MediaTek Genio

Q2’26 Roadmap

PM, IOT Business Unit

MediaTek Overview

One of the Top 5 Fabless Semiconductor Companies

COMPANY SNAPSHOT

- $19.1B 2025 Revenue
- $4.75B 2025 R&D
- 2B+ Connected devices powered annually
- 21K+ Global Employees 15 countries

#1 IN MULTIPLE MARKETS


Smartphone

Smart TV

Smart Home


Connectivity, Broadband & Networking

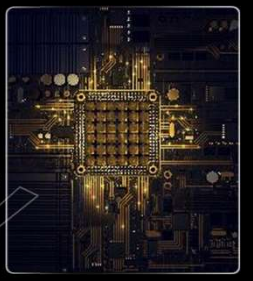

Arm Chromebook & Android Tablets

STRATEGIC GROWTH FOCUS


Automotive


ASIC Solutions


IoT


Power IC

Source: IDC, Gartner, TechInsights, IHS and MediaTek company data (based on 2024 market share)

MediaTek Genio

Generic | Multi-OS | 10y Longevity

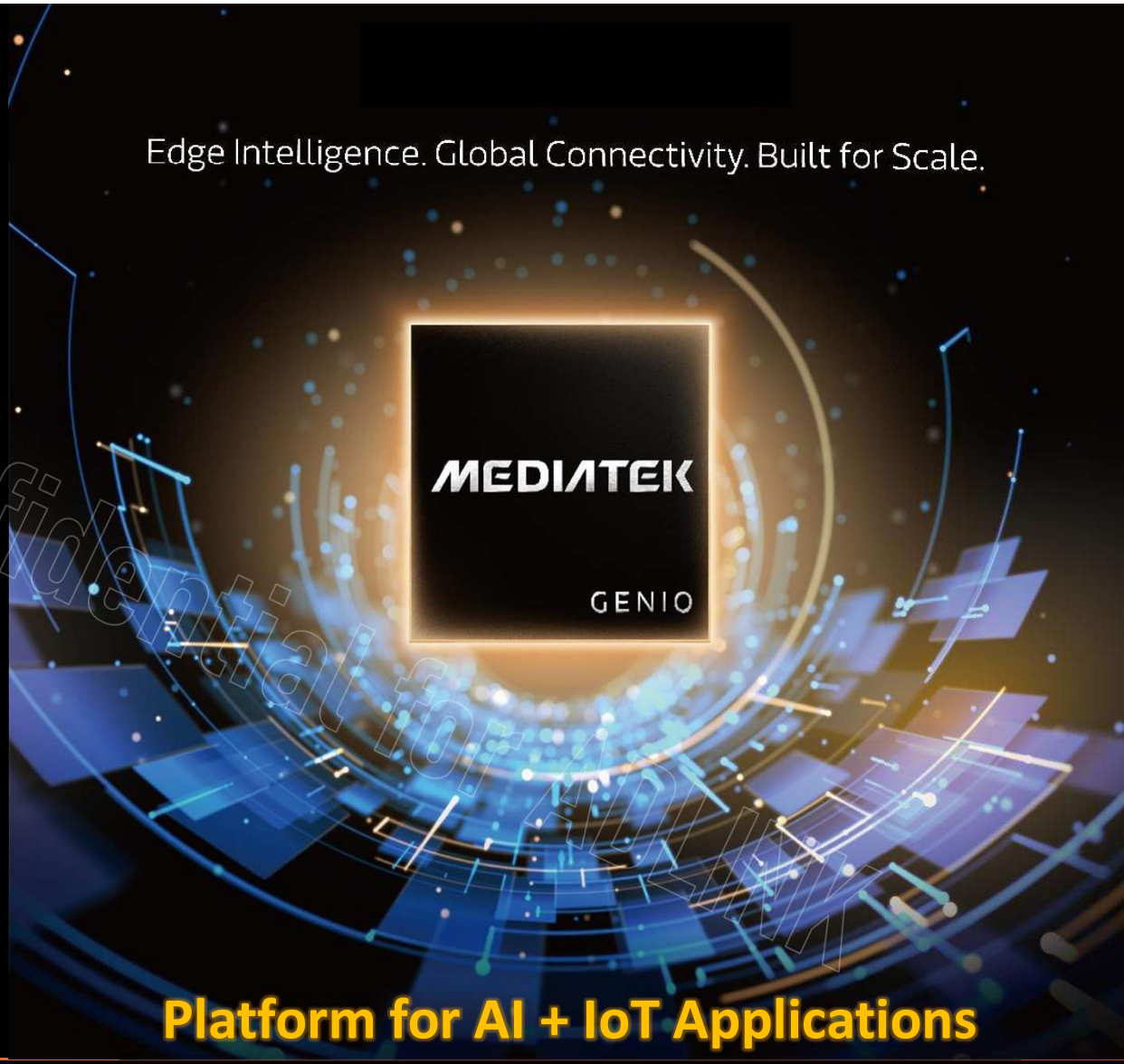
Smart Home

Smart Retail & Hospitality

Display & AV Streaming

Industrial / Medical Human Machine Interface

Embedded



Genio Pro series

Generic | Multi-OS | 10y Longevity

Commercial Unmanned Vehicle

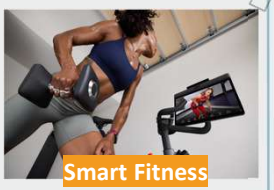
Autonomous Mobile Robotics

Transportation & Logistics

Factory Automation

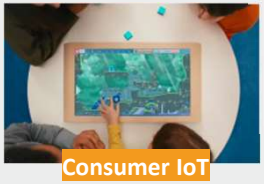
IoT Applications Overview

Smart Home


Smart Fitness


Home Appliance


Home Automation


Consumer IoT

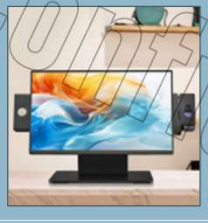
Smart Retail

- Supermarket
- Restaurant
- Chains tore
- Station
- Airport
- Hotel
- Cinema
- Bank

Smart POS

Desktop POS

Table Service



KIOSK

Signage Player

Vending Machine

Display & A/V Streaming


Smart Office


Commercial Display


Video Conference

Industrial HMI


Factory Automation


Healthcare


Inspection & Management


Charging Pile


Industrial Tablet

Transportation

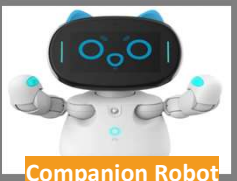

Fleet Management

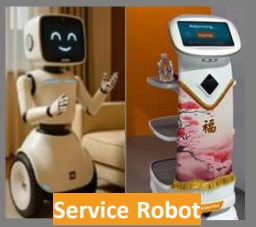

Dashcam/DMS


Marine


Agriculture

★ AMR


Companion Robot


Service Robot


Commercial Drone


Edge AI Computer

Embedded Module

MediaTek Genio» Roadmap (Q2'26)

M/P | Dev. | Planned

Pro

Genio Pro 5100 — 3nm, 260K DMIPS, 64b LP5X, 50 TOPS — LP5 GAI — Q4/E'26

Premium

Genio 1200 — 6nm, 4x A78 + 4x A55, 64b LP4X, NPU 4.8TOPS — ~Y2032

Mainstream

Genio 700 — 6nm, 2x A78 + 6x A55, 64b LP4X, NPU 4TOPS

P2P

Genio 510 — 6nm, 2x A78 + 4x A55, 64b LP4X, NPU 3.2TOPS — ~Y2033

Genio 720 — LP5 GAI — 6nm, 2+6/A78-A55, 32b LP5, UFS, 10+ TOPS for 3B GenAI, MT8391A: 81.5K DMIPS, MT8371A: 74K DMIPS

P2P

Genio 520 — LP5 GAI

P2P

Genio 420 — LP5 GAI — Q2 — 7+ TOPS for 2B GenAI, MT8371L: 60K DMIPS

Next Genio 7 series — ARMv9, C/G/N up

Value

Genio 350 — 14nm, 4x A53, NPU 0.35TOPS — ~Y2029

Genio 360 — GAI — Q3/B — 6nm, 32b LP4X, eMMC, MT8367A: 2+6/A76-A55, 8+ TOPS, 58.8K DMIPS, MT8366A: 1+5/A76-A55, 6+ TOPS, 40.5K DMIPS

M/P | 2025 | 2026 | 2027 | 2028 | 2029

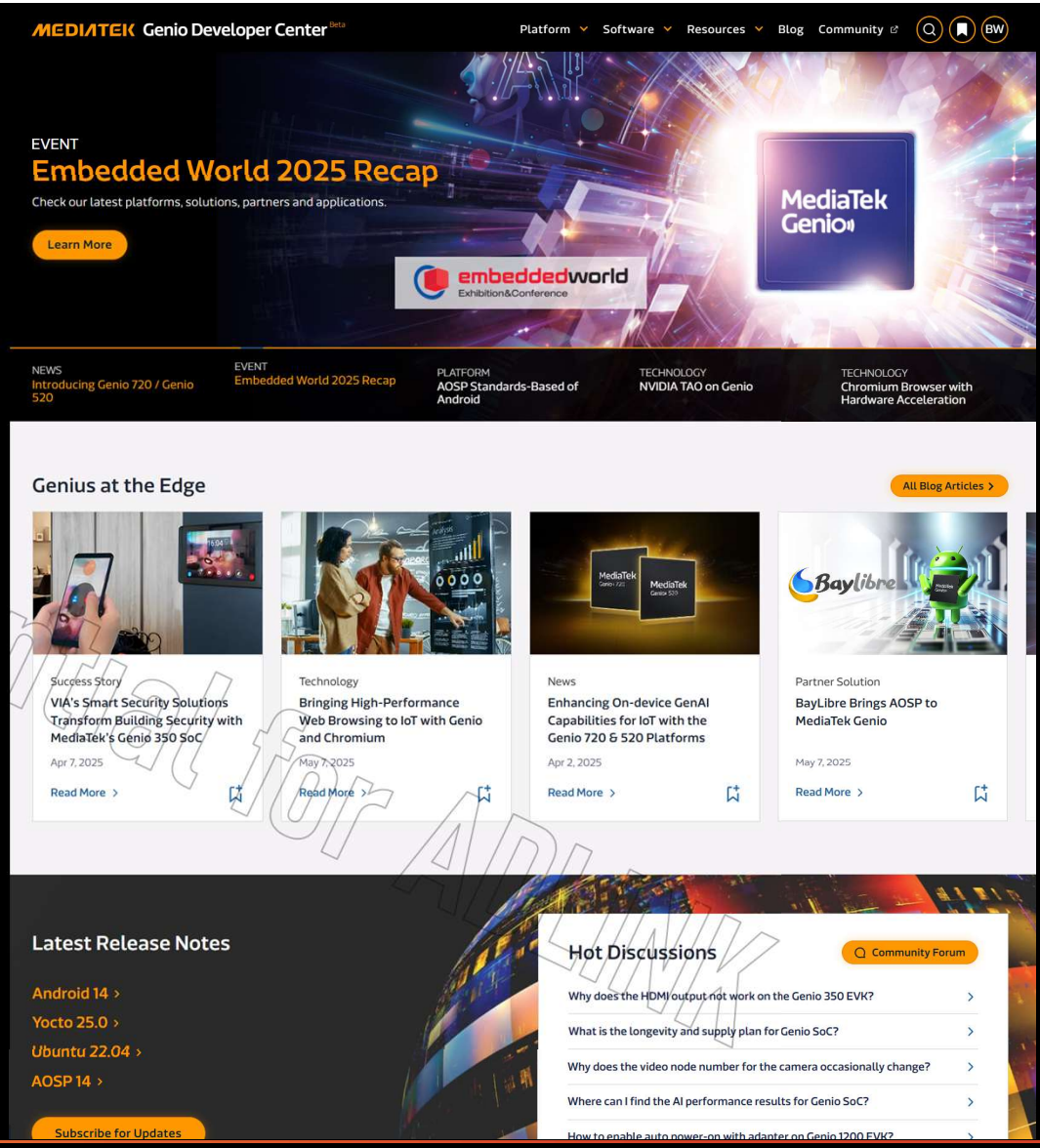
ANDROID | YOCTO

MEDIATEK

Welcome to visit the Genio Developer Center

genio.mediatek.com

- ✓ Software & Hardware Resources Access
- ✓ Online NDA Required Process
- ✓ Comprehensive Online Materials
- ✓ Bookmark / Blog / Forum



