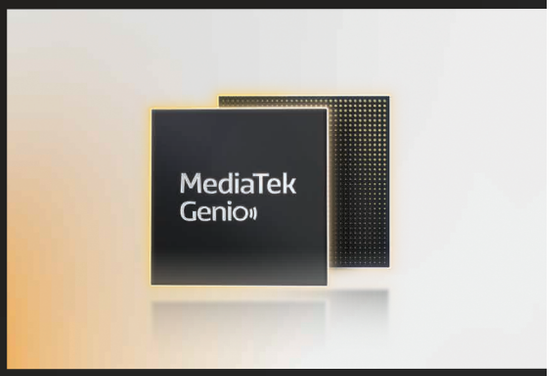
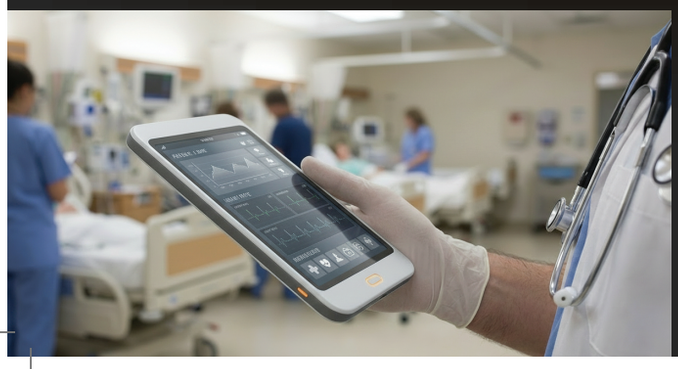
MEDIATEK

MediaTek Genio

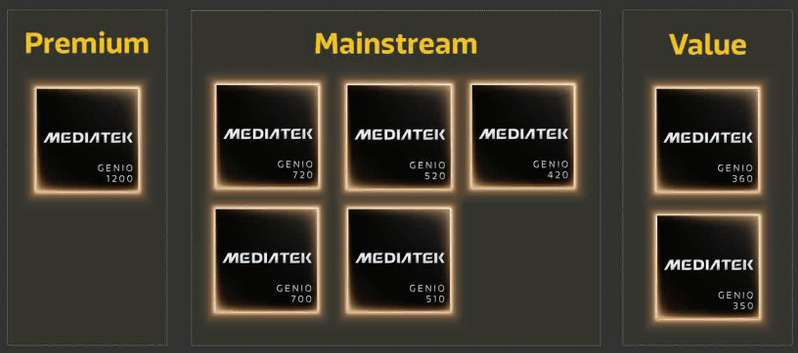
Genius at the Edge





Edge Intelligence. Global Connectivity. Built for Scale.

MediaTek Genio SoC combined with an **open standards software platform** helps you design and create intelligent connected devices



MediaTek's Genio family of System-on-Chips (SoCs) empowers a diverse range of next-generation IoT devices. From **smart home appliances** and **industrial automation** to **connected healthcare**, Genio SoCs offer a compelling combination of features:

One Software Platform: Develop and scale faster using a unified SDK supporting Android, Yocto Linux, and Ubuntu.

Edge AI Performance: Enable real-time vision, voice, and generative AI at the edge with dedicated AI processing.

Advanced Multimedia Capabilities: Deliver stunning 4K multimedia, dual-display output, and smooth, responsive user interfaces.

Built-in Connectivity: Wi-Fi, Bluetooth, and supporting external 5G modules for reliable, always-connected edge deployments.

Power Efficiency at the Edge: Optimize performance and energy efficiency through intelligent workload balancing at the edge.

10-year Longevity Support

MediaTek offers a comprehensive 10-year longevity program for Genio SoCs. This commitment guarantees sustained availability and ongoing assistance for applications demanding extended lifecycles, particularly in industrial and healthcare settings.

MediaTek Genio Open Platform

MediaTek simplifies development by offering a single SDK for all SoCs. This single platform eliminates the need for developers to learn and manage multiple, individual SDKs, significantly reducing development time and complexity.

The streamlined process allows for shorter development cycles and simplified codebases. Additionally, the unified SDK enhances code portability, allowing applications to be deployed on multiple Genio SoCs. This enables wider application compatibility and facilitates seamless integration across the Genio hardware ecosystem.

Scalable, Standard Software

- Standard Yocto Linux architecture & interfaces
- Upstream BSP (expert features with confidential IPs)
- Active migration to latest kernel
- Single SDK for the Genio family SoCs

AI Development Tools

- Software tools and APIs
- Verified AI models from MediaTek model hub and NVIDIA TAO NGC Catalog

Android Support

- 3 Android upgrade with vendor freeze
- 3-year security patch after last upgrade

Yocto Linux Support

- 3-year BSP maintenance
- 3-year security patch after last upgrade
- Active migration to recent LTS Kernel

Ubuntu Support

- Lifecycle 10 years
- Follow Canonical's policy

MediaTek Genio Portfolio

	Genio 1200	Genio 720*/520*	Genio 700**/510**
Process	6nm	6nm	6nm
CPU	4x Arm® Cortex®-A78, 2.2GHz + 4x Arm® Cortex®-A55, 2.0GHz	2x Arm® Cortex® A78, 2.4~2.6GHz + 6x Arm® Cortex® A55, 2.0GHz	2x Arm® Cortex®-A78, 2.2GHZ + 6x Arm® Cortex®-A55, 2.0GHz
GPU	Arm Mali-G57 MC5	Arm Mali-G57 MC2	Arm Mali-G57 MC3 (Genio 700) Arm Mali-G57 M2 (Genio 510)
NPU	2x MDLA2.0 + 2x VisionP6, 4.8 TOPS	MediaTek 8th generation NPU, up to 9 TOPS, Total up to 10 TOPS	1x MDLA3.0 + 1x VisionP6, 4.0 TOPS
Audio DSP	Hi-Fi 4	N/A	Hi-Fi 5
Memory	4-ch 16-bit LP4(X)-4266, up to 16GB	2-ch 16-bit LP4X-4266 up to 8GB 2-ch 16-bit LP5(X)-6400 up to 16GB	2/4-ch 16-bit LP4(X)-3733, up to 8GB
Storage	UFS2.1, eMMC5.1, SPI NOR	UFS3.1 2L, eMMC5.1, SPI NOR	eMMC 5.1, SPI NOR
Display	Triple Display, FHD60+ FHD60+ 4K60 MIPI-DSI + eDP + HDMI/DP	Single: up to UW5K60 Dual: up to 2.5K60+2.5K60 MIPI-DSI/LVDS/eDP/DP (Type-C)	Dual Display, FHD60+4K60 MIPI-DSI/eDP + HDMI/DP
Video Input	3x MIPI CSI-2, 1x HDMI 2.0 16+16MP or 48MP@30fps 6x FHD30 with virtual channels	2x MIPI-CSI-2, 16+16MP or 32MP@30fps “or” 6x FHD30 with virtual channels	2x MIPI CSI-2, 16+16MP or 32MP@30fps 8x FHD30 with virtual channels
VDEC	4K90, H.265/H.264/VP9/AV1	4K60, H.265/H.264/VP9	4K75/4K60, H.265/H.264/VP9/AV1
VENC	4K60, H.265/H.264	4K30, H.265/H.264	4K30, H.265/H.264
Peripheral	1x PCIe3.0, 1xPCIe2.0/USB3.1, 1x USB3.1, 2x USB2.0, 6x UART, 1x GbE MAC (TSN)	1x PCIe2.0, 1x USB3.2 Gen1 (Type C) (1 shared with DP), 3x USB2.0, 1x GbE MAC (TSN)	1x PCIe2.0, 1x USB3.2 Gen1, 2x USB2.0, 4x UART, 1x GbE MAC (TSN)
Temperature	Consumer: -20°C to 95°C (Tj) Industrial: -40°C to 105°C (Tj)	Consumer: -20°C to 95°C (Tj) Industrial: -40°C to 105°C (Tj)	Consumer: -20°C to 95°C (Tj) Industrial: -40°C to 105°C (Tj)

