

MediaTek Genio 420

Gen-AI NPU

An integrated 8th Generation Neural Processing Unit provides full hardware acceleration for popular Transformer and Convolutional Neural Networks (CNN).

- 7.2 TOPS of system performance, secure, private edge-AI
- Generative AI capable
- Support for major Large Language Models (LLMs)
- Support Nvidia TAO Toolkit for AI applications

Ideal for AI-Camera

With multi-channel camera support and powerful edge AI processing, a single Genio platform is ideal for powerful multi-camera installations that demand immediate, secure edge processing.

- Single Camera ISP, 16MP @ 30fps
- Up to 6x FHD30 cameras with MIPI virtual channels

Diverse Display Support

The platform supports a variety of display outputs, including super-high resolution and dual active displays - ideal for commercial displays, smart retail, HMI, and other interactive or multi-window applications.

- LVDS (FHD)
- MIPI (2.5K)
- eDP 1.4 (4K60)
- DP over USB Type-C (5K60 ultrawide)



Powerful Processing

An octa core CPU including 2x Arm Cortex-A78 processors, a dual-core GPU, and fast LPDDR5 provide highly capable edge processing platform for even the most demanding IoT applications.

- Arm Cortex-A78 processors up to 1.8GHz
- Arm Mali-G57 MC2 GPU
- Up to 16GB of LPDDR5 up to 6400Mbps
- Fast UFS 3.1 2-lane storage
- Familiar and reliable Android, Yocto Linux, Ubuntu OS support

Diverse Connectivity and Rich I/O

A wide array of rich interfaces is ideal to meet diverse product design requirements, while tri-band Wi-Fi, Bluetooth, Gigabit Ethernet and the option for cellular add-in cards enable a variety network connectivity options to meet all deployment environments.

- Integrated Wi-Fi 6/6E, or Wi-Fi 7 support via external module
- 5G RedCap cellular support via external module
- Bluetooth 5.3
- Gigabit Ethernet MAC
- PCIe, USB host/device, UART, I2C, I2S, DMIC, PWM, SPI, PCM

Industrial ready

This highly power-efficient platform is ready for long-life industrial deployments. MediaTek's 25+ years in business ensures product and service developers it's a partner they can trust when committing to a new long-term projects and deployments.

- Long 10+ year product life commitment
- Highly efficient 6nm chip suitable for fanless enclosures, battery operation
- Supports OSM (Open Standard Module)