GENIO DESIGN SERVICE

Genio: Your Trusted Partner

Evaluation

- HDK and SDK packages offering built on the Genio EVK available in the market
- Access developer resources at the Genio Developer Center

Design

- HW reference design (MMD) and QVL (Qualified Vender List)
- Conduct HW design reviews and offer recommeNDA Requiredtions for PDN/SI simulation
- SW documentation includes bring-up SOP, porting guide, and tools
- Offer eService for issue tracking

After-Sales

- Deliver security updates
- Longevity support
- Assist with after-sales defect analysis

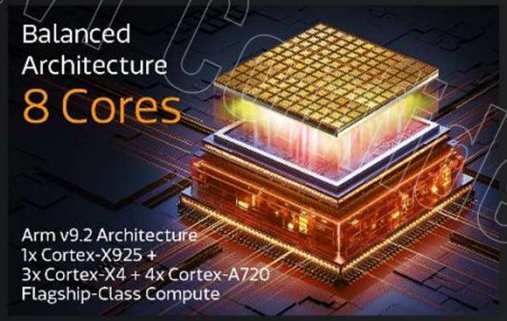
Genio Pro Introduction

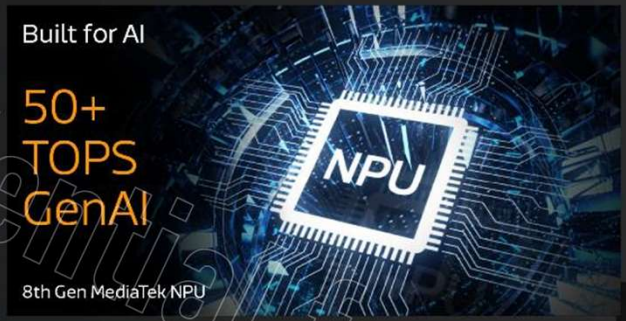
IoT

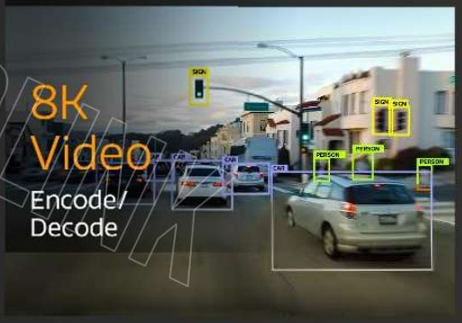
MEDIATEK

GENIO PRO 5100

Extreme Compute and Multimedia Platform Unleashing the Full Potential of AI







MediaTek MT8894 Platform

MediaTek Genio Pro Overview

Extreme Performance & Efficiency

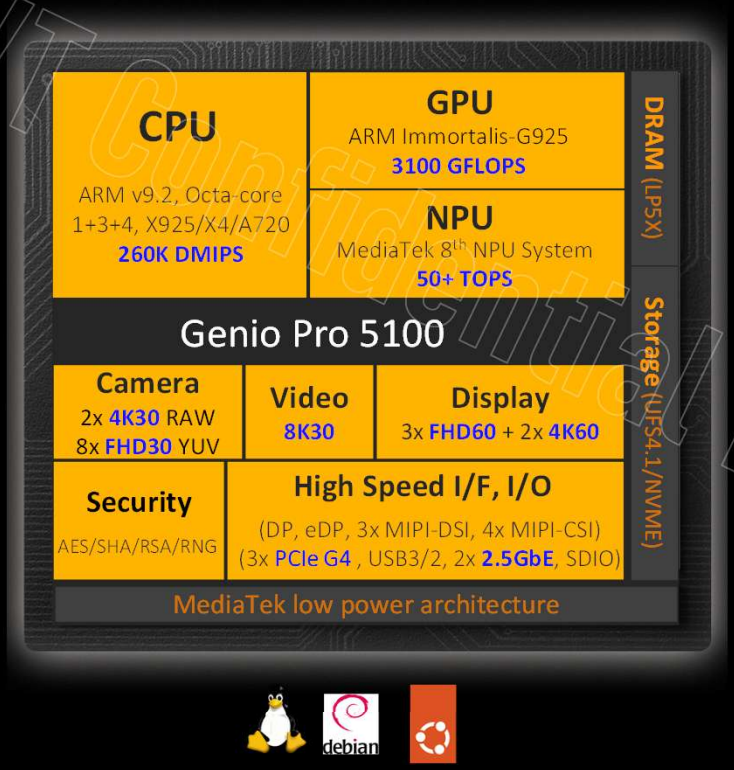
CPU
- 1x Ultra + 3x Performance + 4x Big-cores
- 40% increase in power efficiency
- 1x Ultra-core stress ~8Watt

GPU
- The latest ARM GPU G925
- Up to 3.1 TFLOPS
- GPU stress ~11.5Watt

NPU
- MediaTek 8th NPU for 7B GenAI
- Up to 50+ TOPS
- On-Device LLM/VLM, Agentic AI support

System
- 4ch (64-bit) LP5X-8533 (68 GB/s BW)
- UFS4.0 2L (23.2Gbps/L)
- Support SPI-NOR and NVMe

3nm AI-IoT platform



Advanced Multimedia Technology

Display
- Scalable Display Pipe Architecture
- Support Various Display Combinations

Codec
- 8K30 concurrent Video Decoder and Decoder

Video-in
- Up 3x ISP for RAW & YUV camera
- Support up to 16-ch camera via Virtual Channel

Rich I/O and Display I/F

PCIe
- 1x PCIe Gen4 2L
- 2x PCIe Gen4 1L

Connectivity
- 2x 2.5GbE Mac (TSN)

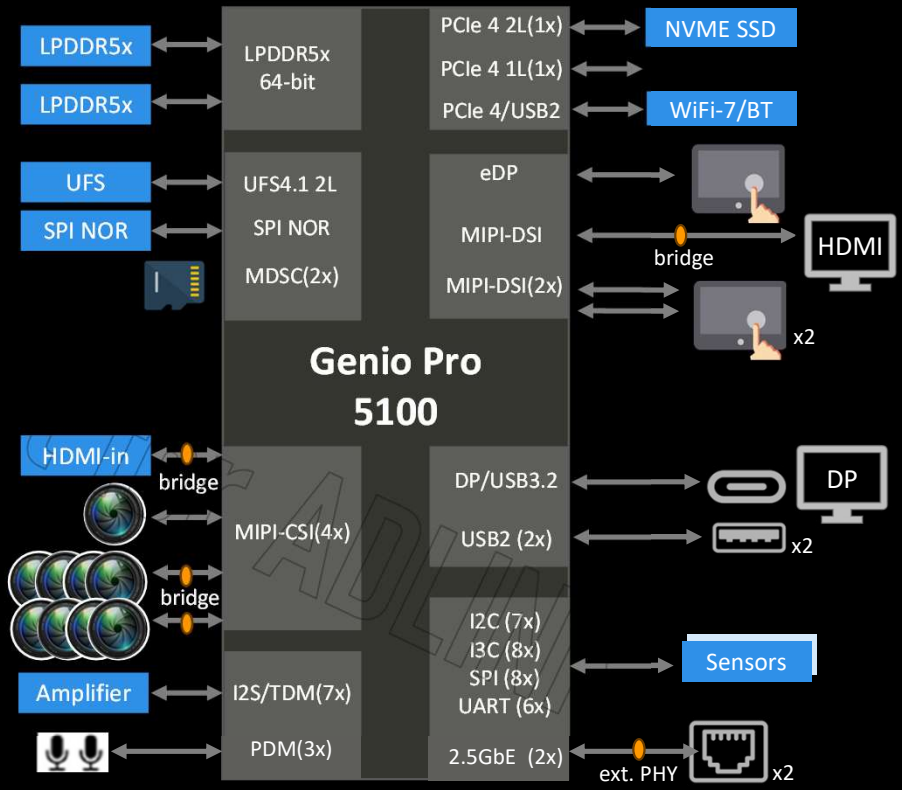
Display I/F
- 1x DP1.4 4L (MST)
- 1x eDP1.5 4L
- 3x MIPI-DSI 4L

Camera
- 4x MIPI-CSI C/D-PHY

MediaTek MT8894 Platform

MediaTek Genio Pro High Level Spec

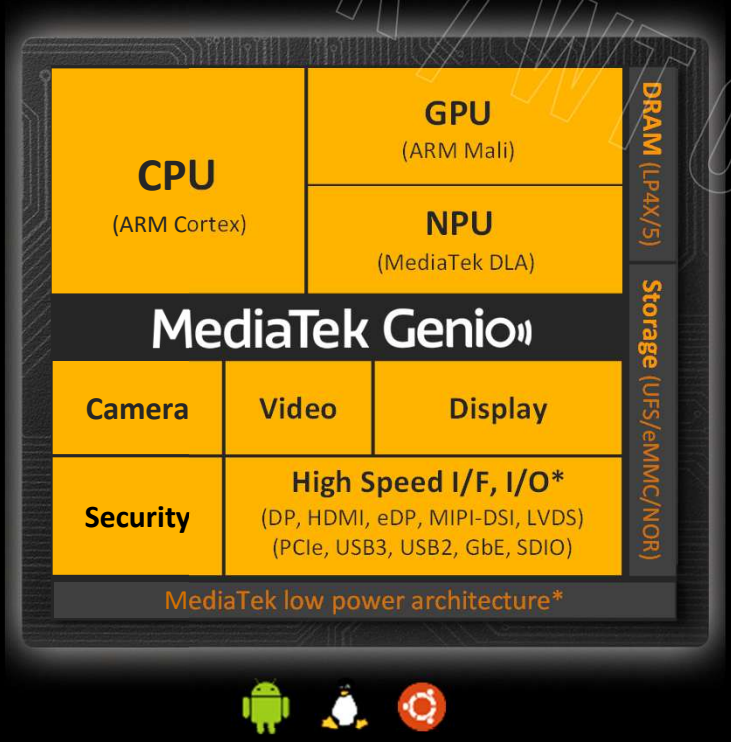
Platform		Genio Pro	Capability (score & system power consumption)
CPU		ARMv9.2 Octa-core 1x X925 (3.1G), 3x X4(2.8G), 4x A720(2.3G)	**260K DMIPS,** (est.) **GB6 SC/MC: 2400+/7800+** (est.) Single-core stress @25C **~8W** (est.) Multi-core stress @25C **~21.5W**
GPU		ARM **Immortalis-G925** MC11	**3.1 TFLOPS,** (est.) **glmark2: 6000+** (est.) GPU stress @25C **~11.5W** (est.) CPU+GPU stress @25C **~24W**
NPU		MediaTek 8th Gen NPU System up to **53** TOPS	(est.) **LLaMa-7B 20+ T/s** (LLM) (est.) **Qwen2.5-VL-3B 10+ T/s** (VLM)
Memory	DRAM	**Side-by-Side,** 64-bit LPDDR5x-8533	up to **30GB**, B/W 68GB/s
	Storage	**UFS4.0 2L**, SPI NOR, SD card, NVME SSD	up to **23.2Gbps/L**
Multimedia	Camera	4x MIPI-CSI 4L	up to **16x FHD30** or **2x RAW + 8x FHD30**
	ISP	3x ISP, support AE, AWB, LSC, EE, HDR, NR	(more camera combinations by request)
	Display	3x MIPI-DSI 4L, 1x eDP1.5 1x DP1.4 MST (muxed with USB 3.2)	**3x 4K60** (eDP + DP MST) (more display combinations by request)
	Video	8K30 HEVC/H.264/AV1/VP9 decode 8K30 HEVC/H.264 encode	**Concurrent 8K30**
Interfaces	PCIe	1x PCIe Gen4 2L(RC/EP), 2x PCIe Gen4 1L(RC)	**NVME SSD** support via PCIe Gen4 2L
	USB	1x USB3.2 (DP Alt support), 3x USB 2.0	
	Audio	2x HiFi5, 7x I2S/TDM, 3x PDM	
	Ethernet	2x 2.5GbE MAC (SGMII)	
	Peri.	2x SDIO3.0, 6x UART, 7x I2C, 8x I3C	



