Embedded PCs for Automation

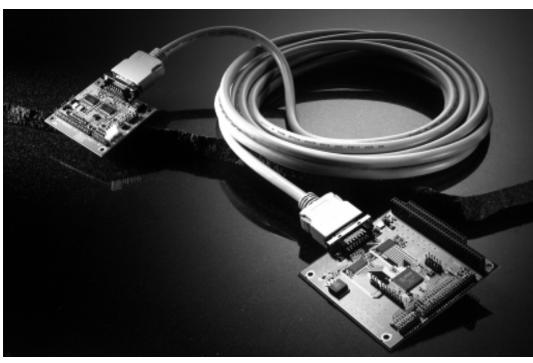
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New Device Brings LVDS Support to Your SBC



Advantech's New PCM-3540 T/R LVDS Transmitter and Receiver

Advantech has designed an ingenious solution to extend the reach of LCD panel monitors. By employing LVDS technology and using two transmitting and receiving units, LCDs can now be placed up to 12 meters away from the computer, vs. 30-50 cm for traditional configurations.

How It Works

This solution comes in three parts: the transmitter, the cable, and the receiver. The transmitter (PCM-3540T) is a PC/104

module which plugs into the CPU board. The cable connecting the transmitter to the receiver comes in various lengths (2 m, 3 m, 5 m, 10 m, 12 m). The receiver (PCM-3540R) plugs into the LCD panel using the original LCD cable. This transmitter-cable-receiver combination can be inserted into any Advantech CPU card/board-LCD product combination, allowing for long-distance LCD signal transmission of up to 12 meters, with no interference, guaranteed.

WHAT'S INSIDE

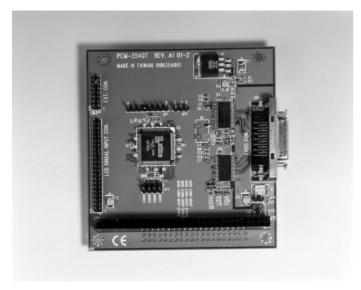
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Advantages with Advantech's PCM-3540

There are numerous advantages to using Advantech's PCM-3540 T/R. Besides the potential 12 meter increased range of your LCD display, Advantech's transmitter-cable-receiver combination falls within the EMI standards of CE and FCC Class A.



PCM-3540 T

Application Possibilities

Increasing the range of LCD displays from 30 cm to 12 meters opens up a whole new range of application possibilities. For example, thin LCD touchscreen panels can be placed or hung, while the bulky CPU systems they connect to can be put in some out-of-the-way or more secure place (within 12 meters of the panel). This kind of application might be useful in train stations or airports, restaurants, stock markets, etc. It can also be used to 'hide' the computer, if style or internal decorating standards are important to be maintained, such as in hotels, restaurants, or clubs.

Now Accepting Orders

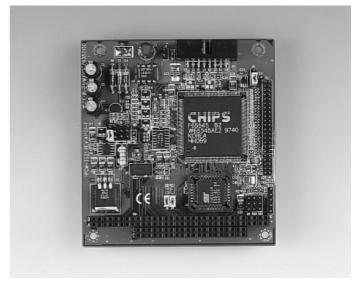
Samples of the PCM-3540 T/R will become available in August. If you are interested in acquiring a sample for evaluation purposes, or inquire about more information about the PCM-3540 T/R, please consult your Advantech sales representative. Advantech always strives to satisfy its customers.

New LCD/CRT Interface Module Replaces PCM-3520

Advantech's new PCM-3521 Flat Panel/CRT VGA PC/104 Module is actually a significant revision of the older, soon-to-be phased-out PCM-3520. This older model is being phased out due to the fact that its C&T 65535 chipset has been phased out by its manufacturer.

Important Revisions

The new PCM-3521 employs the C&T 65545 chipset. The new module's LCD pin assignments are now the same as every other Advantech product (unlike the former PCM-3520). This fact is significant when it comes to future upgrades. No matter what other Advantech board or LCD panel one chooses to use, one won't need to change ones cables or configuration. This makes the upgrading process much more convenient, quicker and less expensive. Other on-board features include 1 MB display memery, 512 KB frame buffer and provision of $V_{\text{\tiny EE}}$ of between -40 V \sim +40 V.



PCM-3521

Call Us If You're Interested

If you wish to upgrade your current system, or if you would like to add this PC/104 card to an application idea which you are currently working on, feel free to contact your local Advantech sales representative. He or she would be happy to supply you with more detailed technical specifications and pricing information. Don't hesitate, call us today!

New IDE SSD Solution for Embedded Systems Soon Available

Advantech now sells a Flash disk solution which is as easy to install and use as an HDD. That's because the casing, mounting holes, and IDE interface are exactly the same as a 2.5" or 3.5" HDD. Because of this fact, no mechanical or configuration changes need to be made in order to use this system.



