ADLINK Launches OSM-MTK510 — High-Performance, Ultra-Low Power, Rugged, Compact Solution

OSM-MTK510 Module: A 6-Core, 5W COM Solution Built for Extreme Ruggedness and 10-Year Longevity

Summary:

- Supports MediaTek Genio 510 for intensive workload, low-power consumption
- Offers up to 8GB LPDDR4 RAM and up to 128 GB eMMC, 4K graphics support, 30MP ISP camera, and extensive I/O options.
- Built for -40°C to 85°C, with a 10-year lifecycle for long-term mission-critical use.
- OSM R1.1 compliant Size-L module

ADLINK Technology Inc., a global leader in edge computing, announces the launch of the new OSM-MTK510. It is an OSM R1.1 Size-L with a 662 BGA module powered by the MediaTek Genio 510 series processor. The newest OSM solution is engineered for efficiency and excels in comprehensive AI workload for real-time decision-making and managing complex data processing.

The OSM-MTK510 is anchored by a powerful 6-core CPU with 2x Arm Cortex-A78 for demanding tasks and 4x Arm Cortex-A55 for ultra-low power consumption, consuming less than 5W, alongside the MediaTek **DLA+VPU AI engine**, delivering up to **3.2 TOPS** to accelerate AI computations that enable real-time intelligent decision-making.

With its integrated Neural Processing Unit (NPU), the OSM-MTK510 drives faster AI model inference and streamlines machine learning tasks with exceptional efficiency. Paired with up to 8GB LPDDR4 RAM and 128GB eMMC to support efficient processing and reliable storage for large datasets and computational AI tasks.

"You will never go wrong with its impressive graphics performance, offering **4K support** and a variety of video output options, including HDMI/DP, eDP, and DSI," said Henri Parmentier, Senior Product Manager from ADLINK. "It also integrates **ISP cameras with 30MP resolution**, perfect for machine learning tasks, vision systems, and real-time image processing. With **1x GbE**, **USB 3.0**, **USB 2.0**, **I2S audio codec interface**, and **17x GPIOs**, ensuring seamless portability into various applications," he added.

Its rugged design optionally supports operating temperatures from **-40°C to 85°C**, suitable for extreme and high-vibration environments, while its guaranteed **10-year product lifecycle** makes it a top choice for mission-critical embedded systems.

The OSM form factor is a compact computer-on-module designed for solderable BGA mini modules, supporting both ARM and x86 designs. At just 45mm x 45mm, these OSM Size-L modules bring exceptional performance in a compact form factor.
Whether processing computation-intensive workloads or powering real-time data, the compact OSM-MTK510 is engineered to deliver exceptional performance, efficiency, and versatility.

For more information about ADLINK COMs, follow this link here at adlinktech.com - OSM-MTK510 module.

About ADLINK Technology
ADLINK Technology Inc. (TAIEX:6166) leads edge computing, the catalyst for a world powered by artificial intelligence. ADLINK manufactures edge hardware and develops edge software for embedded, distributed, and intelligent computing – from powering medical PCs in the intensive care unit to building the world's first high-speed autonomous race car – more than 1600 customers around the world trust ADLINK for mission-critical success. ADLINK holds top-tier edge partnerships with Intel, NVIDIA, AWS, and SAS, and also participates on the Intel Board of Advisors, ROS 2 Technical Steering Committee and Autoware Foundation Board. ADLINK contributes to open source, robotics, autonomous, IoT and 5G standards initiatives across 24+ consortiums, driving innovation in manufacturing, telecommunications, healthcare, energy, defense, transportation and infotainment. For over 25 years, with 1800+ ADLINKers and 200+ partners, ADLINK enables the technologies of today and tomorrow, advancing technology and society around the world. Follow ADLINK Technology on LinkedIn, Twitter, Facebook or visit adlinktech.com.