

Three in one computer with a CAN interface

Onlogic has unveiled the Karbon 700 rugged computer. It is intended for use as a data-logger, network video recorder, or edge device in heavy industrial, in-vehicle, or remote installations. A CAN interface is provided.



(Source: Onlogic)

To help ensure reliability in extreme conditions, the product has been tested to MIL-STD-810G standards to resist damage from prolonged vibration and shock up to 50 G. The system also meets automotive power immunity according to the requirements of E-mark, and EN50155 rolling stock standards, features an operating temperature range of -40 ° to +70 °C, and includes a user-configurable automotive power management system with remote power monitoring capabilities.

The system's voltage input has a range of 9 V_{DC} to 48 V_{DC} and a suite of power protections including transient voltage suppression, over, under, and reverse-voltage and over-current protection. All other I/O is ESD-rated to 15 kV, making the system compatible with medical 60601-1 4th edition standards. Karbon 700's onboard user-programmable micro control unit (MCU) provides

additional functionality and power management flexibility.

The device can be configured with a range of 9th generation Intel processors, including Core i7 or Xeon central processing units. Optional discrete GPU capabilities provide advanced graphics processing, while an integrated CAN network and customizable DIO give the system a range of interface and control capabilities. The system supports up to 6 PoE ports, while wireless connectivity is available via Wi-Fi/Bluetooth, CAT M1 or 4G LTE. Additional expansion, VPU capabilities via Intel Movidius, or optional I/O can be added using the company's proprietary Modbay, which enables expandability to meet specific application requirements.

Two models of the computer are available. The regular model K700-SE, and the K700-X2, which adds dual PCIe slots and support for a range of dedicated graphics cards. In addition to a range of hardware configuration options, Karbon 700 can also be customized via Onlogic's suite of OEM (original equipment manufacturers) services. The system can be custom branded or pre-installed with client software. If required, additional application specific testing is available, and the company's fulfilment services provide options for drop shipping and white boxing for OEMs and software companies looking to provide a full product solution to their customers.

"No two IoT deployments are the same. Modbay gives us the ability to adapt Karbon 700 to any application," said Maxx Garrison, Onlogic Product Manager in charge of the company's Rugged product line. "We developed this technology to give us the flexibility to design solutions to both current, and future client challenges. By combining Modbay with our own motherboard design, Karbon 700 is able to leverage impressive computing power, installation flexibility, and a suite of onboard and optional features to help power innovation wherever it's happening."

"The Edge continues to expand further out from the data center, placing increasingly challenging environmental demands on hardware," said Murat Erdogan, Onlogic VP of Products. "Engineers and Project Managers creating solutions that require both significant computing power and extreme durability are frequently faced with tough decisions in trying to balance cost, features, performance, and reliability. We created Karbon 700 to address these challenges and bring tremendous power to the edge, without sacrificing features or durability."

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