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**Extend Legacy PC/104 (ISA) Support to 2020 with Advantech's 3.5” PCM-9376 SBC**

**Featuring Built-in Legacy Support and Intelligent Management**

***March 5, 2014, Irvine, CA*** – Ever since Microsoft's PC 99 specification recommended that ISA slots be removed entirely by the end of the 1990s, the ISA bus was gradually disappearing in the consumer market. However, embedded markets widely used the PC/104 (ISA) interface because of reliable data acquisition and operation in extreme environments. Advantech understands this and so unveils the [PCM-9376](http://www.advantech.com/products/1-2JKD1I/PCM-9376/mod_9870f332-c45f-4ac1-acf0-3407038c0d4a.aspx)—3.5” Single Board Computer (146 x 102 mm) form factor powered by the AMD G-Series T16R with A55E chipset, which offers an upgrade path for legacy applications. PCM-9376's ruggedized construction was designed with carefully considered material selections, mechanical design and critical test criteria. [PCM-9376](http://www.advantech.com/products/1-2JKD1I/PCM-9376/mod_9870f332-c45f-4ac1-acf0-3407038c0d4a.aspx) supports either soldered DDRIII SDRAM for high vibration resistance, or SODIMM socket for flexible memory module choices. [PCM-9376](http://www.advantech.com/products/1-2JKD1I/PCM-9376/mod_9870f332-c45f-4ac1-acf0-3407038c0d4a.aspx) is equipped with Advantech's iManager intelligent self-management firmware agent to simplify system integration, and help embedded devices become more intelligent, stable and self-managed. It’s ideal for machine control, traffic control, mining, CNC machines, and 3D printing.

**The Ultimate Choice for PC/104 (ISA) Expansion Flexibility**

PC/104 (ISA) is an industrial standard legacy interface which provides reliable data transmission rates and a ruggedized mechanical connector structure. Some customers still use current PC/104 modules without considering replacement, so keeping legacy PC/104(ISA) support can make system integrators reduce migration costs. Legacy ISA expansion demand is still high for customers needing longer longevity and better performance, so [PCM-9376](http://www.advantech.com/products/1-2JKD1I/PCM-9376/mod_9870f332-c45f-4ac1-acf0-3407038c0d4a.aspx) was designed with the AMD G-Series chipset for full ISA connectivity (including DMA support).

**Low Power with Better Performance and Slim Fanless Design (23.9mm)**

The TDP of the AMD G-Series T16R chipset is 4.5 watts only. It averages only 2.3 watts, yet delivers 3 x CPU performance over the last generation AMD Geode LX800 processor with much better 3D graphic performance. [PCM-9376](http://www.advantech.com/products/1-2JKD1I/PCM-9376/mod_9870f332-c45f-4ac1-acf0-3407038c0d4a.aspx) is designed with a fanless low profile heatsink solution only 23.9 mm total in height to meet embedded space limited environments. Since [PCM-9376](http://www.advantech.com/products/1-2JKD1I/PCM-9376/mod_9870f332-c45f-4ac1-acf0-3407038c0d4a.aspx) is embedded with DDR3 memory it can save up to 28% on the cost of memory whilst providing twice the capacity and more than three times the speed. [PCM-9376](http://www.advantech.com/products/1-2JKD1I/PCM-9376/mod_9870f332-c45f-4ac1-acf0-3407038c0d4a.aspx) provides significant system performance improvement over previous AMD Geode LX800 processor-based designs. It also incorporates an mSATA slot instead of CF card slots which improves SATA transmission rates.

**Reliability Enhanced Design**

[PCM-9376](http://www.advantech.com/products/1-2JKD1I/PCM-9376/mod_9870f332-c45f-4ac1-acf0-3407038c0d4a.aspx) is designed with wide temperature components including IC management which prevents poor power conversion efficiency from rising temperatures. 100% solid capacitors ensure constant stability due to their comparative high melting point (350°C), which is much higher than electrolytic capacitors (120°C). It adopts a high heat resistant TG-150 type PCB for stable production and quality. All these material considerations ensure [PCM-9376](http://www.advantech.com/products/1-2JKD1I/PCM-9376/mod_9870f332-c45f-4ac1-acf0-3407038c0d4a.aspx) keeps its shape and electrical characteristics. [PCM-9376](http://www.advantech.com/products/1-2JKD1I/PCM-9376/mod_9870f332-c45f-4ac1-acf0-3407038c0d4a.aspx) is designed with a high level industrial grade ESD COM port driver IC (15KV air protection/8KV contact protection). It’s a reliable 3.5” small form factor solution that is well designed, using high quality materials—all backed up by advanced customization and integration services.