Genio Platform Overview

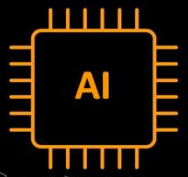
GENIO SOC OVERVIEW

MediaTek Genio» Overview



High Performance, High Efficiency


High Performance
High Efficiency



MediaTek Deep
Learning Accelerator


Dual Display

4K Codec/Display


Multi-Cameras/ISP

TSMC 6nm **GenAI** **4K Multi-media** **Industrial-grade** **10-Year Longevity**

Genio New Generation

Y2025 New

Y2026 New

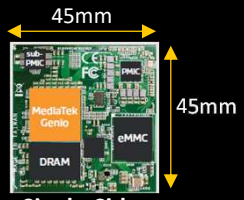
**Features may vary depending on the Platform*

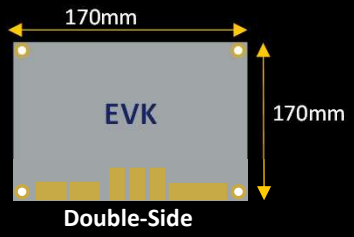
MediaTek Genio» Key Highlights

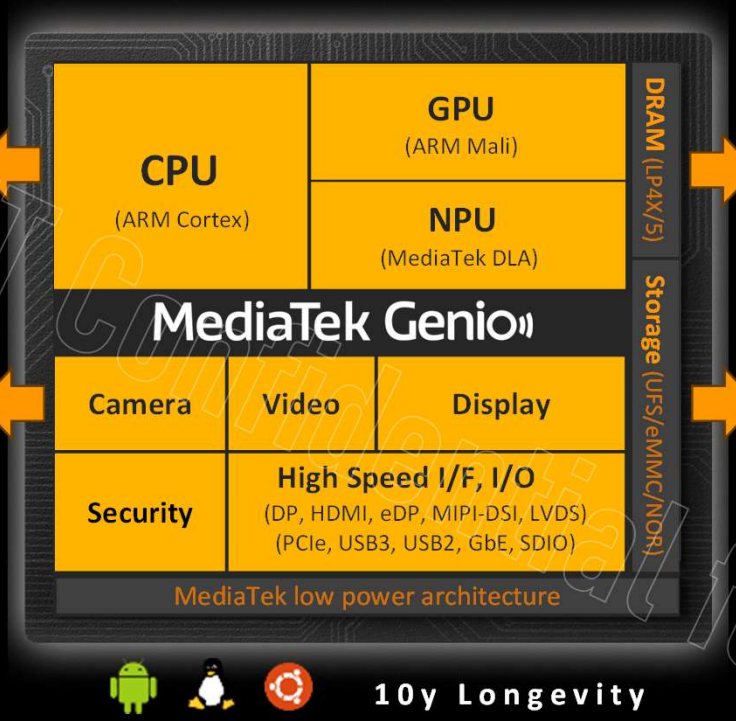
CPU
- TSMC 6nm Process node
- A78 or A76 high performance
- High power efficiency
- CPU stress < 5W

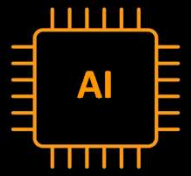
Video-in
- Support RAW + YUV sensor
- Support Video-in up to 4K60
- Support Multi-camera via VC*
- Eco-partners collaborations

Hardware
- Time-to-market by Double-side and Single-side PCB reference design
- Tool for Self-Simulations









AI
- MediaTek in-house IP
- Up to the latest 8th NPU for GenAI
- IoT Model Hub developer site

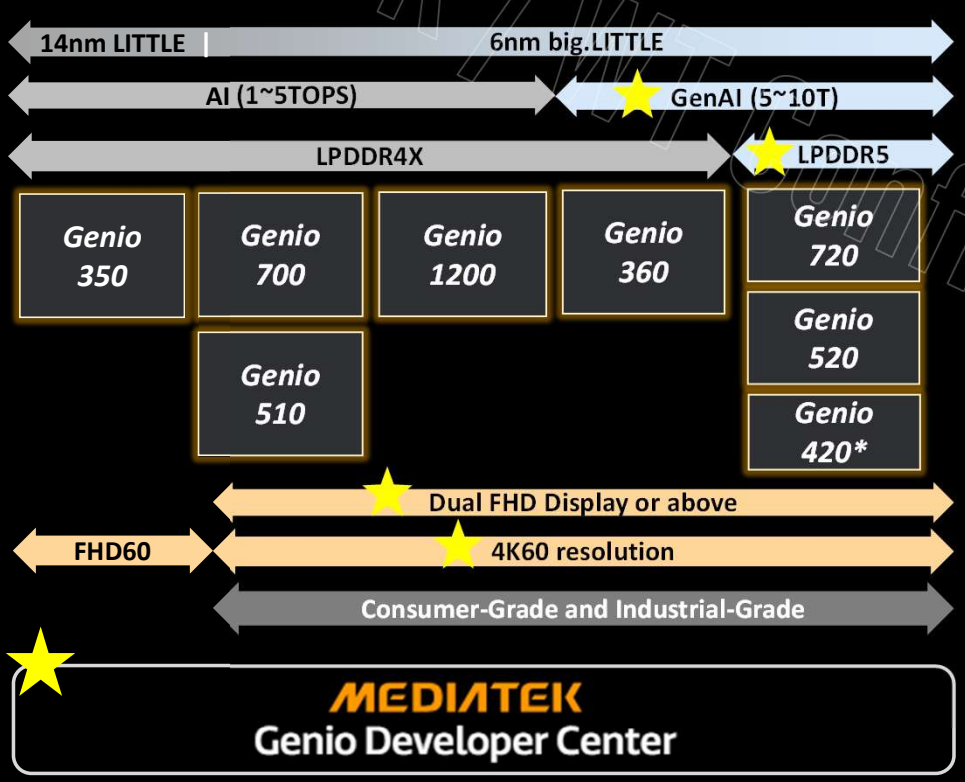
Display
- Support single 4K60 and dual FHD60 display scenario
- Support multiple display I/F
- Flexible display combinations
- Bridge IC Eco-partners collaborations

Connectivity
- RF baseband integrated or Discrete module
- Wi-Fi7 and 5G Redcap in the Roadmap
- Eco-partners collaborations (module maker)

*VC: virtual channels

Wide Range of AI + IoT applications

GenAI, 4K, Dual display for next Gen. IoT product



Smart Home

- Consumer IoT with 4K60 Streaming
- Smart and Connected Fitness
- Home Automation with Edge AI & video streaming
- Home Appliance with Edge AI & remote management

Smart Retail & Hospitality

- Desktop POS with dual display and remote management
- Smart KIOSK for self-checkout and Edge AI
- Hospitality with 4K resolution
- Portable handheld for ordering and warehouse management

Display & AV Streaming

- Interactive Flat Panel Display with 4K input/output
- Smart Video Conferencing system
- Professional Audio/Video with 4K60 transcode
- Video content management with Video Analytics

Industrial / Medical HMI

- In-Vehicle gateway with multi-camera and Edge AI
- Portable devices for extreme environment or health-care
- Smart Factory Automation with high performance and low power

★ Genio Key Features, *: Genio 420 Industrial-grade is not planned yet

Genio Specifications

Genio 720/520/420 Specifications

more information: https://genio.mediatek.com/genio-720
https://genio.mediatek.com/genio-520

Platform	Genio 720	Genio 720	Genio 520	Genio 520	Genio 420
SoC PN, process	MT8391AV, 6nm	MT8391IV, 6nm	MT8371AV, 6nm	MT8371IV, 6nm	MT8371LV, 6nm
CPU	2x A78 2.6G, 6 x A55 2.0G 81.5K DMIPS GB6: 1074/2441, ATT: 600K+	2x A78 2.4G, 6 x A55 2.0G GB6: 1006/2365 ATT: 570K+	2x A78 2.2G, 6 x A55 2.0G 74K DMIPS GB6: 940/2305, ATT: 550K+	2x A78 2.0G, 6 x A55 1.8G GB6: 864/2146 ATT: 515K+	2x A78 1.8G, 6x A55 1.6G 60K DMIPS GB6: 784/1967, ATT: 500K
GPU (MHT3.0)	Mali-G57 MC2 47fps		Mali-G57 MC2 38fps		Mali-G57 MC2 38fps
NPU (TOPS)	MediaTek 8th Gen NPU NPU/9T, Total/~10.5T, ETHZ:458		NPU/9T, Total/~10.3T, ETHZ:450		NPU/6.1T, Total/~7.2T, ETHZ:~368
Video Input	2x ISP, 16+16MP or 32MP@30fps Up to 6x FHD30 via MIPI VC		1x ISP, 16MP@30fps Up to 6x FHD30 via MIPI VC		
	2x MIPI-CSI (C/D-PHY 4L 2.5Gbps/L)				
Camera features	3A, NR, AI-FD, WPE, LSC				
Memory	2ch 16-bit LP4X-4266 up to 8GB, 2ch 16-bit LP5(X)-6400 up to 16GB (LP4x: 17GB/s, LP5: 25.6GB/s DRAM BW)				
Storage	eMMC5.1, UFS3.1 2L, SPI-NOR				
Display	Single Display: Max. UW5K60 (5120x2160) or 4K60 (3840x2160), Dual Display: Max. 2.5K60 + 2.5K60 (2560x1600)				
	MIPI-DSI 4L, single link LVDS (share-pin with MIPI-DSI), eDP1.4 4L, DP1.4/eDP1.2 4L(shared with USB3.2Gen1 P0)				
Video Decode	4K60 H.265/H.264/VP9				
Video Encode	4K30 H.265/H.264				
JPEG Dec/Enc	250/250 MP/s (~4K30)				
Audio	2x I2S/TDM (2ch, 2 in(Master/Slave), 2 out(Master)) (32b @192KHz), 1x PCM (2ch), 2x PDM(2ch) (24b @48KHz)				
I/O	1x PCIe Gen 2 (RC, support Wake on WLAN) 2x USB3.2 Gen 1 Type-C (1x dual mode share with DP1.4, 1x host, 64EP) 3x USB2.0 (host, 64EP), 4x UART(4-wire), 6x SPI, 9x I2C				
	1x GbE MAC (TSN), 3x SDIO3.0 (8-bit/4-bit/4-bit)				
WiFi RF	WiFi-6 1x1 (MT6631X), WiFi-6E 2x2 (MT6637X)				
Op. Temp.	-20°C to 95°C Tj	-40°C to 105°C Tj	-20°C to 95°C Tj	-40°C to 105°C Tj	-20°C to 95°C Tj
Package, Ref. PCB	FCCSP 13.8x11.8mm, 0.4BP, Double-side 8L HDI-2 PCB T≤1.6mm (PP≤63.5um), Single-side 14L HDI-3 PCB T≤1.2mm (PP≤60um) (OSM-L)				
Chipset	MaNDA Requiredtory: SoC + MT6365 + MT6319, Optional: MT6375, RT5762E, WiFi RF chip or WiFi CoB chip				