*Genio 720 and 520 and 420 are pin to pin compatible.
**Genio 700 and 510 are pin to pin compatible.

NEW	NEW	
		
Genio 420*	**Genio 360**	**Genio 350**
6nm	6nm	14nm
2x Arm® Cortex®-A78, 1.8GHZ + 6x Arm® Cortex®-A55, 1.6GHz	1x Arm® Cortex® A76, 1.9~2.0GHz + 5x Arm® Cortex® A55, 1.7~2.0GHz	4x Arm® Cortex®-A53, 2.0GHz
Arm Mali-G57 MC2	Arm Mali-G57 MC2	Arm Mali-G52
MediaTek 8th generation NPU, up to 6.1 TOPS, Total up to 7.2 TOPS	MediaTek 8th generation NPU, up to 5.1 TOPS, Total up to 6 TOPS	1x VisionP6, 0.35 TOPS
N/A	N/A	Hi-Fi 4
2-ch 16-bit LP4X-4266 up to 8GB 2-ch 16-bit LP5(X)-6400 up to 16GB	2-ch 16-bit LP4X-3733 up to 8GB	DDR3L/DDR4/LP3/ LP4(X), up to 4GB
UFS3.1 2L, eMMC5.1, SPI NOR	eMMC 5.1, SPI NOR	eMMC 5.1
Single: up to UW5K60 Dual: up to 2.5K60+2.5K60 MIPI-DSI/LVDS/eDP/DP (Type-C)	Single: Max. 4K60 Dual: Max. FHD60+ FHD60 MIPI-DSI/LVDS/eDP/DP	Dual Display, FHD60+ HD60 MIPI-DSI + LVDS/DPI
2x MIPI-CSI-2, 16MP@30fps “or” 6x FHD30 with virtual channels	2x MIPI CSI, 16MP@30fps “or” 6x FHD30 with virtual channels	2x MIPI CSI-2
4K60, H.265/H.264/VP9	4K30, H.265/H.264/VP9	1080P60, H.265/H.264
4K30, H.265/H.264	FHD90, .265/H.264	1080P60, H.265/H.264/VP9
1x PCIe2.0, 1x USB3.2 Gen1 (Type C) (1 shared with DP), 3x USB2.0, 1x GbE MAC (TSN)	1x PCIe2.0, 1x USB3.2 Gen1, 2x USB2.0, 4x UART, 1x GbE MAC (TSN), 1x CAN-FD	2x USB2 (1xOTG, 1xHost), 3x UART, 4x I2C, 10/100 Ethernet MAC
Consumer: -20°C to 95°C (Tj)	Consumer: -20°C to 95°C (Tj) Industrial: -40°C to 105°C (Tj)	-20°C to 65°C (Ta)

Genio Pro 5100: Unleashing the Full Potential of AI

Extreme Compute, GenAI and Multimedia Platform for IoT and Embedded Applications

One Software Platform: Yocto Linux, Debian and Ubuntu.

Industrial Grade: Supports industrial requirements & operating temperature.

Advanced Multi-Media: Up to 16 cameras, 5 displays, 8K encode/decode.

Powerful AI Acceleration: Latest NPU Architecture provides high ability for AI and Generative AI applications.

Extreme Performance: 3nm process Arm v9.2 structure with Ultra+Big+Medium-cores and flagship GPU.

10-year Longevity Support

MediaTek offers a comprehensive 10-year longevity program for Genio SoCs. This commitment guarantees sustained availability and ongoing assistance for applications demanding extended lifecycles, particularly in industrial and healthcare settings.

