Advantech Home | EPC Homepage | Online Store | Contact Us

January 17, 2003 Vol. 83

-- **Advantech Again Selected as Windows Embedded Partner of the Year** --

-- **Advantech Strengthens RISC Position with New Partner** --

Prime News

Microsoft™ Again Selects Advantech for Windows® Embedded Partner of the Year Award

Advantech is once again pleased to receive the Windows Embedded Partner of the Year Award, this time for 2002. Advantech captured the award from a field of over a thousand Windows Embedded Partners by demonstrating outstanding technical innovation and aptitude with the Windows Embedded platform. **(read more...)**
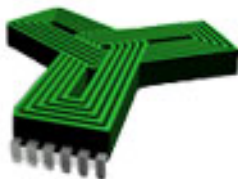
Tel: 886-2-2792-7818
Fax: 886-2-2794-7304
Contact the editor

Recent News

Application Story

- Self-Ticketing Kiosk

New Products

- 4-LAN POD-6704
- PCA-6772
- SOM-4451

Announcement

- PPC103&105 add DC

Announcement

Advantech Strengthens RISC Position by Adding Singapore Partner

Having already enjoyed a cooperative relationship for some time, in November, 2002 Advantech accepted Innvo Systems of Singapore as an Embedded Solution Alliance Partner. Most notably, Innvo Systems was instrumental in working with Advantech to develop the real time embedded Linux system used in our StrongArm PCM-7130 RISC SBC. **(more...)**

RECENT ISSUES

- Jan 1, 2003
- Dec 19, 2002
- Dec 6, 2002
- Nov 14, 2002
- Oct 28, 2002

Problems, comments, suggestions? Please contact the editor

ECG World	Advantech Home	EPC Homepage	EPC News Archive	WAG News Archive	Contact Us

EMBEDDED COMPUTING WORLD *online*

Advantech Home | EPC Homepage | Online Store | Contact Us

January 17, 2003 Vol. 83

Prime News

Microsoft Again Selects Advantech for Windows® Embedded Partner of the Year Award

Advantech is once again pleased to receive the Windows Embedded Partner of the Year Award, this time for 2002. The award was formally presented at the Taipei International Conference Center on Monday, January 13th, 2003. Advantech captured the award from a field of over a thousand Windows Embedded Partners by demonstrating outstanding technical innovation and aptitude with the Windows Embedded platform. Advantech's Embedded Software Solutions division is continuously making breakthroughs based on Windows Embedded technologies. Examples include, among others, direct video capture, VoIP, and x86 instant-on capability, all of which are based on the Windows Embedded OS.

A Committed Partner

For over 8 years, Advantech has been dedicated to providing Windows Embedded software support to our customers. Advantech was the first company to sell a Microsoft Windows CE operating system (OS) and Single Board Computer (SBC) together as one package, and now offers over thirty standard products with Windows Embedded solutions. Our Embedded Software Solution Division (ESSD) has focused on developing end user applications utilizing Windows embedded software, and has also provided development and integration support for a wide range of embedded products for both OEMs/ODMs and various mission-critical applications.

Tel: 886-2-2792-7818
Fax: 886-2-2794-7304
Contact the editor
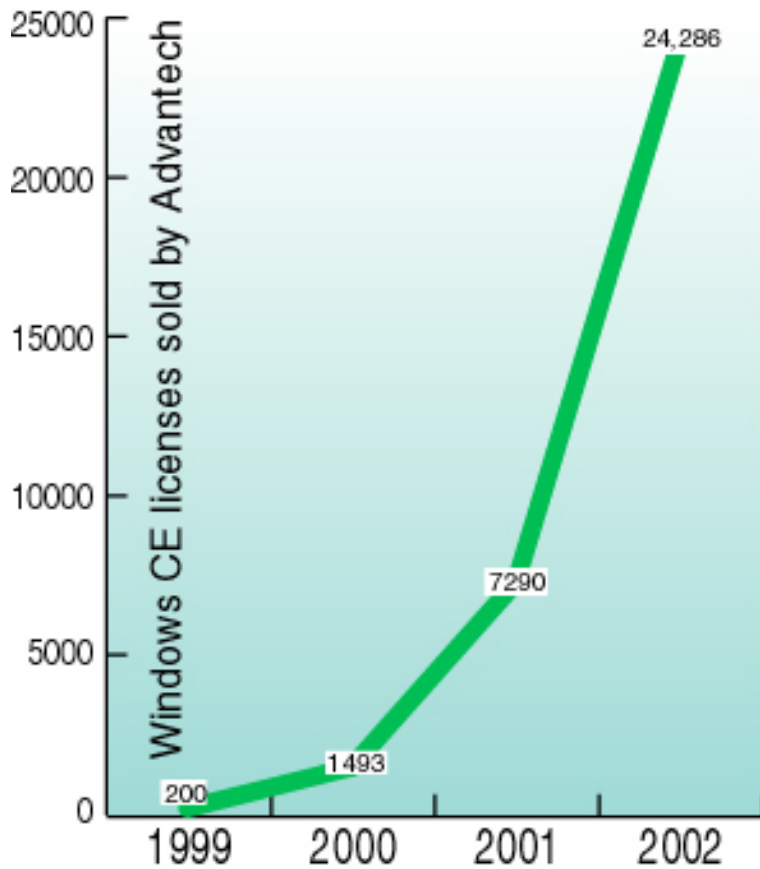
Other News

Prime News

- Microsoft Again Selects Advantech for Award

Announcement

- Advantech Has New Partner

RECENT ISSUES

- Jan 1, 2003
- Dec 19, 2002
- Dec 6, 2002
- Nov 14, 2002
- Oct 28, 2002

Nice Numbers

Recently Embedded Computing World talked with Isaac Hsu, Advantech ESSD Product Manager. We were looking at the chart above.