* Reference only, subject to change

GENIO EVALUATION KITS

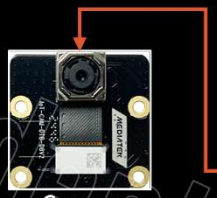
G720/520 Evaluation Kits

Key Features

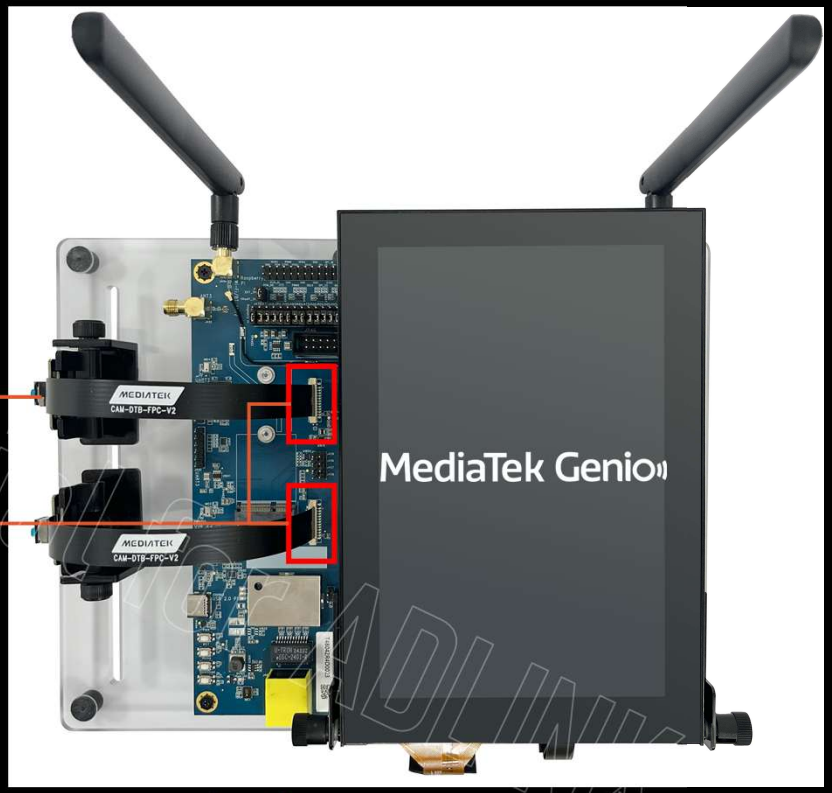
- 6nm high power efficiency platform
- Best-in-class 10Tops GenAI Performance
- Dual-display via MIPI-DSI + DP over Type-C
- **Raspberry PI compatible** Camera Connector

Key Spec

- **8GB LPDDR5-6400**, 128GB UFS3.1
- 7” FHD60 MIPI-DSI Panel with Touch
- MT7921 **Wi-Fi 6/BT5.3** 2x2 pre-installed
- 13MP RAW and 5MP YUV Camera Sensor
- High-speed I/O
  - 1x USB3.2 Gen1/DP (Type-C)
  - 1x USB3.2 Gen1 (Type-C)
  - 1x USB2.0 (Type-C)
  - 1x GbE (RJ45)
  - 1x M.2 2230 A-E Key (WiFi-6/BT5.3 module)
  - 1x M.2 3042 B Key (reserved for **5G RedCap/4G module**)



Raspberry PI
Camera Connector
Compatible (22Pin)



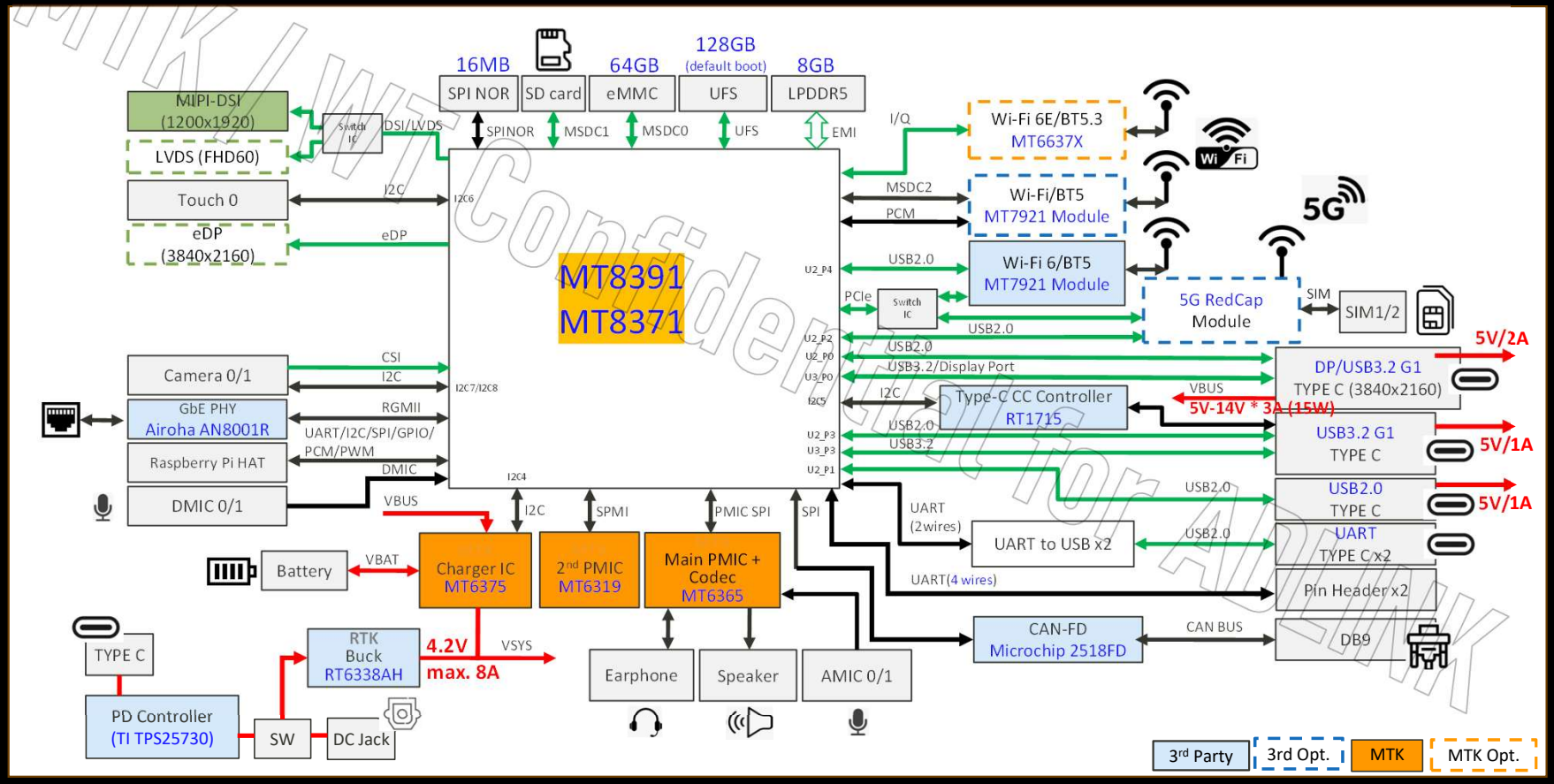
SALE

Available in July/E’25

Available in Dec./E’25

MEDIATEK

Genio 720/520 EVK Block Diagram



* Reference only, subject to change

Genio 1200/700/510/350 Specifications

more information: https://genio.mediatek.com/genio-1200
https://genio.mediatek.com/genio-700
https://genio.mediatek.com/genio-510
https://genio.mediatek.com/genio-350

Confidential B

Platform	Genio 1200	Genio 700	Genio 510	Genio 350
SoC PN, Process	**MT8395, 6nm**	**MT8390, 6nm**	**MT8370, 6nm**	**MT8365, 14nm**
CPU (GB6 SC/MC)	4x A78 2.2G, 4x A55 2.0G **950/3136**	2x A78 2.2G, 6x A55 2.0G **948/2397**	2x A78 2.0G, 4 x A55 2.0G **845/1824**	4x A53 2.0G **191/505**
GPU (MHT3.0)	Mali-G57 MC5, **84fps**	Mali-G57 MC3, **58fps**	Mali-G57 MC2, **39fps**	Mali-G52 MC2, **13fps**
NPU (TOPS)	2x MDLA2.0+2x VP6, **4.8T**	MDLA3.0+VP6, **4.0T**	MDLA3.0+VP6, **3.2T**	1x VP6, **0.35T**
Audio DSP	HiFi-4	HiFi-5		HiFi-4
Video Input	**2x ISP**, 16+16MP or 48MP@30fps, 6x 1080P30 via VC 3x MIPI-CSI 4L (4/4/4 or 4/4/2+2), **1x HDMI 2.0 RX**	**2x ISP**, 16+16MP or 32MP@30fps, 8x 1080P30 via VC 2x MIPI-CSI 4L (4/4 or 4/2+2)		**1x ISP**, 13MP@30fps 2x MIPI-CSI 4L
Camera features	3A, NR, LSC, HDR, AI-FD, Warp Engine	3A, NR, LSC, HDR, AI-FD, Warp Engine		3A, NR, LSC, FD, Warp Engine
Memory	64-bit LP4x-4266 up to **16GB**	32-bit or 64-bit LP4x-3733 up to **8GB**		32-bit DDR3L/DDR4/LP3/LP4-3200 up to **4GB**
Storage	eMMC5.1, **UFS2.1**, SPI-NOR	eMMC5.1, SPI-NOR		eMMC5.1
Display	**Single:** Max. 4K60, **Dual:** Max. 4K60+4K60 **Triple:** Max. 4K60 + 4K30 + 4K30 2x MIPI-DSI 4L (DSC), 1x eDP1.4 4L 1x HDMI 2.0b, 1x DP1.4 4L	**Single:** Max. 4K60 **Dual:** Max. 4K60+4K30 2x MIPI-DSI 4L (DSC), 1x eDP1.2 2L 1x HDMI 2.0b, 1x DP1.4 4L	**Single:** Max. 4K60 **Dual:** Max. 4K60+FHD60	**Single:** Max. FHD60 **Dual:** Max. FHD60 + HD60 1x MIPI-DSI 4L / LVDS (co-pin) 1x DPI
Video Decode	**4K90** H.265/H.264/**AV1**/VP9	**4K75** H.265/H.264/**AV1**/VP9	**4K60** H.265/H.264/**AV1**/VP9	**FHD60** H.265/H.264/VP9
Video Encode	**4K60** H.265/H.264	**4K30** H.265/H.264		**FHD60** H.265/H.264
JPEG Dec/Enc	250/250 MP/s	250/250 MP/s		NA
Audio	4x I2S/TDM(2 in, 2 out), 1x PCM (2ch) 4x PDM(2ch), 2x SPDIF(1 in, 1 out)	4x I2S/TDM(2 in, 2 out), 1x PCM (2ch) 4x PDM(2ch), 2x SPDIF(1 in, 1 out)		4x I2S/TDM(2 in, 2 out), 1x PCM (2ch) 4x PDM(2ch), 2x SPDIF(1 in, 1 out)
I/O	**1x** PCIe3.0 2L (EP/RC), **1x** PCIe2.0 (RC)/USB3.2 G1 (Host) **1x** USB3.2 G1 (Host/Device), **2x** USB2.0 (Host/Device) **1x** GbE MAC (TSN), **2x** SDIO3.0 (4-bit) **6x** UART, 6x I2C, 2x I3C, 8x SPI (6M/2S)	**1x** PCIe2.0 1L (RC), **1x** USB3.2 G1 (Host/Device), **2x** USB2.0 (Host/Device) **1x** GbE MAC (TSN), **2x** SDIO3.0 (4-bit) **4x** UART, 5x I2C, 2x I3C, 6x SPI (M)		**1x** USB2.0 (Host/Device) **1x** USB2.0 (Host) **1x** 10/100 Ethernet MAC, **2x** SDIO3.0 (4-bit) **3x** UART, 4x I2C, SPI
WiFi Baseband	NA	NA		**WiFi-5/BT5.0** 1x1 (MT6631)
Op. Temp.	Consumer: -20 to 65C Ta(95Tj), Industrial: -40 to 105Tj	Consumer : -20 to 65C Ta(95Tj), Industrial: -40 to 105Tj		Consumer: -20 to 65C Ta (95Tj)
Package Ref. PCB	FCCSP 15x15, 0.4BP MT8395A: Double **8L HDI-2 T≤1.0mm** MT8395I: Double **8L HDI-2 T≤1.6mm**	FCCSP 15x15, 0.4BP MT8390A: Double **8L HDI-2 T≤1.2mm** MT839I/MT8370A/MT8370I: Double **8L HDI-2 T≤1.6mm**		FCCSP 12.8x11.8, 0.4BP Single **6L HDI-1 T≤1.0mm**
Genio Chipset	**SoC + PMIC + BUCK + 4x LDO**	**SoC + PMIC + 2x BUCK + LDO**		**SoC + PMIC + 2x LDO**

