the SOM concept of an application-specific customer solution board utilizing a plug-in CPU module, the SOM-ETX line has great I/O capacity and meets both ISA & PCI needs.



New Product

[PCM-231 Add-on Module Gives Audio and TV Support to Select SBCs](#)

Advantech has released a new module for added Audio and TV support for select SBCs. PCM-9370, PCM-5823, PCA-6752.

Problems, comments, suggestions? Please contact the [editor](#)

[EPC World](#)

[Advantech Home](#)

[EPC Homepage](#)

[News Archive](#)

[Contact Us](#)

Recent News

Prime News

■ [New Dual/Triple LAN Pentium® III PCM-9576 SBC Gives Administrators More Network Control](#)

New Service

■ [Advantech Announces Windows® CE 3.0 Support and Training for System On Module Products](#)

RECENT ISSUES

[June 15, 2001](#)

[June 1, 2001](#)

[May 15, 2001](#)

[May 1, 2001](#)

Tel: 886-2-2218-4567
 Fax: 886-2-2218-3875
[Contact the editor](#)

Other News

Prime News

- [Advantech Hardware & Windows® CE Support Machinery and Fabrication Collaborative Manufacturing](#)

New Product

- [New Geode™ GX1 SOM-ETX System On Module Available Now](#)

New Product

- [PCM-231 Add-on Module Gives Audio and TV Support to Select SBCs](#)

RECENT ISSUES

[June 15, 2001](#)
[June 1, 2001](#)
[May 15, 2001](#)
[May 1, 2001](#)

Prime News

Advantech Hardware & Windows® CE Support Machinery and Fabrication Collaborative Manufacturing

Advantech continues to position itself well in the \$7 billion a year factory controls market by offering multiple PC-based hardware platforms and Microsoft Windows® CE 3.0 support and training. In a market dominated by programmable logic controllers (PLCs), Windows CE's real-time performance and ability to act as a common platform from factory floor to front office to Internet (customer), has the industry excited about all the new capabilities, benefits and potential for increased innovation.

Advantech's x86 and Windows® CE development experience, full range of turnkey solutions that include industrial SBCs, various HMI touchscreen devices and variable I/O control cards, allow our customers to realize gains in efficiency, reduce costs and ultimately improve their time to market performance.



Engineers Hard to Convince

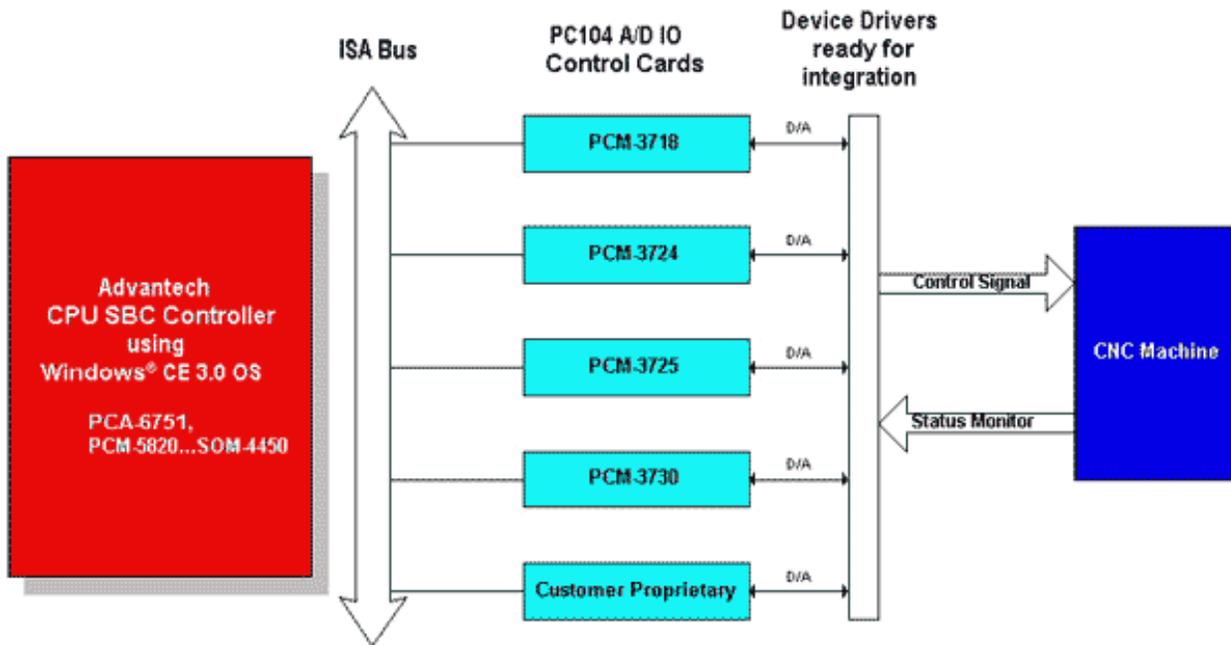
There has been a growing movement to bring PC power to the factory floor to handle more dynamic and complicated control tasks. Manufacturing engineers, however, have been reluctant (and with good reason) to use PC's and Windows to control their mission critical processes. The real-time performance of these systems do not meet the control and safety levels dictated by their applications. The DOS-based engines driving these PCs simply do not respond fast enough, or reliably enough, to high priority commands. The chance of the OS performing a lower priority task at a critical time (ie. emergency stop), turns engineers off. Real-time extensions that allow Windows NT to be a priority-based OS, has overcome some of these concerns, but this is a costly solution that does not hold up well in many industrial environments. Windows CE 3.0, with its real-time capabilities, fast reaction time, and small OS footprint that can run from a SSD or diskless and ability to operate in the harshest environments, truly brings Windows to the factory floor.