Applications

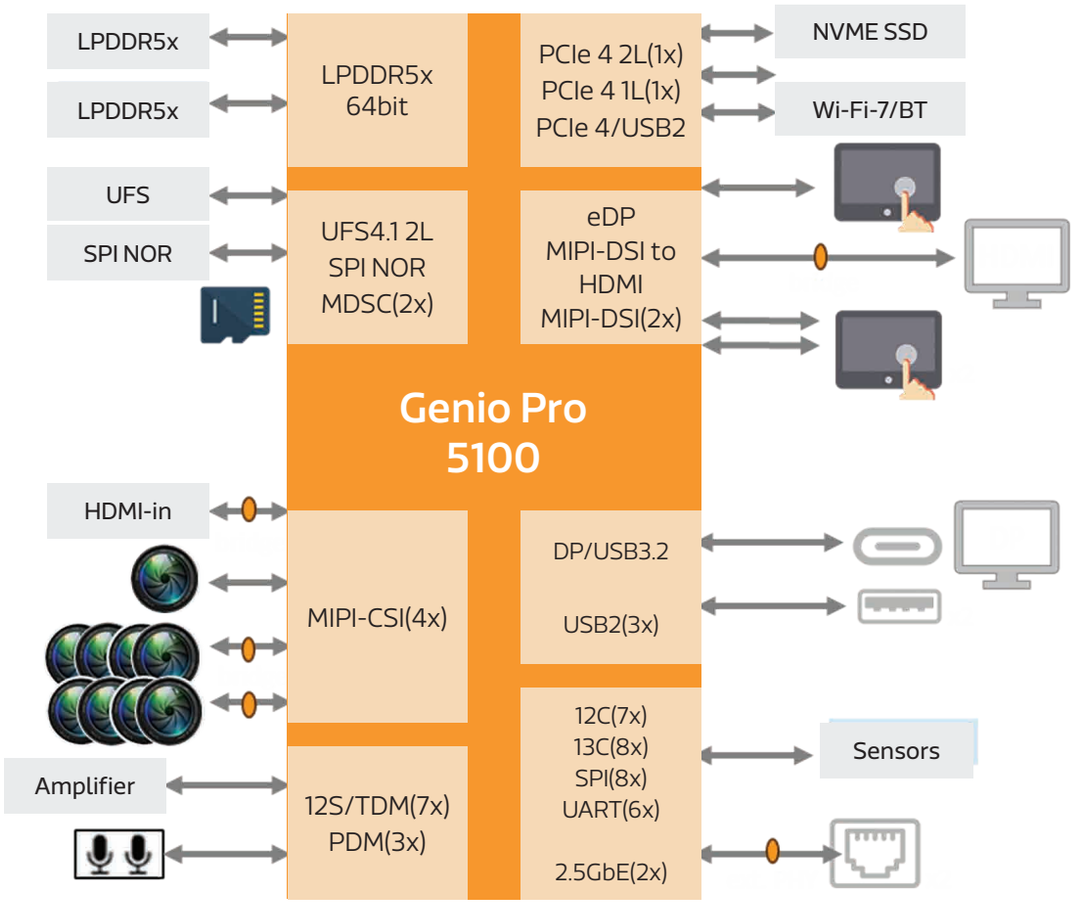
Commercial Drones

Service Robots

AI NVR

Edge AI Server

Platform	Genio Pro 5100
Process	TSMC 3nm
CPU GB6 (SC/MC)	1x Arm Cortex-X925+3x Arm Cortex-X4+4x Arm Cortex-A720
GPU GB6 (SC/MC)	Arm Immortalis-G925 MC11; 3.1 TFLOPS
NPU	MediaTek 8th Gen NPU 50+TOPS
Memory	Discrete, 64-bit LP5X-8533
Storage	UFS4.1 2L
Display	Multi-Display: 3x 4K60
Video Input	2x 4K30 RAW + 8x FHD30 upto 16 cameras (virtual channels)
VDEC	8K30 H.265/H.264/AV1/VP9
VENC	8K30 H.265/H.264
Peripheral	1x PCIe Gen 4 2L, 2x PCIe Gen4 1L; 1x USB3.2 Gen 2/2.0; 3x USB2.0; 2x 2.5Gbps MAC



MediaTek Genio Evaluation Kits

MediaTek Genio 520/720 EVK

Key Features

- 8GB of LPDDR5
- 128GB UFS 3.1 (default booting device) and 64GB eMMC onboard
- Wi-Fi 6 (2x2) + BT5.3 wireless connectivity
- 2x MIPI CSI camera board with 13MP and 5MP camera modules
- 1x USB 3.2 port support DP (Type-C)
- 1x USB 3.2 port (Type-C), 1x USB 2.0 port (Type-C), 1x Micro SD card slot
- 1x eDP connector (reserved), 1x LVDS connector (reserved)
- 7 inch FullHD LCM with touch panel
- 1x 10/100/1000M Ethernet RJ45 connector, 40-Pin Raspberry Pi pin header, CAN-FD with D-Sub 9 pin connector, 2x 2-wire UART connector (Type-C), 2x 4-wire UART pin header
- 1x M.2 Key B slot (USB2.0), 1x M.2 Key E slot (PCIe), 1x M.2 Key E slot (SDIO)

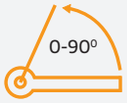
Genio 720/520 EVK-P2V3

MediaTek Genio 510/700 EVK

Key Features

- 4GB/8GB of LPDDR4X
- 64GB eMMC onboard
- Wi-Fi 6 (2x2) + BT5.2 wireless connectivity
- 2x MIPI CSI connectors with 13MP and 8MP cameras
- 2x USB 2.0 ports
- 1x Micro SD card slot
- 1x HDMI Tx port
- 1x 10/100/1000M Ethernet RJ45 connector
- 40-Pin GPIO
- A 7-inch Full HD LCM touch panel

IoT-Genio 510 EVK-P1V2
IoT-Genio 700 EVK-P1V3



Lay Flat

Dual Display

Camera Board

4K UltraHD

HDMI

MediaTek Genio 360 EVK

Key Features

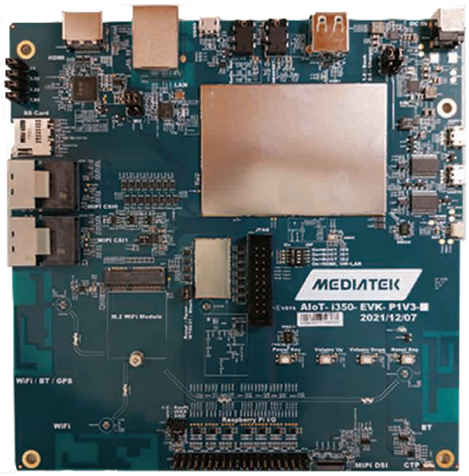
- 4GB of LPDDR4X
- eMMC 5.1 64GB onboard
- Wi-Fi 6 (2x2) + BT5.2 wireless connectivity
- 2x MIPI CSI camera board with camera modules
- 1x USB 3.2 port support DP (Type-C connector)
- 1x USB 2.0 port (Type-C connector)
- 1x Micro SD card connector
- 1x eDP connector, 1x LVDS connector
- 7 inch TFT-LCD contains 1200x1920 pixels with touch panel
- 1x 10/100/1000M Ethernet RJ45 connector
- 40-Pin Raspberry Pi pin header
- CAN-FD with D-Sub 9 pin connector
- 2x 2-wire UART connector (Type-C connector)
- 1x M.2 Key B and E slots (PCIe interface), 1x M.2 Key E slot (SDIO interface)

Coming Soon

MediaTek Genio 350 EVK

Key Features

- 3GB of LPDDR4X
- 64GB eMMC onboard
- Wi-Fi 5 2x2 wireless connectivity
- 2x MIPI CSI connectors with 1.3MP cameras
- 2x USB 2.0 ports, 1x Micro SD card slot
- 1x HDMI Tx port
- 1x 10/100M Ethernet RJ45 connector
- 40-Pin GPIO
- A 7-inch Full HD LCM touch panel



Type-C | Wi-Fi 6 2x2 | Android | Yocto Linux | Ubuntu

MediaTek Genio Featured Partner Solutions

MediaTek Genio 1200

ADVANTECH
Enabling an Intelligent Planet

RSB-3810 & EPC-R3810

Edge AI Single Board Computer and Box

- 2.5” Pico-ITX single board computer
- 8GB LPDDR4X, 32GB eMMC
- Dual GbE, 1x 4-wire RS-232/422/485,
- 6 rear I/O configurations
- Ubuntu and Android
- IEC 62443-4-2 Certified (Security Level 2)

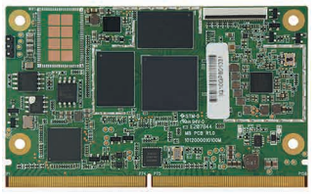
ADLINK
LEADING EDGE COMPUTING

I-Pi SMARC 1200

Edge AI Development Kit

- Standard SMARC Module Plus Carrier
- 4GB LPDDR4X, 64GB UFS
- 2x GbE, CAN bus, 3x MIPI-CSI
- 2x USB 3.0, 4x USB 2.0, CAN, SPI, I2C, GPIO
- Yocto Linux and Ubuntu