Genio 360 Specifications

Platform	Genio 360P	Genio 360P (preliminary)	Genio 360	Genio 360 (preliminary)
SoC PN	MT8367AV, 6nm	MT8367IV, 6nm	MT8366AV, 6nm	MT8366IV, 6nm
CPU (GB6 SC/MC, ATTv10)	2x A76 2.0G, 6 x A55 2.0G 656/1747, ATT: 350K+	2x A76 1.9G, 6 x A55 1.7G 600+/1600+, ATT: 320K+	1x A76 2.0G, 5 x A55 2.0G 655/1356, ATT: 310K+	1x A76 1.9G, 5 x A55 1.7G 600+/1200+, ATT: 280K+
GPU (MHT3.0)	Mali-G57 MC2 30fps			
NPU (TOPS)	MediaTek 8th Gen NPU NPU/7.4T, Total/8.5T AI-benchmark: 300+		MediaTek 8th Gen NPU NPU/5.1T, Total/6T AI-benchmark: 270+	
Video Input	1x ISP, 16MP@30fps, Up to 6x FHD30 via MIPI Virtual Channels			
	2x MIPI-CSI (C/D-PHY 4L 2.5Gbps/L)			
Camera features	3A, NR, AI-FD, LSC			
Memory	2ch 16-bit LP4X-3733 up to 8GB (14.9GB/s DRAM BW)			
Storage	eMMC5.1, SPI-NOR			
Display	Single Display: Max. 4K60 (3840x2160), Dual Display: Max. FHD60 + FHD60 (1920x1080)			
	2x MIPI-DSI 4L, single link LVDS (share-pin with MIPI-DSI), DP1.4/eDP1.2 4L			
Video Decode	4K30 H.265/H.264/VP9			
Video Encode	FHD90 H.265/H.264			
JPEG Dec/Enc	250/400 MP/s (~4K30/4K45)			
Audio	2x I2S/TDM (2 in(Master/Slave, 2 out(Master)) (32b @384KHz), 1x PCM (2ch), 4x PDM(2ch) (24b @48KHz)			
I/O	1x PCIe Gen 2 (RC, support Wake on WLAN), 1x USB3.2 Gen 1 (dual mode, 64EP) 2x USB2.0 (host, 64EP), 4x UART(4-wire), 6x SPI, 8x I2C, 2x I3C, 1x CAN-FD			
	1x GbE MAC (TSN), 3x SDIO3.0 (8-bit/4-bit/4-bit)			
WiFi RF	WiFi-5 1x1 (MT6631N)			
Op. Temp.	-20°C to 95°C Tj	-40°C to 105°C Tj	-20°C to 95°C Tj	-40°C to 105°C Tj
Package, Ref. PCB	FCCSP 12.2x13.4mm, 0.4BP, Double-side 6L HDI-2 PCB T≤1.6mm (PP≤65um), Single-side T≤1.2mm (PP≤60um)(OSM-L)			
Chipset	MaNDA Requiredtory: SoC + MT6366 + MT6680 + RT5760, Optional: MT6375, WiFi RF chip or WiFi CoB chip			

GENIO 720/520/420 KEY FEATURE - NPU

MediaTek Genio» AI Advantage

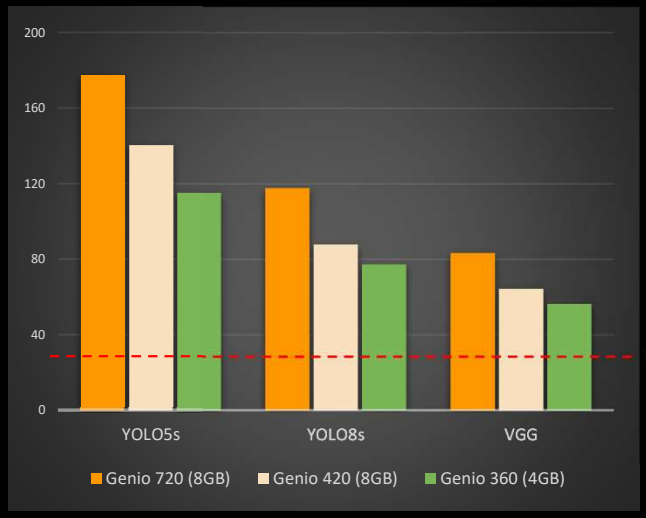
Best-in-Class Performance

- WW#1 IOT NPU performance (ETHZ AI benchmark)
- Real-time AI inference
- Genio 720/520 for <3B model
- Genio 420 for <2B model

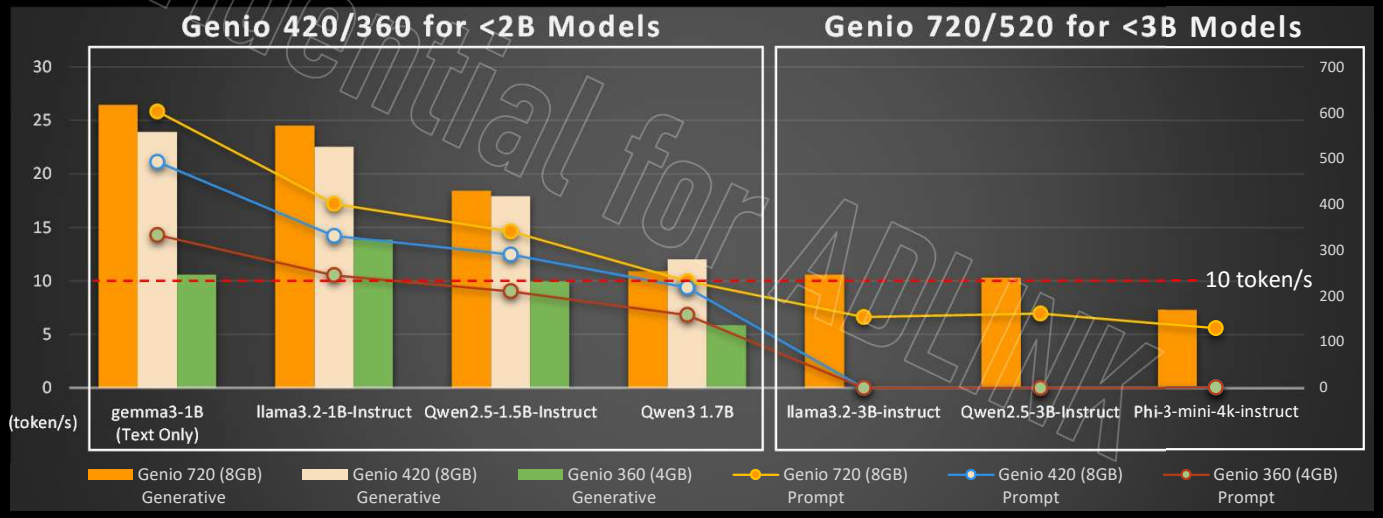
ETHZ AI benchmark v5 (https://ai-benchmark.com/ranking_IoT.html)

Processor	CPU Cores	AI Accelerator	Year	Lib	CPU-Q Score	CPU-F Score	INT8 NNAPI 1.1	INT8 NNAPI 1.3	INT8 Accuracy	FP16 NNAPI 1.1	FP16 NNAPI 1.3	FP16 Accuracy	INT8 Parallel	FP16 Parallel	INT8 NLP
MediaTek Genio 720	2x2.6 GHz Cortex-A78 & 6x2.0 GHz Cortex-A55	NPU 8.0	2025	nn	12	8.6	42.2	243	92.6	23.7	95.3				
MediaTek Genio 520	2x2.2 GHz Cortex-A78 & 6x2.0 GHz Cortex-A55	NPU 8.0	2025	nn	10.8	7.9	42.3	239	92.6	23.8	93.2				
MediaTek Genio 700	2x2.2 GHz Cortex-A78 & 6x2.0 GHz Cortex-A55	APU 5.0 (MDLA3.0 @900MHz)	2024	nn	9	9.3	26.1	142	83.5	14.2	50.7	83.7	6.9	4	4

Analytical AI Performance (fps)



Generative AI Performance (token/s)

