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INDUSTRIAL COMPUTER

ARM-based touch PCs for factory management applications

Advantech, provider of industrial computing platforms, has announced the TPC-100W. It is an ARM-based industrial panel PC aimed at machine automation and web terminal applications. It supports CAN.

The panel PCs can be deployed as single-cable solutions in environments, eliminating infrastructure requirements and enabling remote management and control for diverse Internet of Things applications, said the company (Source: Advantech)

The panel PCs are available with three display sizes: 7 inch, 10,1 inch, and 15,6 inch. They are powered by an NXP ARM Cortex-A53 quad-core processor that supports Linux Yocto and Android operating systems. In addition to a true-flat front panel with P-CAP multi-touch control, the series features a serial port equipped with a 120-Ω termination resistor that supports CAN and offers a programmable bit rate of up to 1 Mbit/s. Wireless communication technologies, including Bluetooth and Wi-Fi, via a mini PCIe interface are also provided. The PCs are also equipped with Power-over-Ethernet functionality. Support for both Vesa and panel mounting allows for installation according to usage requirements, said the company.

Aimed at the industrial market, the fanless panel PCs are equipped with an ARM Cortex-A53 i.MX 8M Mini quad-core (1,6 GHz) processor, 2 GiB DDR4 RAM, and 16 GiB of eMMC storage to provide computing and efficiency for top-tier applications, explained the company. The devices support an operating temperature range of -20 °C to 60 °C and are IP66 rated for protection from dust, oil, and water.

TPC-100W supports various OS, including Android 10 and Linux Yocto 3.0 with GUI toolkits, Qt Webbrowser, and OPC UA, eliminating software porting and facilitating application development, the company continued explaining. Moreover, the PC installed with Android OS supports the Chromium Embedded Framework (CEF), which is an open-source software framework for embedding a Chromium web browser within another application. This enables developers to add web browsing functionality to applications and to use HTML, CSS, and/or Javascript to create the user interface.

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