AMOBILE
Powered by MEDIATEK

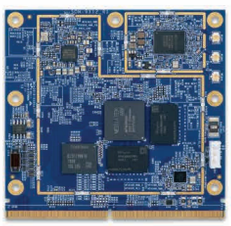


SoM SM1200

Intelligent Edge AI SOM

- SMARC 2.11 System on Module
- 8GB LPDDR4X, 64GB UFS
- Dual 4K display, HDMI in 4K60
- Built-in Wi-Fi 6E, BT 5.2 and Gbit Ethernet
- Android and Yocto Linux

VIA



SOM-7000

Rich Wireless Connectivity Options

- SMARC 2.11 System on Module
- 8GB LPDDR4X, 16GB eMMC
- 2x 4-lane MIPI DSI, 2x MIPI CSI-2, 1x HDMI 2.0, 1x USB 3.1 and 3x USB 2.0, 12x GPIO
- Android, Yocto Linux, and Debian

MediaTek Genio 720/520

ADVANTECH
Enabling an Intelligent Planet

AOM-2421 (G520/G720)

Edge GenAI Module

- OSM Size-L Module
- 2 x Cortex-A78 and 6 x Cortex-A55
- 8th Gen MediaTek NPU delivers 10 TOPS
- Supports LPDDR5 6400 MT/s memory and UFS 3.1 high-speed storage

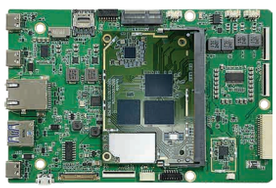
ADLINK
LEADING EDGE COMPUTING

OSM-MTK520/720

Compact and Rugged SOM

- OSM R1.2 Size-L 45x45mm Module
- Up to 16GB LPDDR5X, up to 128GB eMMC
- MIPI-DSI, LVDS, DP and eDP support
- Rugged temperature: -40°C to 85°C (optional)
- Yocto, Android and Ubuntu

AMOBILE
Powered by MEDIATEK



SBC-MB520/720

Embedded SBC for Edge AI Applications

- AI engine, 9 TOPS
- ARM Mali-G57 MC3 GPU
- Up to 16GB LPDDR5, 64GB UFS
- Built-in WiFi 6, BT 5.4
- eDP, MIPI-DSI, DP; 2x MIPI-CSI Camera
- Android and Yocto Linux

AMOBILE
Powered by MEDIATEK

SoM-SD520/720

Industrial-Grade AI Computing Module

- SODIMM 260 edge connector SOM
- AI engine, 9.0 TOPS
- 8GB LPDDR5, 64GB UFS
- Built-in Wi-Fi 6, BT 5.4 and Gbit Ethernet
- Android and Yocto Linux

MediaTek Genio Featured Partner Solutions

MediaTek Genio 720/520

M328L(G720/G520)

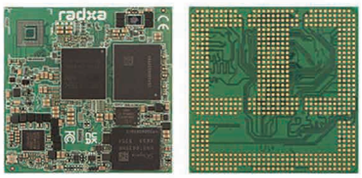
AI SoM Powered by MediaTek

- LGA Package System on Module; 32-bit LPDDR5X, UFS3.1
- 2x 4-lane MIPI DSI, 4-lane eDP1.4, 4-lane DP1.4 (Type-C)
- 3x USB2.0, 2x USB3.2 Gen1, 6x SPI, 8x I2C
- Integrated Wi-Fi 6E 2x2, BT 5.3 (Optional, for Android version only)
- Android 15, Yocto, or Ubuntu (available soon)

MOSM-MM30U-(G720/G520)

OSM Standard v1.2 OSM Size-L SoC module

- OSM Standard v1.2 OSM Size-L SoC module
- 45 mm x 45 mm/662-pin LGA layout
- 1x 8GB onboard LPDDR5, 1x 128GB UFS 3.1
- 2x eDP, 2x 4-lane MIPI CSI, 2x USB 3.0, 3x USB 2.0



Radxa OM-G720-L

Compact OSM-L Module for Edge AI and GenAI

- OSM 45x45 mm Module
- ARM Mali-G57 GPU; 10 TOPS NPU
- LPDDR5, UFS3.1; GbE with TSN, CAN, PCIe
- On device GenAI and LLM inference support
- Android, Ubuntu and Yocto

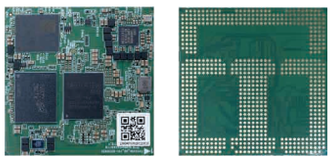
SH803FD-WF (G720)

High-Performance IoT LCC Module

- LCC+LGA module 43 ×44 ×2.95 mm
- 12GB LPDDR5X, 256GB UFS
- Wi-Fi6 1x1, Wi-Fi6E 2x2, BT5
- USBx5, PCIex1, UARTx4, 2xMIPI CSI, MIPI DSI/eDP/DP/ LVDS
- Android, Linux, Ubuntu

MediaTek Genio 720/520

Techvision



Mediatek Genio G720 OSM

Industrial OSM Module

- 45 mm x 45 mm OSM Package
- 4GB LPDDR5x, UFS3.1
- eDP,1x MIPI DSI, 2x MIPI CSI
- 2x RGMII, 2x SDIO, 1x PCIe, 4x UART, 2x I2C, 2x I2S
- Android 15

GLOBALSCALE TECHNOLOGIES, INC.

Case8 CyberDeck with OSM Module

Ready-to-Deploy OSM for Genio 720

- 120 mm x 120 mm with enclosure
- 16GB DDR5, 64 GB UFS
- Wi-Fi6 1x1, Wi-Fi6E 2x2, BT5
- 2K Display, mic, speaker, Ethernet
- Wi-Fi, BLE, m.2 for 5G, HDMI, DP, camera, keyboard

LANTRONIX®

Open-M™ 520G/720G SOM

Ideal for IoT+AI Applications

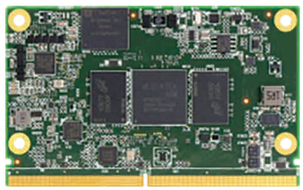
- 43 x 44 x 2.95 mm LGA SOM
- 8GB LPDDR5X, 64 GB UFS
- Wi-Fi6 1x1, Wi-Fi6E 2x2, BT5
- 3x USB3.2, 3x USB2.0, 4x UART, SD Card, I2S/PCM, SPI, GPIOs
- Android, Linux, Ubuntu

MediaTek Genio Featured Partner Solutions

MediaTek Genio 700/510

uCOM-M700/M510

Compact SMARC 2.1 MicroModule



- SMARC 2.1 Compliant; ARM MediaTek Genio 700 / 510
- Onboard LPDDR4, Up to 8GB; HDMI 2.0 x 1, DP 1.4 x 1
- eDP 2 lane x 1, MIPI-DSI 4 lane x 1; GbE x 1
- USB 3.0 HOST x 1, USB 2.0 OTG x 1, USB 2.0 HOST x 4
- UART x 4, GPIO x 12, MIPI CSI x 2, TPM 2.0
- Yocto, Ubuntu, Android, Debian