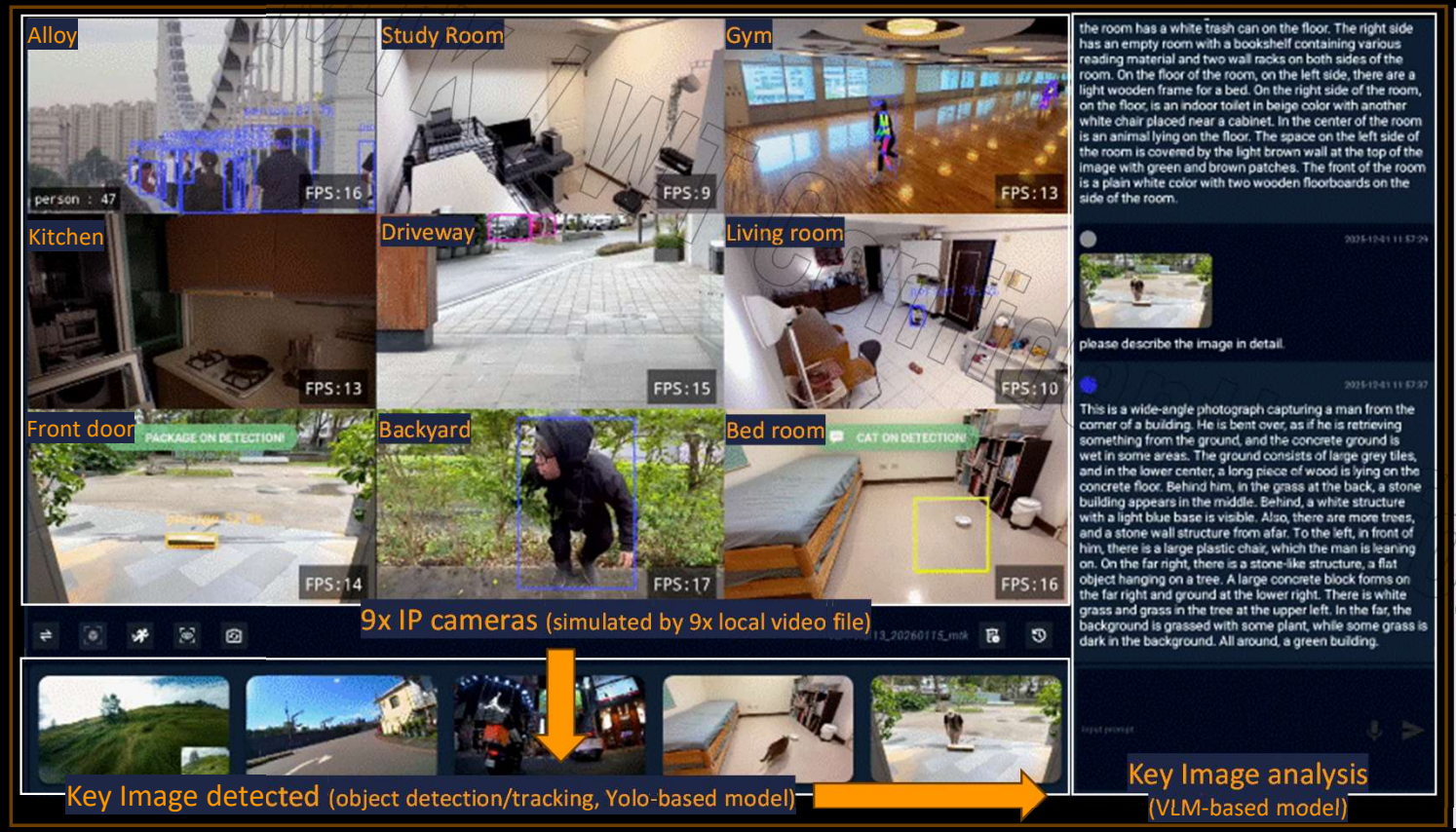


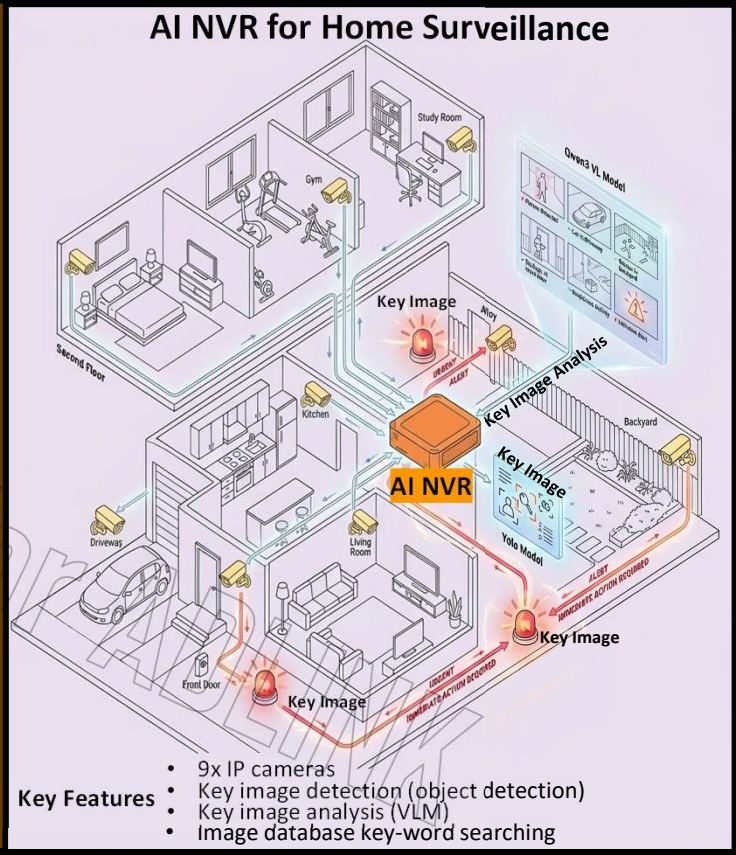
G720* config: G720+LP5(8GB)+UFS(128GB), G520* config: G520+LP5(8GB)+UFS(128GB), G460 config: G460+LP4X(4GB)+eMMC(64GB), G360 config: G360+LP4X(4GB)+eMMC(64GB)

MEDIATEK

GENIO 720/520/420 KEY FEATURE - NPU

On-device GenAI PoC Demo – AI NVR for Home Surveillance





- POC System: Genio 720/16GB DRAM/128G UFS/Android 15, On-device AI models: YOLOv8 (object detection, Pose and object tracking, Qwen3-VL 2B(VLM)
- POC scenario is based on 9x local video with AI and system power consumption < 5W (includes 9x VDEC + 9x YOLO + 1x VLM + external Display)

VLM: Vision Language Model

GENIO KEY FEATURE - DISPLAY

Display Demo by Genio 720 EVK

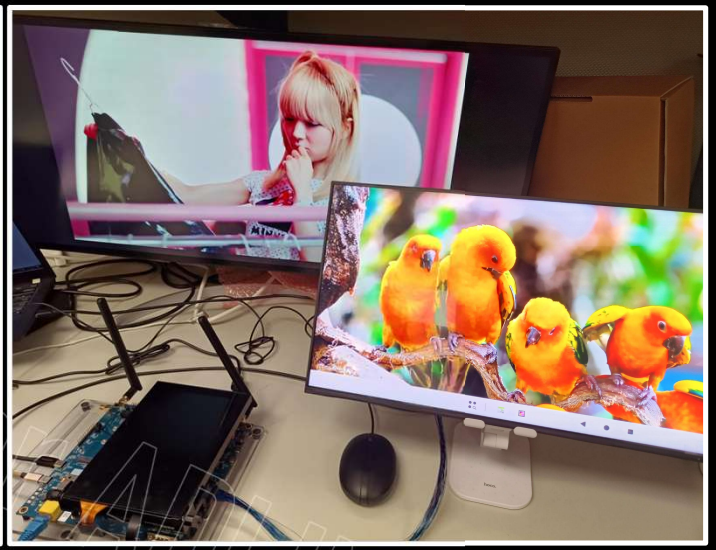
Dual Display (FHD60+FHD60)

Dual Display: MIPI-DSI(FHD60) + DPoC(FHD60)

5K60 Ultrawide Single Display

Single UW5K30: DP-TX (5120x2160 30fps)

Dual Display (4K60+4K60)



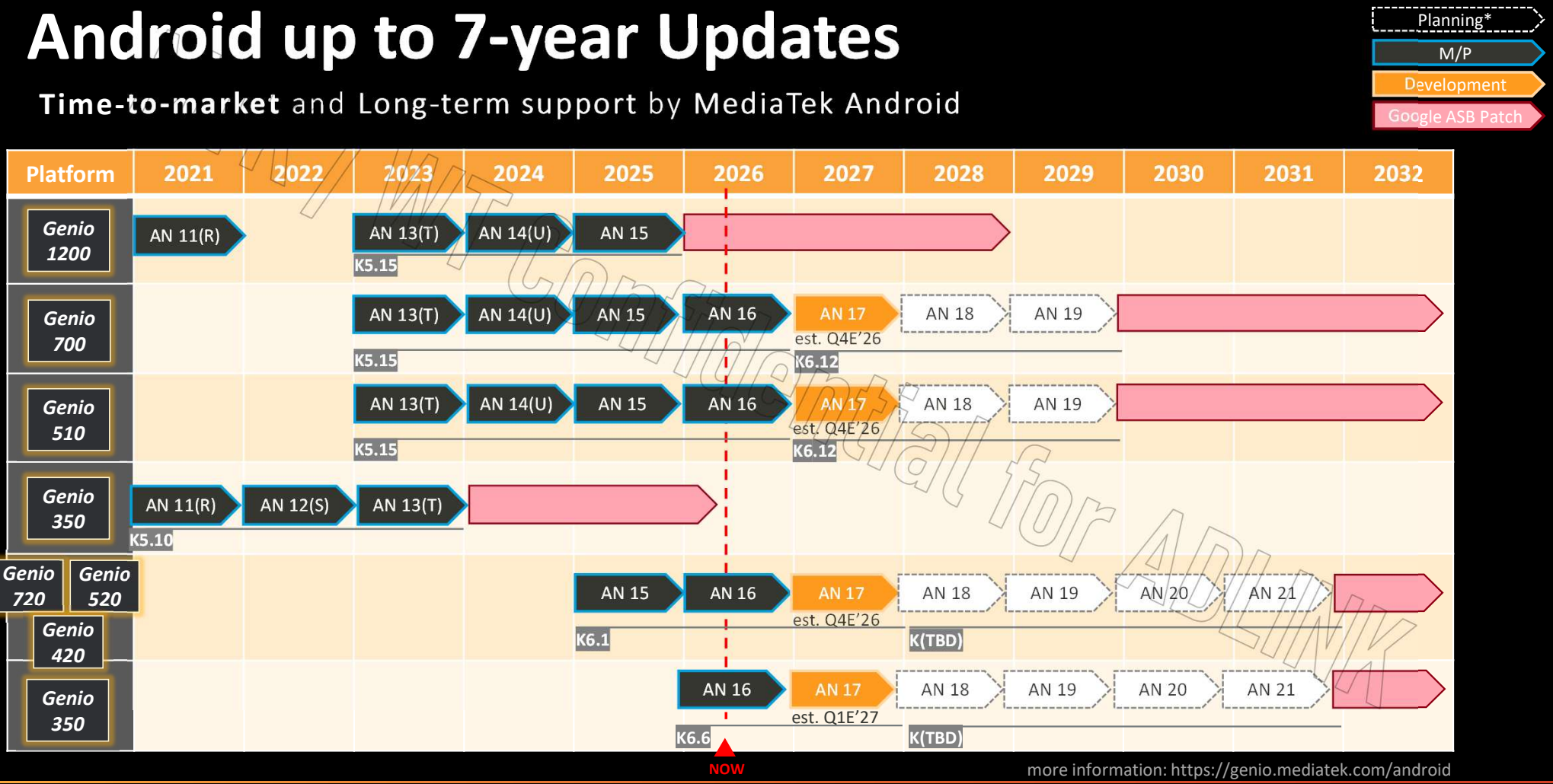
Dual 4K60: eDP + DP-TX (3840x2160 60fps)