Expanding Customer Services

Advantech has a full line of hardware and Windows CE 3.0 software products that allow our customers to capitalize on these current market trends. We have Evaluation Kits and Platform development Kits that allow customers to realize fast prototyping and deployment of their products and applications, visit here to find out more, <http://www.advantech.com.tw/epc/esw/products.asp>. Advantech is also offering Windows CE 3.0 Training and support for our System On Module products <http://www.advantech.com.tw/epc/news/news192.asp>. Advantech's tough and durable industrial grade hardware, industrial automation domain expertise and our full Windows CE 3.0 capabilities, work well together for these industrial applications.

Bringing Everything Together

Advantech's broad product line gives customers a wide range of services and products to enable their dynamic applications. Decreasing development time and costs while increasing graphic and display capabilities and overall system performance, plays well into all kinds of PC/Windows CE applications. To give an example of this, here is a diagram of a typical control system for a CNC machine using off-the-shelf Advantech CPU boards and Digital/Analog IO modules.



Advantages of a Windows CE 3.0 Solution

The advantages of using Windows 3.0 are sweeping the machinery and manufacturing industry. Below is a list of some of these.

- **Reduce costs**
 - OS (Windows CE license less than MS-DOS)
 - Buy off-the-shelf hardware products and add on cards, also supports proprietary I/O control cards
 - Reduced hardware demand (no HDD)
 - Reduce maintenance costs (Operate from SSD or diskless, Increased MTBF)
 - Reduce development time and costs
 - Choose from a wider range of CPUs that better fit application needs
- **Instant On and Off**
 - No boot up time wasted using CE
- **Better performance**
 - Able to use higher speed processors
 - Use larger memory when needed
 - Better performance over traditional PLCs, some PLCs may be up to 50 times slower than Windows CE real-time versions
- **The ability for Windows CE to connect to so many other business and technical Windows-based platforms already firmly established.**
 - Managers can connect directly to the factory floor from the front office (ethernet connectivity platforms)
 - Easy to make devices that can dial out and transfer files to enterprise servers. HTML data can be viewed by browser allowing better control and collaboration
 - Engineers can synch handheld devices
 - Scale across multiple platforms running Windows NT or CE
- **Windows CE lets customers leverage thousands of software applications and developers already familiar with Visual Basic and C programming.**
 - Reduce development time and costs
 - Easier to migrate existing Windows 98, NT software to Win CE
 - Easier to program and display graphics
- **Small and compact OS**
 - OS can be stored in flash memory (no moving parts)

- Remote Boot capability, further reduce costs by eliminating SSD, increases reliability as well
- Able to operate in much harsher environments, better shock and vibration resistance

Contact Information

Call your local Advantech sales contact to find out more about Advantech's Windows CE solutions. Let us put a package together for you. You can reach us anytime at epc@advantech.com.tw

[TOP](#)

Problems, comments, suggestions? Please contact the [editor](#)

EPC World	Advantech Home	EPC Homepage	News Archive	Contact Us
---------------------------	--------------------------------	------------------------------	------------------------------	----------------------------

New Product

New Geode™ GX1 SOM-ETX System On Module Available Now

Advantech's ETX form factor System On module series provides scalable solutions that meet customers' advanced CPU and application development needs.

Maintaining the SOM concept of an application-specific customer solution board utilizing a plug-in CPU module, the SOM-ETX line has great I/O capacity and meets both ISA & PCI needs. With a wide range of processor choices, SOM-ETX gives application engineers powerful CPU platform choices, streamlining the product development process and reducing time to market. The small size (95 mm x 114 mm) and use of four high capacity connectors based on Jumptec's ETX form factor, allow the SOM-ETX modules to be easily and securely mounted onto a customized application (customer solution) board.