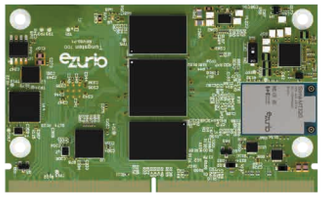
M274K

Intelligent Micro Module with Genio 700

- LCC + LGA Package
- 64bit LPDDR4X 1866MHz, eMMC 5.1
- 4-lane MIPI DSI, 2x 4-lane MIPI CSI, 1x USB3, 2x USB2
- Supports OTG, 3x SPI, 6x I2C, 2x I2S, 2x ADC
- Android

Tungsten700/510 SMARC

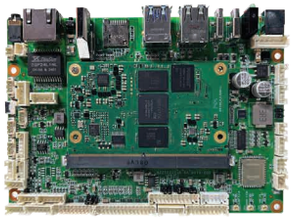
SOM with MediaTek AI Accelerator



- Standard SMARC 2.1.1 Module
- 8GB LPDDR4, 16GB eMMC
- Dual GbE, CAN/CAN-FD, UART, I2C, SPI
- SDIO/eMMC, GPIO, 2x 4-lane MIPI CSI
- Yocto Linux, Ubuntu, and Android

MTB-620

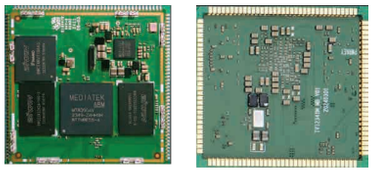
Single Board Computer for MediaTek Genio 700



- SMARC 2.1 314 Pin SBC
- 8GB LPDDR4X, 64GB eMMC
- HDMI type A port, EDP, Dual 8-bit LVDS, DP, MIPI CSI
- Android and Yocto Linux

MediaTek Genio 700/510

Techvision

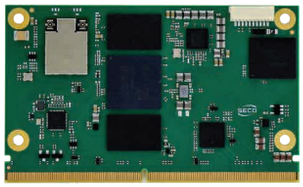


Mediatek Genio G700

Embedded Core Module

- 45mm x 45mm LCC Package
- 8GB LPDDR4x, eMMC5.1
- Dual display (FHD60+4K60)
- 2x MIPI DSI, eDP, DP, HDMI 2.0, 2x MIPI CSI
- Android 13

SECO
Endless ways to the future

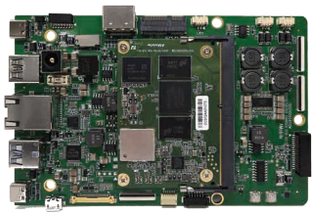


SOM-SMARC-Genio700/510

High-Performance Multimedia SOM

- SMARC Rel. 2.1.1 Module
- 8GB LPDDR4X, 64GB eMMC
- 1x Gigabit Ethernet (RGMII), 1x 100Mbit Ethernet (USB)
- 1x USB3.1, 1x USB2.0 Host/Slave, 4x USB2.0 Host, MIPI CSI, 2x I2S port
- Yocto Linux and Android

SECO
Endless ways to the future

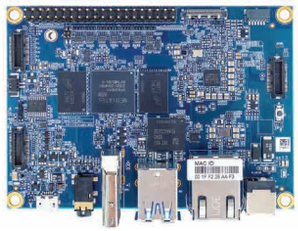


SBC-MB510

MediaTek G510 Single Board Computer

- 92x140 mm, SODIMM I/F
- 4GB/8GB LPDDR4, 64GB eMMC 5.1 storage
- Multi-type I/O ports include eDP, USB, HDMI, camera, audio, network
- Supports Android, and Yocto Linux

VIA



VAB-5000

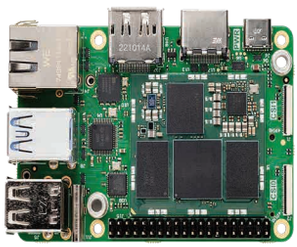
Fanless Low-Power Genio 700 SBC

- Pico-ITX Single Board Computer; 4GB/8GB LPDDR4X, 16GB eMMC
- 1x40-Pin Raspberry Pi-type GPIO header, 1x Micro coaxial
- 4-lane MIPI DSI, 2x USB 3.1, 1x Micro USB 2.0, 1x Nano SIM card slot
- Also available in the SMARC form factor
- Android, Yocto Linux, and Debian

MediaTek Genio Featured Partner Solutions

MediaTek Genio 700/510

GRINN

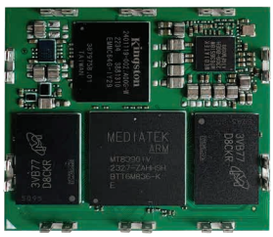


Grinn Edge AI SBC (G700)

Intelligence at the Edge

- AI Processing Unit 4 TOPS
- 4GB LPDDR4, 16GB eMMC
- Integrated GPU
- HDMI, 2x MIPI-CSI, PCIe Gen2
- Optimized for low-power applications

GRINN

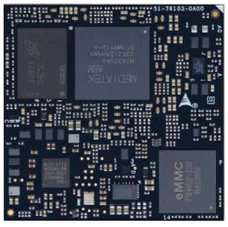


Grinn GenioSOM-700

SOM for Advanced IoT Devices

- LGA312 System on Module
- 8GB LPDDR4, 64GB eMMC, 2x USB 2.0, 1x USB 3.1
- 1x PCIe, 1x eDP, 1x DP, 6x SPI, 4x UART, 1x AUX, 2x MSDC, 7x I2C
- 4x CSI, 2x DSI, 1x DPI, 1x HDMI, 4x PWM, 1x RGMII
- Yocto Linux and Android

ADLINK
LEADING EDGE COMPUTING

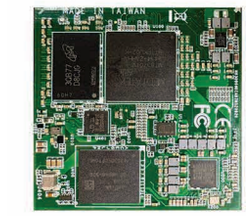


OSM-MTK510

Compact and Rugged SOM

- OSM 45x45 mm Module
- 4GB LPDDR4X, 128GB eMMC
- Dual GbE, CAN bus, 1x MIPI CSI, Bluetooth 5.0, HDMI/DP
- Ubuntu, Yocto Linux, and Android

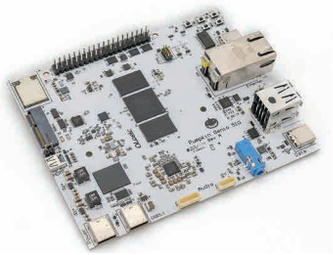
MediaTek Genio 700/510



MiTwell MOSM-MM20E (G700/G510)