Software

GENIO KEY FEATURE – SOFTWARE

Android up to 7-year Updates

Time-to-market and Long-term support by MediaTek Android



more information: https://genio.mediatek.com/android

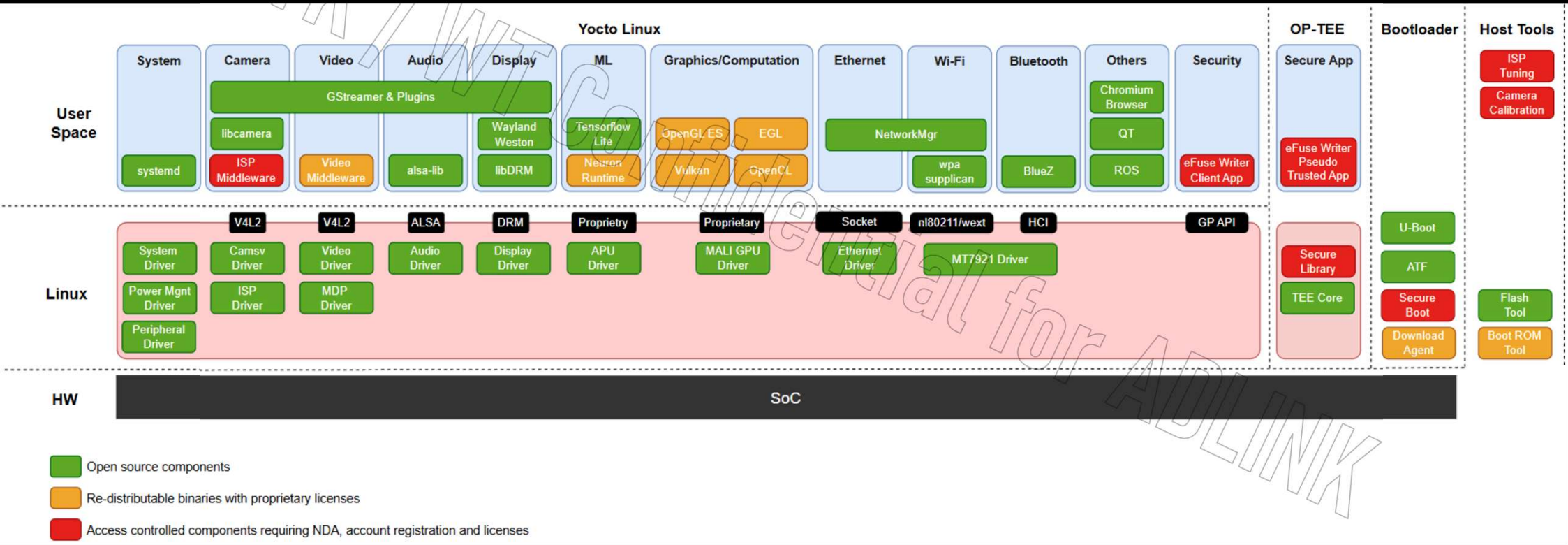
* subject to change without notice

MEDIATEK

GENIO KEY FEATURE – SOFTWARE

IoT Yocto Linux Software Architecture

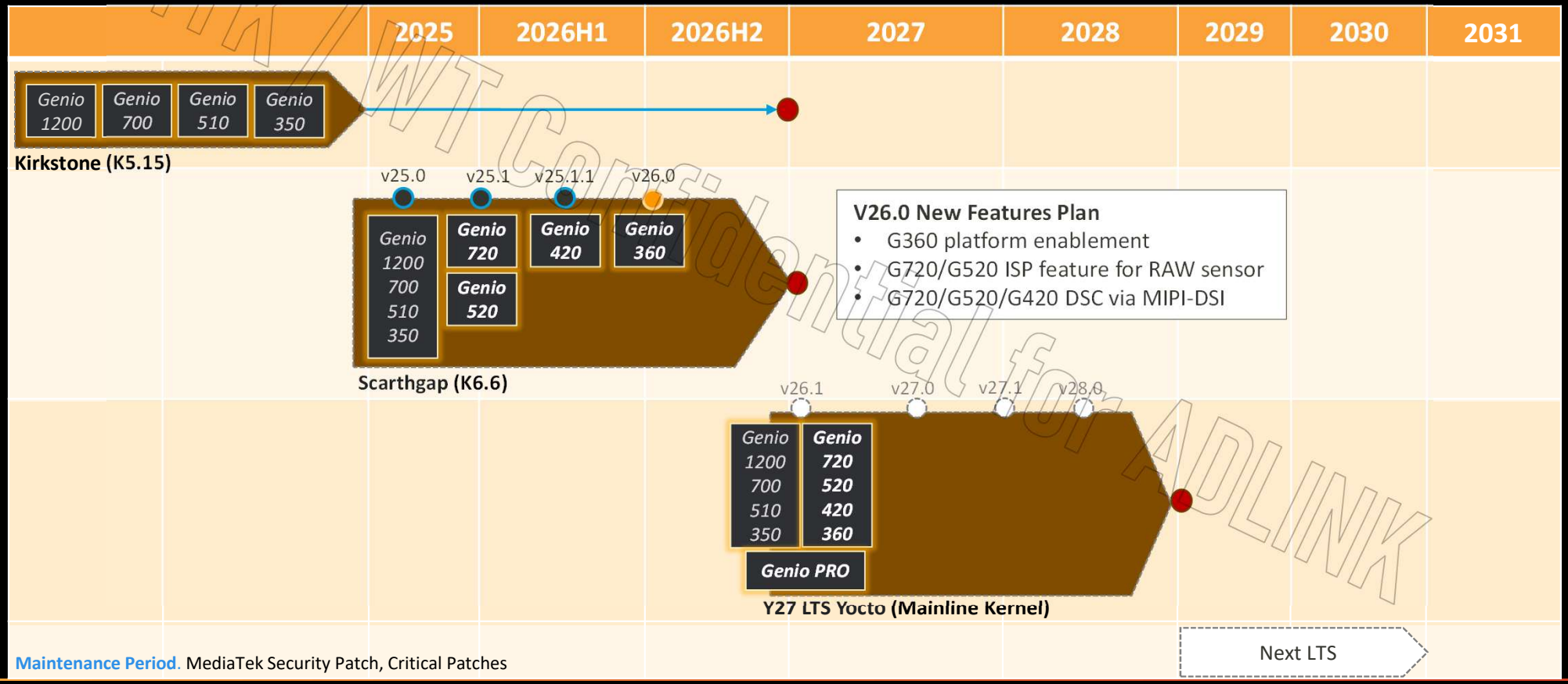
Single Code Base, Open Source Project, Upstream Compliance



GENIO KEY FEATURE – SOFTWARE

Yocto Linux Bi-Yearly Kernel Migrations

EOL
available
development
planning
Maintenance



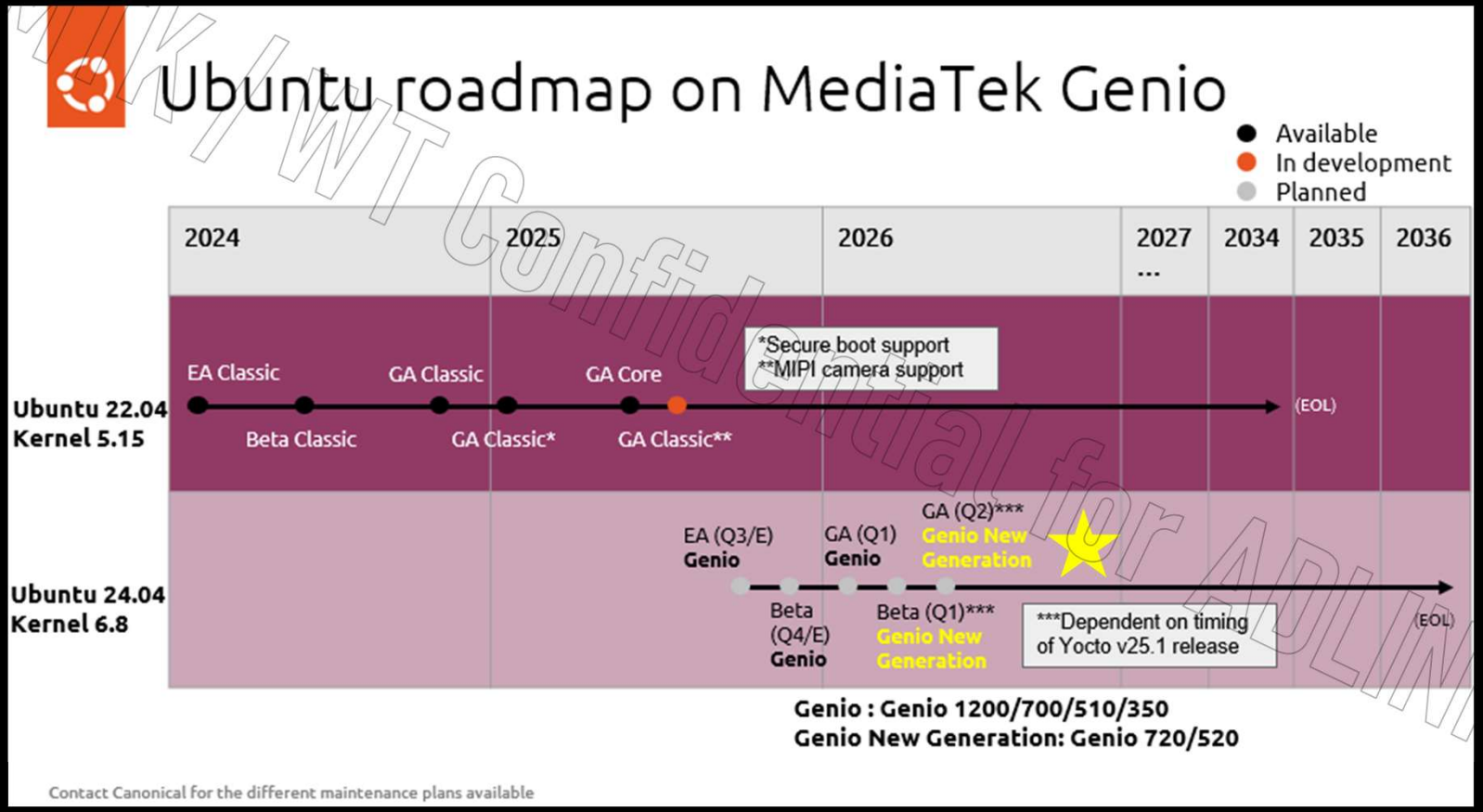
Maintenance Period. MediaTek Security Patch, Critical Patches

* subject to change without notice
more information: https://genio.mediatek.com/yocto