**Easy Expansion Up to 8 COM Ports**

Besides the 4 COM ports supported from PCM-9376 SBC directly, [PCM-9376](http://www.advantech.com/products/1-2JKD1I/PCM-9376/mod_9870f332-c45f-4ac1-acf0-3407038c0d4a.aspx) can support four more COM ports by a 31.5 x 48 mm small LPC module, which is cost effective and space flexible. Advantech offers three kinds of LPC module ready to order: 4 x RS-232, 4 x RS-422 and RS-485 with auto-flow control and TPM (Trusted Platform Module) for storage device encryption and decryption to protect your confidential data. This multi COM port feature makes [PCM-9376](http://www.advantech.com/products/1-2JKD1I/PCM-9376/mod_9870f332-c45f-4ac1-acf0-3407038c0d4a.aspx) especially suitable for industrial automation, AGV (Automated Guided Vehicle) and communication applications.

**Advantech** [**iManager**](http://www.advantech.com.tw/embcore/imanager.aspx) **&** [**SUSIAccess**](http://www.advantech.com.tw/embcore/SUSIAccess.aspx) **– Embedded Remote Management Solutions**

[PCM-9376](http://www.advantech.com/products/1-2JKD1I/PCM-9376/mod_9870f332-c45f-4ac1-acf0-3407038c0d4a.aspx) supports iManager intelligent self-management cross-platform API that can monitor system status to take action if something is abnormal. The main features are: CPU temperature/Vcore monitoring, standby/power management mode, LVDS backlight brightness adjustment, watchdog, boot-up period log, low voltage detection and warning. Additionally [SUSIAccess](http://www.advantech.com/IndustrialCloud/), a remote monitoring application, is also bundled to manage and configure customers’ system boot up/shutdown times, system configuration, monitor device health, and perform remote backup and/or recovery. Combining iManager and SUSIAccess gives customers superior levels of manageability and reliability.

**Features:**

* Processor: AMD G-Series Single Core T16R processor + A55E
* Memory: DDR3 1066 MHz SO-DIMM up to 4GB or soldered 1GB SDRAM (by request).
* VGA up to 1920 x 1200 at 85Hz
* 48-bit LVDS up to 1920 x 1200 at 60Hz (PCM-9376E)
* 18-bit TTL (PCM-9376F)
* Rich I/O: 2 GbE, 4 COM (2 RS-232, 2 RS-232/422/485), 4 USB 2.0, HD audio, 8-bit GPIO (5V tolerance), PS/2, SMBus/I2C(share)
* Up to 8 COM ports total via LPC expansion
* ESD protection for all COM ports: air gap ±15kV, contact ±8kV
* Storage: 2 SATA II, 1 mSATA (Full-size, Mini PCIe supported by request)
* Expansion: PC/104, LPC connector, Mini PCIe (Half-size)
* Power Type: 5V AT/ATX ±5% (12V only for LCD and PC/104)
* OS support: XPE, WES7, WinCE 6.0/7.0, Linux Ubuntu 12.04
* Software support: Advantech iManager, SUSIAccess with McAfee and Acronis
* Power consumption: typical 1.48A @ 5V (7.4 W) , max.2.28A @ 5V (11.4 W)
* 3.5” SBC (146x102mm). Total height: 23.9mm including heatsink

[PCM-9376](http://www.advantech.com/products/1-2JKD1I/PCM-9376/mod_9870f332-c45f-4ac1-acf0-3407038c0d4a.aspx) combines both legacy specifications and newer technologies together to make the whole system backward - and forward compatible, more intelligent, lower power, higher performance, and wider connectivity with a longer life span. Please visit [Advantech Embedded SBCs website](http://www.advantech.com/products/Embedded-Single-Board-Computers/sub_1-2JKJ91.aspx) to learn more about Embedded SBCs, or contact your local sales for detailed information.

**About Embedded Core Service**

Advantech Embedded Core Services offers design-in oriented services. These streamlined solutions broadly integrate embedded boards, peripheral modules and software. This dedicated focus on Embedded Design-in services fulfills electronic engineering demands at their design-in phase, and brings benefits that shorten the design and integration cycle, minimizing uncertainty and risk. Learn more about Embedded Core Services, please visit <http://www.advantech.com/embcore/>

**About Advantech**

Founded in 1983, Advantech is a leader in providing trusted, innovative products, services, and solutions. Advantech offers comprehensive system integration, hardware, software, customer-centric design services, embedded systems, automation products, and global logistics support. We cooperate closely with our partners to help provide complete solutions for a wide array of applications across a diverse range of industries. Our mission is to enable an intelligent planet with Automation and Embedded Computing products and solutions that empower the development of smarter working and living. With Advantech, there is no limit to the applications and innovations our products make possible. (Corporate Website: <http://www.advantech.com/>)