OSM-L with MediaTek Genio 700/510

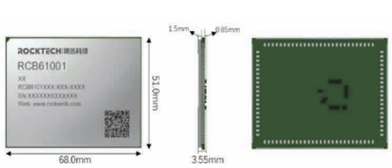
- OSM 45x45 mm Module
- 8GB LPDDR4X, eMMC 64GB
- 1 x MIPI DSI, 1x 4-lane MIPI CSI, 3x USB2.0, 1x USB3.0
- 2x SPI, 2x I2C, 3x UART, 2x ADC, 1x I2S
- Yocto Linux and Ubuntu



Pumpkin Genio 510

Single Board Computer for MediaTek Genio 510

- SBC with Tensilica VP6 NPU3.0
- 8GB 4-channel LPDDR4X, 16GB eMMC
- 10/100/1000Mbps Ethernet, MIPI 4-lane DSI, 2x MIPI CSI-2 4-Lane
- Supports Type C DRP USB-3.1 (Host/Device), Type A x2, USB-C (Serial Console)
- Android and Yocto Linux



RCB-6111

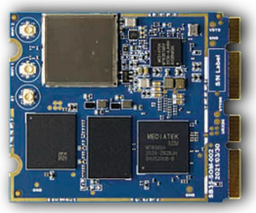
System on Module for MediaTek Genio 510

- LGA 316 Pin System on Module
- 8GB LPDDR4X, 64GB eMMC
- MIPI DSI, EDP, DP, HDMI, MIPI CSI
- Android and Yocto Linux

MediaTek Genio Featured Partner Solutions

MediaTek Genio 350

innocomm

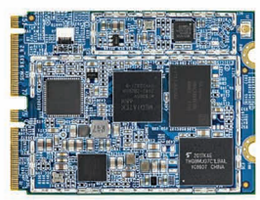


SB35

SOM for Edge AI Applications

- M.2 E-key x2 form factor SOM
- 4GB LPDDR4, 32GB eMMC
- Supports Wi-Fi 802.11 a/b/g/n/ac MIMO, USB2.0 OTG & Host
- I2C, SPI, UART, ADC, GPIO
- Android

VIA

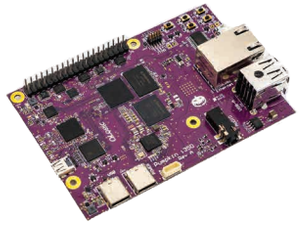


SOM-3000

Integrated AI Processor SOM

- 60x45x6.8 mm System on Module
- 2GB LPDDR4, 16GB eMMC
- 1x 4-Lane MIPI DSI, 1x HDMI 1.4, 2x 4-Lane MIPI CSI
- 1x USB 2.0 Host, 1x USB 2.0 OTG, 1x SPI, 3x I2C, 2x UART
- Android and Yocto Linux

OLogic



Pumpkin Genio 350

AWS Greengrass V2 Certified SBC

- SBC Designed for Mainstream AI + IoT Applications
- 2GB LPDDR4, 16GB eMMC
- USB Type C DRP (Host/Device), Type A x2, Micro-B
- 10/100Mbps Ethernet, MIPI 4-lane DSI, x3 MIPI CSI-2 ports
- Android and Yocto Linux

MediaTek Genio 360

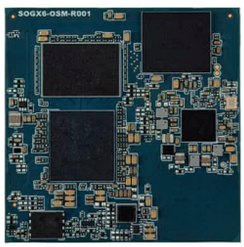
MOSM-MM10E-G360

OSM Standard v1.2, OSM Size-L SoC module

- 45 mm x 45 mm/662-pin LGA layout
- 1x 8GB onboard LPDDR4X, 1x 32GB eMMC
- 1x PCIe Gen2/ 1x eDP
- 1x DSI / 2x 4-lane MIPI CSI/ 2x USB 2.0, 1x USB 3.0/ 1x RGMII LAN
- Embedded Linux (Yocto-based) / Android 16

SOG36(P)

Cost-Effective Edge AI with Flagship Capabilities



- OSM 45 x 45 mm module, OSM Standard v1.2 compliance
- 4GB LPDDR4X (up to 8GB), 32GB eMMC (up to 64GB)
- 1x MIPI DSI, 2x MIPI CSI, 1x GbE MAC, 1x USB3.2 Gen 1, 2x USB2.0
- 2x I2S, 6x SPI, 8x I2C, 1x PCIe Gen 2, 3x SDIO 3.0
- Android and Yocto Linux

SOM-Trizeps-X-Genio360

SODIMM-200 CPU Computer on Module

- Compact form factor: 67.6 mm × 36.7 mm
- Low-cost, robust SODIMM connector
- High level of long-term pin and software compatibility
- Typical power envelope below 5 W
- Industrial temperature range: –40°C to +85°C (industrial version)

MediaTek Genio Connectivity Solutions

Wireless Module for 5G

COMPAL

RMM-G1 (T700)

- 30x52x2.25 mm M.2 3052 (Key B) Module
- 3GPP Rel-15 compliant
- -40°C to +85°C
- Yocto Linux Driver Support

COMPAL

CMM-G3 (T300)

- M.2 Key. B Module
- 3GPP Rel-17 Redcap compliant
- -25°C to +75°C
- Yocto Linux

QUECTEL

RM500K (T700)

- 5G Modem: MediaTek T700
- M.2 3052 Key B
- 5G Sub-6 GHz
- -40° C to +85° C
- China Region
- Android and Yocto Linux

Wi-Fi: MediaTek MT7663

WCT22M2101 (MT7663)

- Wi-Fi/BT: MediaTek MT7663B
- LGA (20x25x2.4), 3xANT
- Wi-Fi 5 (SDIO) + Bluetooth 5.2 (SDIO)
- -10° C to +70° C
- Android

AW-CB451NF-D V2 (MT7663)

- Wi-Fi/BT: MediaTek MT7663B
- M.2 2230 Key E
- Wi-Fi 5 (SDIO) + Bluetooth 5.2 (SDIO)
- -10° C to +70° C
- Worldwide Homologation certified
- Android

MediaTek Genio Connectivity Solutions

Wi-Fi: MediaTek MT7921

ezurio
New name for Laird Connectivity

Sona™ MT320 - Wi-Fi 6 + Bluetooth® 5.4 Module

- Wi-Fi/BT: MediaTek MT7921LS
- M.2 2230 Key E
- Wi-Fi 6 (SDIO) + Bluetooth 5.4 (SDIO)
- -40° C to +85° C
- Bluetooth SIG Approval
- Android and Yocto Linux

GSD

WXT2PM2003

- Wi-Fi/BT: MediaTek MT7921LE
- LGA (24x24x2.6), 3xANT
- Wi-Fi 6 (PCIe) + Bluetooth 5.4 (USB2)
- 10° C to +70° C
- Android and Yocto Linux

AzureWave

AW-XB468NF

- Wi-Fi/BT: MediaTek MT7921LE
- M.2 2230 Key E
- Wi-Fi 6 (PCIe) + Bluetooth 5.4 (USB2)
- -10° C to +70° C
- Worldwide Homologation certified
- Android and Yocto Linux

AzureWave

AW-XB554NF

- Wi-Fi/BT: MediaTek MT7921LS
- M.2 2230 Key E
- Wi-Fi 6 (SDIO) + Bluetooth 5.4 (SDIO)
- -10° C to +70° C
- Worldwide Homologation certified
- Android and Yocto Linux

NeuroPilot:
MediaTek's Ecosystem for AI Development

MediaTek's NeuroPilot is an ecosystem of software tools and APIs designed to simplify the development of efficient AI applications on devices powered by MediaTek chipsets, specifically targeting the Edge AI space. MediaTek's NeuroPilot technology enables executing AI tasks directly on the device reducing latency, improving security, and facilitating reliable and efficient offline operation.