MEDIATEK

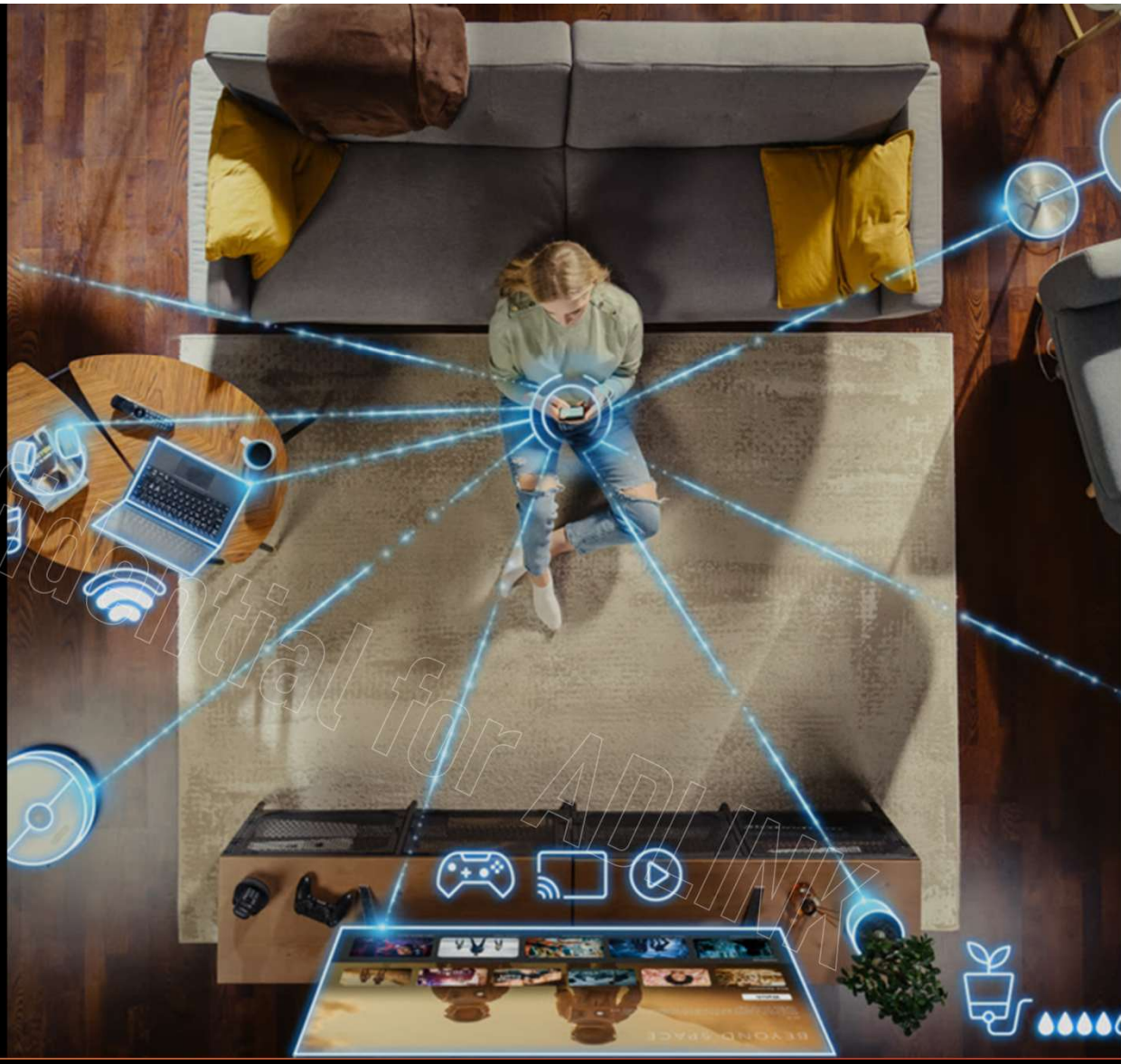
GENIO KEY FEATURE – SOFTWARE

Ubuntu Roadmap from Conanical



more information: https://genio.mediatek.com/ubuntu

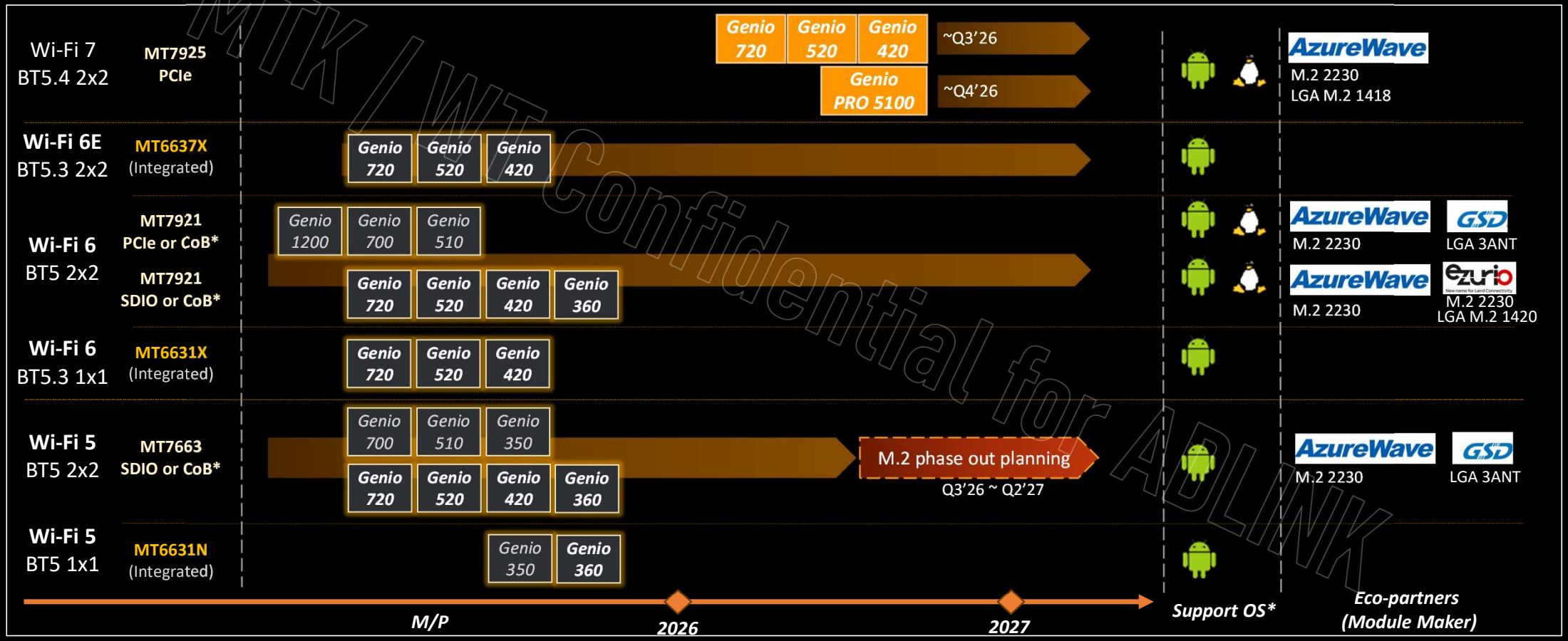
Connectivity



GENIO KEY FEATURE – WI-FI CONNECTIVITY

MediaTek Genio» Wi-Fi Solution Roadmap

M/P
Development



*CoB (Chip on Board) is project-based support, Ubuntu OS support depends on Yocto readiness, features may vary depending on the OS

Connectivity Reference Part List

Driver pre-integrated for Genio New Generation

	Spec	Supplier	Part No.	Grade	Spec. brief	Android	Linux	
★	**WiFi-6**	AzureWave	AW-XB468NF	CT (-10~70)	MT7921L, **M.2 2230**, PCIe/USB, 2x ANT	●	●	
★	**WiFi-5**	AzureWave	AW-CB451NF V2	CT (-10~70)	MT7663B, **M.2 2230**, SDIO, 2x ANT	●		phase out planning
★	**WiFi-6**	eZurio	Sona MT320	IT (-40~85)	MT7921S, **M.2 2230**, SDIO, 2x ANT	●	●	
New	**WiFi-7**	AzureWave	AW-EB600NF	CT (-10~70)	MT7925, **M.2 2230**, PCIe/USB, 2x ANT	●	●	

Multiple Wi-Fi candidates for Wide Range IoT applications

WiFi-6	AzureWave	AW-XB554NF	CT (-10~70)	MT7921S, **M.2 2230**, SDIO, 2x ANT	●	●	
WiFi-6	eZurio	Sona MT320	IT (-40~85)	MT7921S, **LGA M.2 1420**, SDIO, 2x ANT	●	●	
WiFi-6	GSD	WXT50M2101	CT (0~70)	MT7921L, **M.2 2230**, PCIe/USB, 2x ANT	●	●	
WiFi-6	GSD	WXT2PM2003	CT (-10~70)	MT7921L, **LGA (24x24x2.6)**, PCIe/USB, 3x ANT	●	●	
WiFi-5	GSD	WCT22M2101	CT (-10~70)	MT7663B, **LGA (20x25x2.4)**, SDIO, 3x ANT	●		
New **WiFi-7**	AzureWave	AW-EM637	CT (-10~70)	MT7925, **LGA M.2 1418**, PCIe/USB, 2x ANT	●	●	

more information: https://genio.mediatek.com/evk-boards#companion-modules

Contact: Patrick Lin
E-mail: patrick.Lin@azurewave.com
Webpage: https://www.azurewave.com/wireless-modules-MTK.html\

Contact: Leviys Liang
E-mail: liangys@gaosd.com

Webpage:
https://www.ezurio.com/wireless-modules/wifi-modules-bluetooth

★ pre-integrated into the new generation Genio EVK

MEDIATEK GENIO PARTNERS

Expanding Global Partner Ecosystem

SOLUTION/AI PARTNERS

NVIDIA, CyberLink, Cyberon, intelliGo Technology Inc., IRIDA LABS, Neural Spike, YUAN, DSP Concepts, AIROHA, ASIX, ITE Tech. Inc., 御光視覺

SYSTEM INTEGRATION

AzureWave, Baylibre, COLLABORA, esper, exein, INNOWAVE, kynetics, NEXA, NUU, OLogic, PrevantisNova, longsys, Vantron, Canonical, YJ 雲景科技

VAR/ DISTRIBUTORS

文曄科技 股份有限公司 WT MICROELECTRONICS, ARROW, BRAEMAC, MOUSER ELECTRONICS, RUTRONIK ELECTRONICS WORLDWIDE, ASC, SMC 芯智

HARDWARE SOM/IDH/ ODM

ADLINK, ADVANTECH, MiTAC DIGITAL TECHNOLOGY CORP., MicroTouch, msi, QUECTEL, ROCKTECH, MobiIoT, ezurio, SECO, innocomm, COMPAL, AAEON, EverFocus, Qbic Technology, iBASE, AGENEW, radxa, GRINN, CYP, VIA, MiTwell, AMobile, WINMATE, USI, TESSOLVE A Hero Electronix Venture, iWave Global

Genio 720/520/420 Module Partners

OSM-L

ADLINK LEADING EDGE COMPUTING

OSM-MTK520
(G720/G520)

OSM-L

ADVANTECH
Enabling an Intelligent Planet

AOM-2421
(G720/G520)

OSM-L

MOSM-MM30U-G520
(G720/G520/G420)

OSM-L

SERA

OSM-M8371 / OSM-M8391
(G720/G520)

OSM-L

Qbic Technology

QOM-0520 / QOM-0720
(G720/G520)

OSM-L

radxa

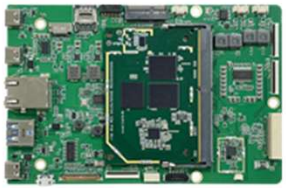
OM-G720-L
(G720)

Industrial Gateway

ADLINK LEADING EDGE COMPUTING

MXA-312M
(G520)

Proprietary SOM



AMOBILE

SBC-MB520/SBC-MB720
(SoM-SD520/SoM-SD720)
(G720/G520)

Smart Module

LANTRONIX

Open-M™ 720G/520G SOM
(G720/G520)

SMARC

VIA

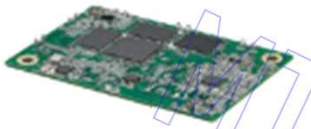
SOM-5200
(G520)

Smart Module

QUECTEL
Build a Smarter World

SH603FC SOM
(G720/G520)

Smart Module and Eco Partners



Vecow

ESOM-MT-1200
(G1200)

ADLINK

LEC-MTK-i1200/I-Pi SMARC 1200
OSM-MTK510, OSM-MTK520
(G1200/G510)

kontron

3.5"-SBC-i1200
(G1200)

ADVANTECH

2.5" RSB-3810 & EPC-R3810
(G1200)

VIA

SOM-7000/5000/3000
VAB-5000/3000
(G1200/G700/G510)

SECO

SOM-SMARC-Genio700/510
(G700/G510)

ezurio

Tungsten700/510 SMARC
(G700/G510)

OLogic

Pumpkin Genio 700/510/350
(G700/G510/G350)

innocomm

SB-35
(G350)

TESSOLVE

Genio700 SOM
(G700)

MTwell

MOSM-MM20E/MOSM-MM30U
(G700/510)

radxa

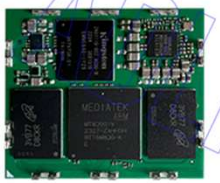
NIO 12L
(G1200)

ROCKTECH

MTB-612/613/620
RCB6101/6111/6108
(G700/G510)

AGENEW

M274K
(G700)



GRINN

GenioSOM-700
(G700)

AAEON

uCOM-M700
(G700/G510)

more information: https://genio.mediatek.com/evk-boards#partner-boards

GENIO ECO PARTNERS

MediaTek Genio» Exhibitions

2024 @Embedded World

2025 @Embedded World

2026 @Embedded World

2026 @Computex

2027...

2024 @Computex

2025 @Computex

2026 @NRF

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