SOM-4450 Geode™ GX1-300

Advantech's SOM-4450 is our introduction SOM-ETX model. The SOM-4450, has a GX1-300 processor, VGA, LCD or LVDS/ LAN /Audio. Many gains were made by utilizing the Geode GX1 processor. The GX1 processor provides the lowest power consumption/high speed combination of any X86 processor at these performance levels. These processors also support most popular web plug-ins and leverage existing software and hardware investments. Combined with the CS5530A system chipset and RTL 8139 Ethernet Chipset, the SOM-4450 is a low power, high performance platform ready to be integrated with customer solution boards covering multiple applications.

Summary of Features and Specifications of the SOM-4450

The design of the SOM-4450 gives customers good performance, eliminates CPU integration worries and allows fast application support for the most dynamic embedded needs, greatly streamlining the product development process and reducing critical time-to-market.

The SOM-4450 has all the powerful features that allow it to support the most dynamic applications. Below is a summary of the specifications:

- **CPU:** NS Geode™ GX1-300 MHz
- **Chipset:** NS CS5530A
- **RAM memory:** One SODIMM socket supports up to 128 MB synchronous DRAM
- **VGA/LCD controller:** CS 5530A LCD/CRT



Tel: 886-2-2218-4567

Fax: 886-2-2218-3875

[Contact the editor](#)

Other News

Prime News

- [Advantech Hardware & Windows® CE Support Machinery and Fabrication Collaborative Manufacturing](#)

New Product

- [New Geode™ GX1 SOM-ETX System On Module Available Now](#)

New Product

- [PCM-231 Add-on Module Gives Audio and TV Support to Select SBCs](#)

RECENT ISSUES

[June 15, 2001](#)[June 1, 2001](#)[May 15, 2001](#)[May 1, 2001](#)

controller, single 18-bit LCD interface, 64-bit graphics engine, 1 - 4 MB display memory
TTL interface: Supports 18-bit LCD

- **LVDS interface:** Supports Single Channel LVDS 68 MHz Video interface: CS5530A chip & CH7003 TV Out decoder, S-video support
- **Audio interface:** CS5530A chip, AC97, 16-bit stereo, line-in,out,mic-in, 3D audio SSD support: 1 CompactFlash™ socket on board, 16 MB DOC® 2000 (optional)
- **Ethernet interface:** RealTek RTL 8139 controller
- **Solid State Disk:** One CompactFlash™ socket

Standard SBC Ordering Information

SOM-4450F-G0A1: SOM-ETX w/ GX1-300/VGA/LCD/LAN/Audio/TV

SOM-4450FL-G0A1: SOM-ETX w/ GX1-300/VGA/LVDS/LAN/Audio/TV

SOM-DB4400 : Development Board for SOM-ETX

Contact Information

The SOM-4450 is available now. To place an order or obtain more information on the new SOM-4450 or any other Advantech products, contact your nearest Advantech representative or e-mail us at som@advantech.com.tw today.

[TOP](#)

Problems, comments, suggestions? Please contact the [editor](#)

EPC World	Advantech Home	EPC Homepage	News Archive	Contact Us
---------------------------	--------------------------------	------------------------------	------------------------------	----------------------------

Product Update

PCM-231 Add-on Module Gives Audio and TV Support to Select SBCs

Advantech has released a new module for added Audio and TV support.

The **PCM-231AV** provides Audio and TV out (S-video) support for the **PCM-9370** SBC. <http://www.advantech.com.tw/products/PCM-9370.asp>

The **PCM-231A** provides Audio support for the **PCM-5823** <http://www.advantech.com.tw/epc/news/news135.asp> and the **PCA-6752** <http://www.advantech.com.tw/products/PCM-6752F.asp> SBCs.

Contact and Ordering Information

Call your local Advantech sales contact to find out more about these support modules, they are available now. You can reach us anytime at epc@advantech.com.tw

To place orders or request information, use the following part numbers:

PCM-231AV-00A1: Audio/TV-Out module for PCM-9370

PCM-231A-00A1: Audio-Out module for **PCM-5823** and **PCA-6752**

Tel: 886-2-2218-4567
Fax: 886-2-2218-3875
[Contact the editor](#)

Other News

Prime News

- [Advantech Hardware & Windows® CE Support Machinery and Fabrication Collaborative Manufacturing](#)

New Product

- [New Geode™ GX1 SOM-ETX System On Module Available Now](#)

New Product

- [PCM-231 Add-on Module Gives Audio and TV Support to Select SBCs](#)

RECENT ISSUES

- [June 15, 2001](#)
- [June 1, 2001](#)
- [May 15, 2001](#)
- [May 1, 2001](#)

[TOP](#)

Problems, comments, suggestions? Please contact the [editor](#)

EPC World	Advantech Home	EPC Homepage	News Archive	Contact Us
---------------------------	--------------------------------	------------------------------	------------------------------	----------------------------