Features of NeuroPilot include:

- **Support for Popular AI Frameworks:** Compatibility with frameworks like TensorFlow Lite, PyTorch, Caffe, and others allows developers to leverage existing models and code
- **IoT Model Hub:** Set of pre-trained machine learning models ready for fine-tuning and deployable anywhere with AI enabled devices powered by MediaTek
- **Hardware Acceleration:** Utilizes dedicated hardware components, MediaTek AI Processing Unit (NPU), within the chipset to accelerate AI computations, improving performance and power efficiency

Resources:

- Neuropilot Home Page
- Getting Started
- Watch video: What is Neuropilot?

https://neuropilot.mediatek.com/

Case Study

Reliable AV Over IP for 24/7 Casino Environments with Genio 1200

CYP partnered with MediaTek to deliver an AV over IP solution powered by Genio 1200 for a five-star Las Vegas casino, enabling reliable, scalable, and high-quality video distribution across always-on, multi-zone, high-stakes gaming environments.

Challenge

The casino required uninterrupted AV operation with low-latency 4K60 video, centralized control across multiple zones, compact fanless hardware for space-constrained installations, and thermal efficiency to sustain continuous, high-demand workloads.

Solution

MediaTek's Genio 1200 SoC delivered the performance, multimedia acceleration, and power efficiency needed for CYP's AV over IP platform. With 4K60 H.26x streaming, low latency, and efficient thermal performance, Genio 1200 enabled compact, fanless designs built for continuous use in space-constrained environments.

Benefits:

- **24/7 Reliability:** Stable AV performance under continuous operation and frequent source switching
- **Premium Visual Experience:** Smooth, low-latency 4K60 video across signage and display systems
- **Scalable Multi-Zone Control:** Centralized AV distribution across expansive casino floors
- **Compact, Energy-Efficient Design:** Fanless, low-power hardware optimized for space-constrained, always-on casino environments
- **Rapid Deployment:** Flexible integration with minimal on-site adjustments

Case Study

Empowering Service Robots with MediaTek Genio 720

Over the next few years, dexterous and highly interactive service robots will increasingly shape our lives. To respond to this trend, Primax proposes a solution for fast market adoption built on Genio 720.

Challenge

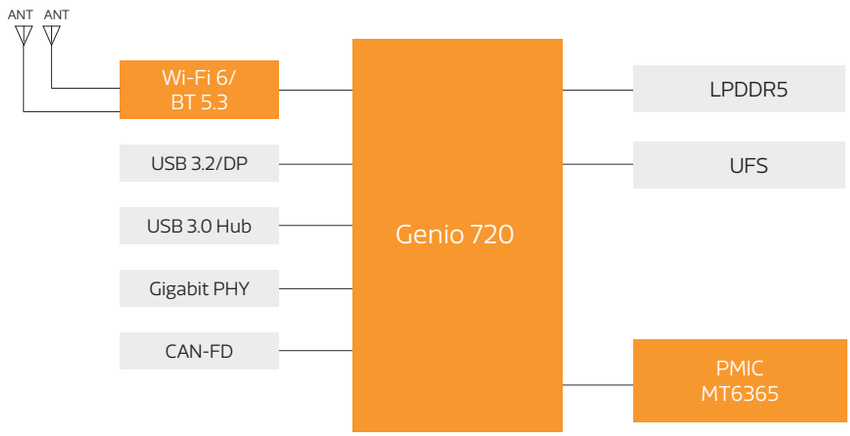
In the near future, service robots will be applied in diverse scenarios and environments. To succeed, they must develop stronger environmental awareness for improved localization, navigation, and obstacle avoidance. At the same time, the increasing number of robots will make collaboration a key challenge to address.

Solution

Powered by a high-performance CPU and a 10-TOPs NPU supporting GAI, the Genio 720 offers extensive I/O interfaces for integrating a wide range of sensing devices, making it the premier IoT solution in its category.

Benefits:

- **Powerful & Industrial-Grade Processing:** Delivers high CPU performance with integrated control interfaces and ROS2 support, operating reliably across industrial temperature ranges
- **Advanced AI Capabilities:** Enables human-following functionality, allowing robots to work alongside users and providing improved human-robot collaboration
- **AI Sensor Fusion:** Integrates data from LiDAR, VSLAM, 2D/3D cameras, microphone arrays, and thermal sensors to deliver enhanced environmental perception
- **Seamless Multi-Robot Collaboration:** Robots communicate directly with each other, coordinating their paths and working collaboratively to achieve higher efficiency and smoother operation



Solution Block Diagram

Genio Platforms Enable Chromium for IoT User Interfaces

Chromium Browser enables developers to build modern, secure web-based user interfaces on MediaTek Genio platforms for kiosks, digital signage, smart control panels, and industrial dashboards. As an open-source browser, Chromium supports modern web standards and allows interfaces to be updated and managed remotely, making it well suited for connected IoT devices.

On Genio platforms running IoT Yocto, Chromium is fully integrated and optimized with GPU and hardware video acceleration. This enables smooth graphics, efficient high-resolution video playback, reduced CPU load, and dependable performance in embedded designs.

The result is a responsive user experience, improved power efficiency, and stable operation in space and power-constrained environments. Chromium on Genio has been validated across demanding IoT scenarios, making it ready for production deployment.

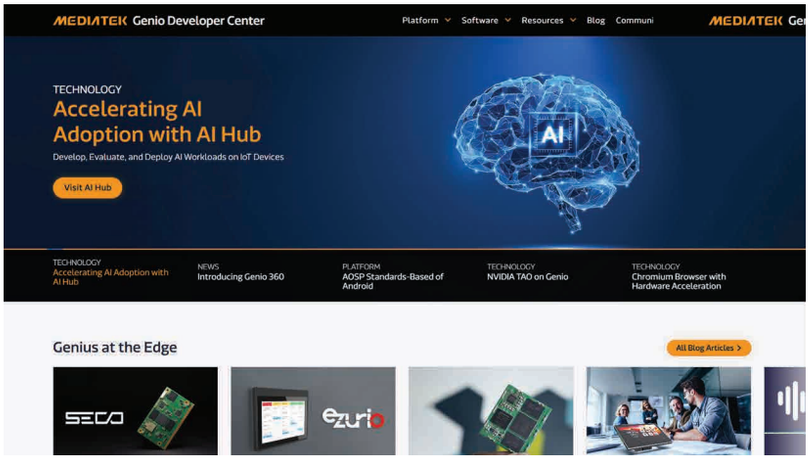
Partner Enablement

Chromium on Genio is supported through open-source collaboration with Collabora, ensuring stable integration and optimized performance for production-ready IoT deployments.