ECW: Those are some nice-looking numbers.
Hsu: Yeah, they form an exponential curve.
         Of course we can't expect to keep that up indefinitely.
ECW: Not in a finite world.
Hsu: But for now it does look good.
ECW: It looks great.
Hsu: And that is just for Windows *CE* Embedded. As sales
         of Windows **XP** Embedded ramp up, they'll help keep
         our Windows Embedded line headed in the right
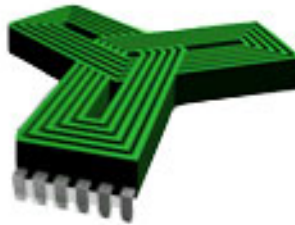   direction for a long time to come.

Find Out More Today

Advantech is continuously developing solutions using the industry's most reliable OS like Microsoft's newest Windows CE .NET, Windows NT embedded, Windows XP embedded or Windows 2000 SAK on our most revolutionized platform solutions. To find out more, please call your local Advantech sales office, or visit our website at http://www.advantech.com

EMBEDDED COMPUTING WORLD *online*

January 17, 2003 Vol. 83

Announcement

Advantech Strengthens Its RISC Position
by Adding Singapore Partner

Having already enjoyed a cooperative relationship for some time, in November, 2002 Advantech accepted Innvo Systems of Singapore as an Embedded Solution Alliance Partner. Innvo is a provider of turnkey embedded system solutions, offering expertise in java, wireless technologies, and real-time operating systems. Most notably, Innvo Systems was instrumental in working with Advantech to develop the real time embedded Linux system used in our StrongArm PCM-7130 RISC SBC. The PCM-7130 is a full-function embedded solution providing crucial features such as LCD/touchscreen support, a battery interface, GPIO/DIO plus the usual I/O ports such as serial, USB, LAN and CRT.

Realtime
The term 'realtime' is used several contexts in embedded systems. If a task needs to perform operations with a short and consistent response time to an input, it is normally referred to as a realtime task. Examples of such tasks are input device handling, network stream handling, multimedia video support and the like. In all these cases, tasks must be processed within a predetermined time limit.

Hard and Soft Realtime
In soft realtime tasks, the task deadline can be missed without any serious penalty. For example, in a video game, some frames can be dropped to maintain synchronization without any serious loss of quality. Many tasks involving multimedia input devices fall into this category.
Hard realtime tasks are those in which missing the deadline invokes a serious penalty. An example of this would be a realtime process that fires propulsion systems in sequence in a rocket. If one of the rockets is fired slightly after deadline, the mission ends in disaster. Another example would be the task of inflating an automotive airbag during an auto accident. If that task were to miss its deadline, it could result in serious injury to the passenger.
Industrial controllers are required to work with hard realtime guarantees figured in terms of milliseconds.

The PCM-7130 achieves super low latencies through a combination of a realtime Linux OS running on a high-efficiency architecture hardware platform.

Realtime Linux

Tel: 886-2-2792-7818
Fax: 886-2-2794-7304
Contact the editor

Other News

Prime News
- Microsoft Again Selects Advantech for Award

Announcement
- Advantech Has New Partner

RECENT ISSUES
- Jan 1, 2003
- Dec 19, 2002
- Dec 6, 2002
- Nov 14, 2002
- Oct 28, 2002

It is notable that RTLinux provides the best realtime guarantees (in terms of latency) among all available Linux Realtime variants. It has been observed to provide worst case latencies of less than 10 microseconds on 800 MHz Intel Pentium III based systems.

Nanosecond Resolution The fundamental principal of RTLinux is to provide a mechanism through the Linux kernel which allows tasks to work with latencies on the order of microseconds. It also allows the tasks to define their period in nanosecond resolution.

Linux Kernel Resources Tasks make use of the resources provided by the Linux kernel and are run with hard Realtime guarantees. RTLinux is implemented by running the entire Linux kernel and its subtasks as a low priority thread under a Realtime microkernel called RTLinux. For a detailed account of realtime latency tests conducted by Innov on the Advantech PCM-7130 platform, you can view their PDF file here (1.2MB).

Find Out More Today

To find out more about how Advantech RISC solutions can benefit you, please call your local Advantech sales office, or visit our website at http://www.advantech.com.tw/risc

TOP

Problems, comments, suggestions? Please contact the editor

EPC World	Advantech Home	EPC Homepage	News Archive	Contact Us