MT8362A Platform
Wireless Connected Multimedia Solution

MEDIATEK

MT8362A Platform is a highly integrated solution for wireless connected multimedia systems incorporating a power efficient **Quad-core Arm® Cortex®-A35** processor operating at 1.3 GHz and powerful Imagination Technologies PowerVR™ Series8XE GPU. The support for various DRAM interfaces (LPDDR3, DDR3L, DDR4) and Flash storage solutions (e•MMC™, Raw NAND) provides high flexibility in the memory configuration. With several I2S interfaces as well as 8-channel TDM audio input and 8-channel TDM audio output MT8362A can process algorithms for multiple high-resolution audio streams at the same time. This rich set of interfaces is also providing a system BOM cost reduction by eliminating the need of external DSP solution.

MT8362A paired with **MT7668** offers a complete Connected Platform. The MT7668 connectivity chipset is combining a dual-band **2x2 802.11ac Wi-Fi** with MU-MIMO and the latest Bluetooth® 5 wireless technology together in a single package. The optimized RF architecture and baseband algorithms provide superb performance and low power consumption. MT7668 is designed to meet a diverse set of home connectivity needs. It can stream high definition multimedia with low-latency over 802.11ac Wi-Fi at up to 867Mbps to/from home or mobile devices or multimedia equipment.

MT8362A Platform power management solution is based on **MT6392** PMIC supplying various power rails for the platform chipsets and other system needs.

64-bit CPU	
	▪ Quad-core Arm® Cortex®-A35 processor operating at 1.3 GHz with DVFS
	▪ Most power efficient 64-bit Armv8-A processor with full Armv7-A compatibility
	▪ Arm® NEON™ advanced SIMD extension

Microphone-array multi-channel audio input and audio front-end algorithms support	
	▪ Wake-word engine
	▪ Far-field
	▪ Beamforming
	▪ Acoustic Noise Reduction
	▪ Acoustic Echo Cancelling

Multi-channel high-resolution audio output	
	▪ TDM interface to up to 8-channel DAC

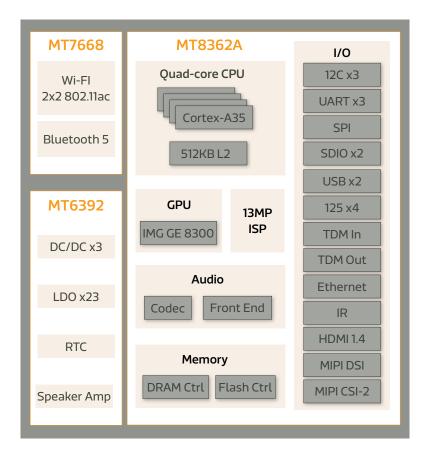| Connectivity IC (MT7668)	
	▪ Dual-band (2.4 GHz and 5 GHz) 2x2 802.11ac Wi-Fi with MU-MIMO
	▪ Bluetooth 5

MT8362A

CPU	64-bit Quad-core Arm Cortex-A35 up to 1.3 GHz
GPU	IMG GE8300, 125MTri/s, 2.0Gpix/s
Video	Decode H.264/HEVC 1080p@60fps, encode H.264@720p
Memory	32-bit LPDDR3/DDR3L up to 800 MHz 32-bit DDR4 up to 667 MHz
Flash	e.MMC SLC NAND
Storage	SD Card
Interfaces	I2C, UART, SPI, SDIO3.0, USB2.0 OTG and Host, Ethernet
Audio Codec	Integrated audio stereo ADC and stereo DAC
Audio Inputs	Up to 3 analog or 2 digital microphones 8-channel TDM for microphone-array I2S x2 S/PDIF
Audio Outputs	Line Out Headphone 8-channel TDM I2S x2 S/PDIF
Connectivity	Dual-band 2x2 802.11ac Wi-Fi Bluetooth 5

☑ Imagination GE8300 GPU

☑ HD Video Encode and FHD Decode

☑ 13MPix Camera ISP

☑ Integrated Power Management IC (MT6392)

☑ Linux BSP support and Evaluation Kit available

For more information, visit
mediatek.com

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MT7668

Wi-FI
2x2 802.11ac

Bluetooth 5

MT6392

DC/DC x3

LDO x23

RTC

Speaker Amp

MT8362A

Quad-core CPU

Cortex-A35

512KB L2

GPU

IMG GE 8300

13MP ISP

Audio

Codec   Front End

Memory

DRAM Ctrl   Flash Ctrl

I/O

12C x3

UART x3

SPI

SDIO x2

USB x2

125 x4

TDM In

TDM Out

Ethernet

IR

HDMI 1.4

MIPI DSI

MIPI CSI-2

BENEFITS

- Quad-core Arm Cortex-A35 64-bit processor
- Powerful GPU with Vulcan 1.0 and OpenCL 3.0 support
- Dual display support with MIPI and HDMI outputs.
- Dual MIPI CSI camera interfaces
- Flexible DRAM and Flash memory interfaces
- Integrated stereo audio codec
- Rich audio interfaces to support various microphones and speakers configurations
- Multi-channel high-resolution audio up to 192kHz/24-bit
- 10/100 Ethernet MAC with RMII interface
- Advanced Wi-Fi/Bluetooth connectivity

APPLICATIONS

- Voice Assistant with Display.
- Digital Signage
- Point of Sale
- Control System
- Surveillance Camera
- Internet of things

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