2.5"/3.5" IDE Flash Disk

Specifications

The Flash disk chips and controllers found within this unit were manufactured by SanDisk. This IDE Flash drive comes in capacities of 20 MB, 40 MB, 60 MB, 80 MB, 100 MB and 220 MB. The advantage of using Flash disk chips over tradition mechanical HDDs is that there are no moving parts. This means that they have a high tolerance for vibrations and shocks, unlike HDDs, which are easily damaged by either. In fact, HDD failures account for over 50% of all computer related production losses. These losses will virtually be eliminated by using Flash disks. The sizes of these devices are also ideal for more industrial applications. Prices are also quite affordable when compared to similar-sized HDDs.

Arriving Soon

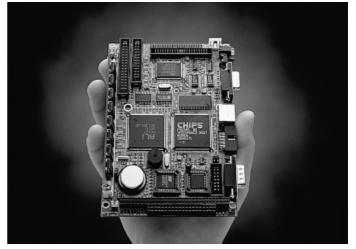
Sample versions of Advantech's 2.5" and 3.5" IDE Flash Disks will be available by August 1998. See for yourself how much more convenient and reliable these devices are over mechanical HDDs. Contact your regional Advantech representative for more technical and sales related information.

All Advantech Boards Now Accept EDO RAM

The last two Advantech SBCs have been modified to accept EDO RAM (as well as FPM RAM). The two SBCs in question are the PCA-6135/L and the PCM-3864/60.

So What?

So, you might think, what's so special about EDO. Well, for one thing, its faster and higher performing than the older generation FPM RAM. Also, these days, EDO RAM is often both easier to attain and cheaper than FPM. Upgrading to other Advantech boards should also be simpler, since all Advantech boards now support EDO RAM.



PCM-3864/60

About the Boards

The first of the boards, PCA-6135/L, is a 386SX Half-size CPU Card with LCD/CRT/SSD. Besides now accepting both FPM and EDO RAM, its BIOS and chipset has also been updated (from ALi M6117B to ALi M6117C), yet its price remains the same as before. The second of the boards, PCM-3864/60, is a 386 SBC with VGA/LCD Interface. Revision B1 of this model also contains the updated BIOS and chipset.

Standardization Prevails

With these last two boards, Advantech has now acheived complete product line support for EDO RAM, a better and more readily available RAM than FPM. This move simplifies the job for system integrators and keeps Advantech apace with the rapidly progressing market.

2 MB On-board VGA SBC Option Now Available

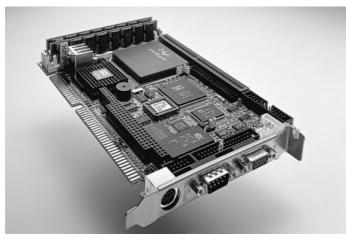
Advantech's PCA-6153 Pentium Processor-based Half-size CPU Card with PCI LCD/CRT Interface now can be ordered with an on-board 2 MB VGA RAM option. Previously, cards could only be ordered with 1 MB VGA RAM on-board. Extra VGA RAM allows for more colorful graphics. In this case, 2 MB of VGA RAM would allow for resolutions up to 1280 x 1024 @ 256 colors (1 MB of VGA RAM only allows for 16 colors at this resolution). The ordering numbers for each of the options are: 6153-00A2 (1 MB VGA RAM) and 6153-02A2 (2 MB VGA RAM). Place your orders today.

Biscuit PC's I/O Chipset Has Been Revised

Advantech's PCM-5862/L Pentium MMX SBC with VGA/LCD, Ethernet and Audio has gotten a new, revised I/O chipset (version B1). One of the original two chips has been phased out by its manufacturer, and a newer, better one has replaced it. The PCM-5862/L's BIOS has also been revised to accommodate this replacement. None of the boards other functions have been affected in any way.

A Powerful, Flexible Board

The PCM-5862/L is ideal for compact, multimedia applications, such as information kiosks, ordering and ticketing machines, hotel, restaurant and club check-in and information terminals, etc. It's sure to meet your multimedia application demands. Contact your local representative for more information.



PCM-5862/L

Certification Attained for New Half-size Biscuit PCs

Advantech's new set of half-size biscuit PCs, PCM-4823/L 486 SBC with VGA/LCD and Ethernet, and PCM-4825/L 486 SBC with VGA/LCD and Audio, have now officially attained both CE and FCC Class A certification for their Revision A102 or later. These palm-size SBCs are ideal for highly compact applications, especially those using either Ethernet (PCM-4823/L) or audio (PCM-4825/L) features.

Phase-out Notice for Older PC/104 Modules and Half-size Biscuit PCs

This is a notice that Advantech's PCM-3920 (PC/104 Carrier Module), PCM-3920V (PC/104 Carrier Module with VGA), PCM-4820 (486 SBC), PCM-4822 (486 SBC with VGA/LCD Interface) and PCM-4824 (486 SBC with Ethernet Interface) are being phased out. Last orders must be placed before July 31, 1998 (last shipments before Nov.30, 1998). Two of these half-size biscuit boards, though, will be replaced with similar, yet more powerful ones: the PCM-4823L 486 SBC with Ethernet (replaces the PCM-4824), and PCM-4825L 486 SBC with VGA/LCD (replaces the PCM-4822). Instead of these 'light' replacements, one can also choose to have extra VGA/LCD (PCM-4823) or audio (PCM-4825).