MediaTek Genio Developer Center: Your Gateway to Edge AI Development

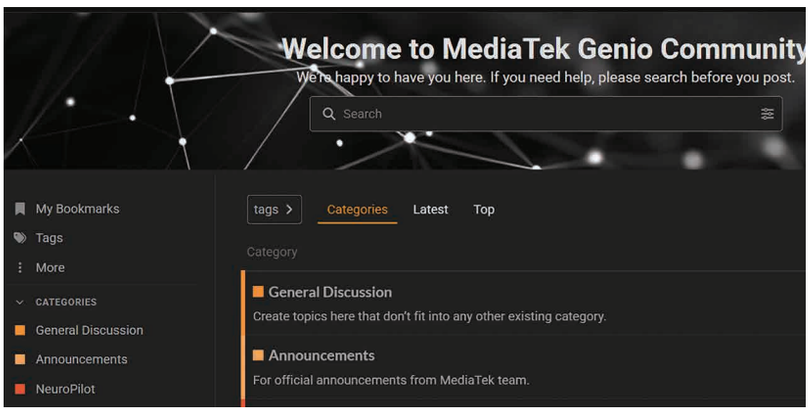
The Genio Developer Center is your one-stop platform for building on MediaTek's Genio IoT SoCs. It provides direct access to the AI Hub for developing and deploying optimized AI workloads, board support packages across Yocto, Ubuntu, AOSP, and Android, plus schematic references, SDK tools, and integration guides for frameworks like NVIDIA TAO.

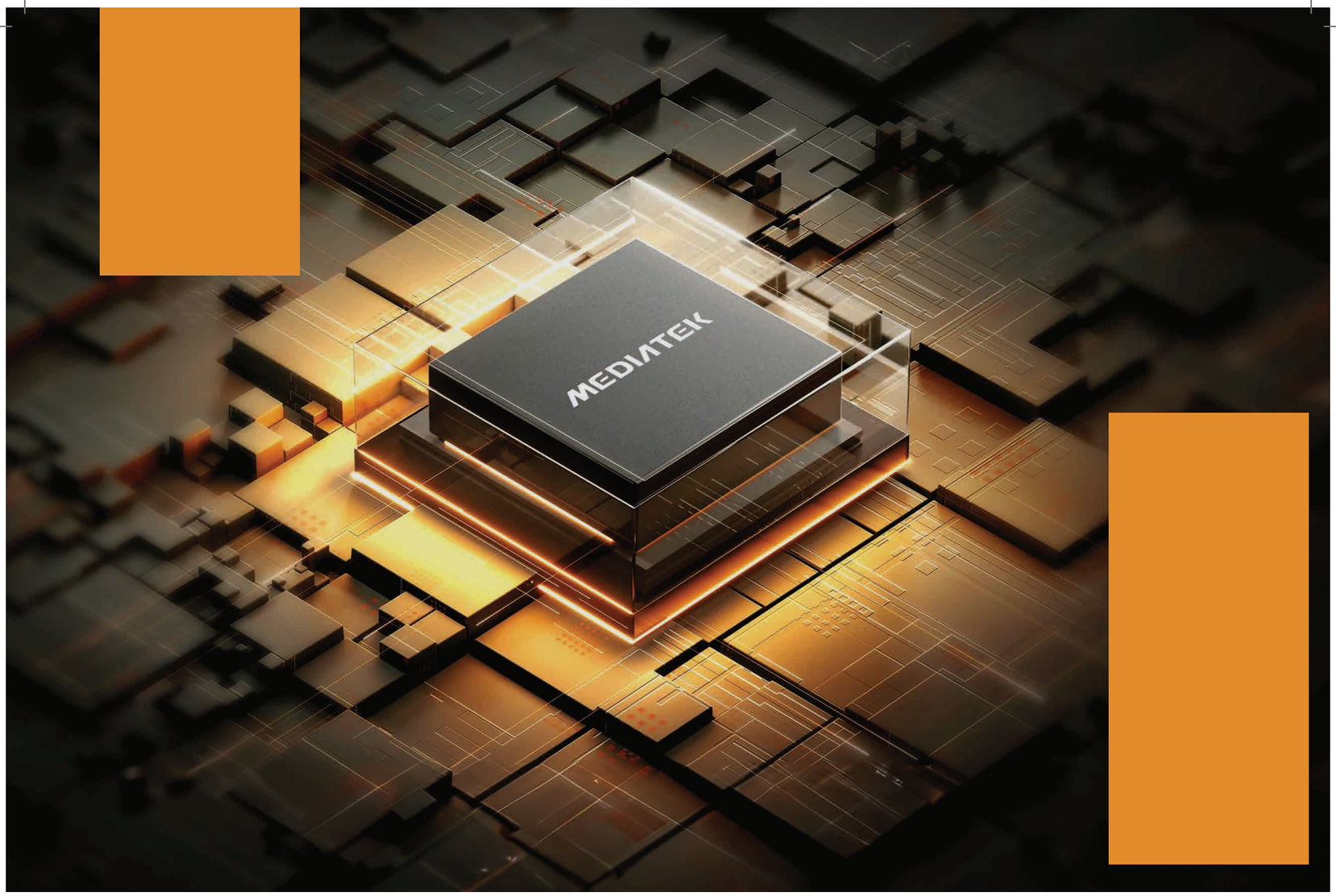
Whether you're prototyping a smart display or deploying edge AI in production, this hub puts documentation, tools, and community support all in one place.



Join the Genio Community Forum

Connect with fellow engineers and MediaTek experts to solve real-world development challenges. The Community Forum features active discussions on topics like camera configuration, display output routing, Yocto image builds, and real-time Linux kernel support. Get answers fast, share your experience, and stay updated on the latest Genio platform developments.





About MediaTek

MediaTek Incorporated (TWSE: 2454) is the world's 5th largest global fabless semiconductor company and powers more than 2 billion connected devices a year. We are a market leader in developing innovative systems-on-chip (SoC) for mobile device, home entertainment, connectivity, and IoT products.

Our dedication to innovation has positioned us as a driving market force in several key technology areas, including highly power-efficient mobile technologies, industrial and automotive solutions, and a broad range of advanced multimedia products such as smartphones, tablets, TVs, 5G, Chromebooks, Voice Assistant Devices (VAD) and wearables.

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MEDIATEK

Mar 2026