

EMBEDDED BOARD DELIVERS COMPUTING PERFORMANCE FOR DIGITAL SIGNAGE AND AUTOMATION APPLICATIONS

3.5-inch single-board computer provides support for four 4K displays

Westerham, United Kingdom, <5th July 2022>. Embedded systems and display solutions provider, Review Display Systems (RDS) has announced the introduction of a 3.5-inch subcompact single-board computer (SBC) from AAEON, a leading manufacturer of advanced industrial and embedded computing platforms.

The GENE-TGU6 features the latest 11th Generation Intel Core i7, i5, i3, and Celeron SoC processors and can deliver performance enhancements of up to 20% over previous generations of embedded processors. Additional onboard features are designed to support digital signage, automation, AI processing, and Edge IoT applications.

Featuring compact mechanical dimensions of just 146mm (l) x 101.7mm (w) and implementing an innovative thermal design, the GENE-TGU6 has been developed to manage harsh industrial and embedded environments with an operating temperature range of -40°C to 85°C and a wide input voltage range of +9V to +36V.

The integrated embedded Intel Iris Xe graphics enables support for high-definition video, with the GENE-TGU6 providing five video outputs capable of simultaneously supporting up to four 4K displays. Video output is provided with an HDMI 2.0b, two DisplayPort 1.4a, a DisplayPort 1.4a via Type C, and an on-board LVDS/embedded DisplayPort optional).

Peter Marchant, embedded business manager, RDS said, “The processing capability, integrated on-board graphics, and scalable expansion support of the GENE-TGU6 enables the 3.5-inch SBC to deliver the computing performance needed for a wide range of applications such as digital signage and public information displays, IoT gateways, and AI processing.”

To enhance speed and flexibility, the board supports four USB3.2 Gen 2 ports and USB3.2 Gen 2 Type-C. The board has two LAN ports, one powered by the Intel i225 chipset delivering speeds up to 2.5 Gbps, alongside an Intel i219 Gbps port. Expansion is supported with multiple M.2 slots, and a Mini Card supporting functions such as Wi-Fi, high-speed NVMe storage, and AI scalability with modules such as the AI Core XM2280.

Additionally, the Intel Iris Xe is designed to be compatible with the Intel Distribution of the OpenVINO toolkit, allowing it to perform AI acceleration tasks. Along with Intel Deep Learning Boost, the GENE-TGU6 is capable of AI compute performance 30 to 40% greater than previous generations.

Review Display Systems can offer a comprehensive design, development, and manufacturing service for embedded computing systems. The new 3.5-inch AAEON single-board computer GENE-TGU6 is now available from Review Display Systems.