Additional Benefits of Replacement Boards

Besides having additional functions, these four replacement boards have built-in PC/104 connectors (the PCM-4822/24 boards needed an additional carrier module). An extra parallel port and floppy drive port are also on board. Lastly, an embedded CPU is also included on-board (AMD DX5-133).

Capacitors Are Now Both Greener and Safer

All Advantech products have recently replaced one type of capacitor. Now, multilayer capacitors have replaced all tantalum capacitors (used previously). These new capacitors are "greener" (safer for the environment) and safer (older ones would burn on rare occasions). This further demonstrates Advantech's commitment to both its customers and the environment.

Airborne Money Exchange Now Possible from Isreali Company

Some air passengers will be happy to see that in-flight service now includes a recently innovated money exchange machine. This money exchange system provides in-flight, automated exchange services for international air passengers. The unit houses Advantech's PCA-6145B, PCL-746+ and MBPC-641 half-size chassis.



Sturdy and Hardworking

Mounted within a sturdy in-flight cart, this application performs exchange services in the aisles along with duty-free sales. When not in use, it is stored in or near the galley, where batteries can be recharged. In service, for-eign currencies and coins can be converted and cash can even be extracted from credit cards. For these services there is no service charge. Up-to-the-hour currency rates can be applied through an Ethernet connection while stored in the galley.

Advantech's Embedded Solution

Housed in Advantech's MBPC-641 Half-size chassis, the PCA-6145B 486 Processor-based Half size ISBC with VGA/LCD/LAN/SSD performs credit card reading functions; the PCL-746 4-port RS-232/RS-422/RS-485 interface card handles the Ethernet connection. Since the PCL-746+ includes four ports, and Windows 95 OS supports only two RS-232 ports, Advantech customized the OS by successfully devising 'SuperCom9' to meet this shortcoming. Advantech's after-sales and technical support was also critically important.

More applications to come

Lateral applications employing Advantech's PCA-6145B might include Automatic Teller Machines, ticket-vending machines, and coin-changing machines for use in subways, etc.

Advantech Embedded Internet Mini-gateway Saves Phone Bills

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 minigateway 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.

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 use 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.

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BIOS Solutions for Y2K Bug

Advantech is proud to announce its solution to the Millenium Bug. The BIOS' of all current EPC CPU cards and boards have been rewritten to handle the year 2000 and beyond. All of these items have been tested and verified using RighTime company's Test2000.exe testing software. If your product's BIOS version matches or exceeds the one listed below, then it will not have a problem. If not, then please visit our web site to download the updated BIOS version and to read more detailed information. Our web site address is:

http://su	pport.ac	dvantech	.com.tw/epc

nttp://support:advanteen.com.tw/epc					
Model No.	Y2K Ready/ Release Ver.	Model No.	Y2K Ready/ Release Ver.		
PCM-5862	V1.41E	POS-562	V1.10		
PCM-5860	V2.10	PCA-6154	V1.10		
PCM-4862	V2.25	PCA-6153	V2.1		
PCM-4825	V1.10	PCA-6151	V2.0		
PCM-4824	V2.00	PCA-6145L	V2.12		
PCM-4823	V1.10	PCA-6145A	V2.00		
PCM-4822	V2.10	PCA-6145B	V2.00		
PCM-4820	V2.00	PCA-6144V	V2.00		
PCM-3864/60	V2.5	PCA-6144S	V2.20		
PCM-3865	V1.05	PCA-6135/L	V1.10		
POS-460A1/2	V2.10	PCA-6143P	V2.00		
POS-560	V1.10				

CPU Card/Board Y2K BIOS Status

If your product is not listed, please feel free to contact our Customer Service Department for support. Or, if you would like, you could consider upgrading to an even faster and more powerful Advantech product.



EPC Seminar in Taipei

Computex '98 Was a Smashing Success for Advantech

This year's Computex '98 show in Taipei, Taiwan (June 2-6) was a resounding success for Advantech. Advantech's booth was specially designed to showcase Advantech's Panel PCs, which are geared more toward the consumer and public information appliance markets. On June 2, Advantech and three of its four divisions (EPC, IC and PPC) held a news gathering, which was attended by several members of the local and international media. Advantech's future goals and vision were presented, along with the newest products of each of these divisions. EPC highlighted its PCM-4825 486 SBC with VGA/LCD and Audio, and its POS-562 Super Multimedia POS Board with VGA/LAN/SSD and audio. All of these factors contributed to a very successful exhibition for Advantech and for the Embedded PC division.



Intel Representative Speaks at EPC Seminar in Taipei in June

Advantech's Embedded PC division held a seminar in Taipei on June 11 which concerned new trends in the industry and vertical solutions for technical problems. Over a hundred local businessmen, manufacturers and media were invited to this event. Two important keynote speakers also made presentations about strategies, trends and solutions for the industry. The first speaker was a product manager from Intel. The second was a sales representative for Win CE. Both were very optimistic about the future of the embedded PC market. Overall, this seminar can be classed as a resounding success, not only for Advantech, but for the Embedded PC division as well.