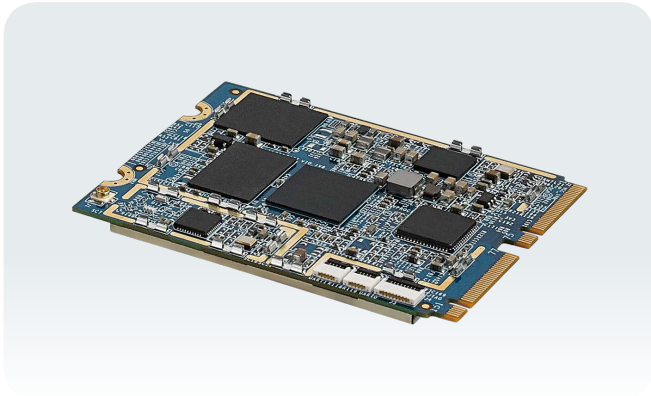


# ESOM-MT-350

Arm-Based MediaTek Genio 350 System on Module



## Features

- Quad-core MediaTek Genio 350 processor with quad Arm Cortex-A53 @2.0GHz
- Integrated Mali-G52 GPU and H.265/H.264 FHD video decoding
- Onboard Dual-band 802.11ac Wi-Fi with Bluetooth 5.0
- Onboard 2GB LPDDR4 memory and 16GB eMMC
- Support 4-lane MIPI CSI-2 camera with internal ISP, Full HD Resolution
- Support Digital Display and 4-lane MIPI DSI, Full HD Resolution
- Supports Android 10 and Yocto 3.1 operating system



## Specifications

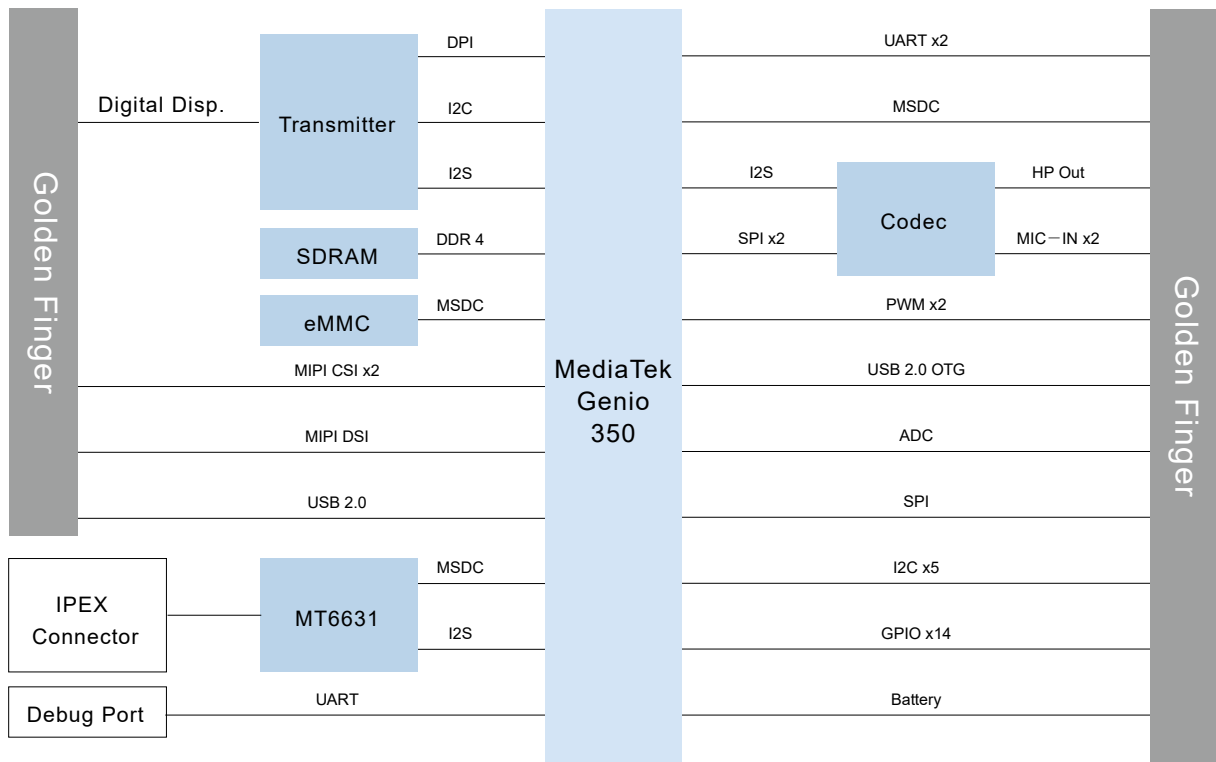
System	
<b>Processor</b>	MediaTek Genio 350 Processor with Quad-core Cortex-A53 @2.0GHz
<b>Memory</b>	2GB LPDDR4 SDRAM
<b>eMMC</b>	16GB eMMC
<b>OS</b>	<ul style="list-style-type: none"><li>▪ Android 10</li><li>▪ Linux Yocto 3.1</li></ul>
I/O Interface	
<b>External I/O</b>	<ul style="list-style-type: none"><li>▪ 1 IPEX Connector</li><li>▪ 1 Debug Console Port</li></ul>
<b>Internal I/O</b>	2 M.2 Golden Finger
Graphics	
<b>Graphics Processor</b>	<ul style="list-style-type: none"><li>▪ ARM Mali-G52 high-performance GPU</li><li>▪ 3D graphics accelerator processing 1600M pixel/sec @800MHz</li><li>▪ Graphics engine supporting OpenGL® ES 3.2, OpenCL ES 2.0, and Vulkan 1.1 hardware acceleration</li></ul>
<b>Video</b>	<ul style="list-style-type: none"><li>▪ Video Encode:<ul style="list-style-type: none"><li>- HEVC: 1080p@60fps</li><li>- H.264: 1080p@60fps</li></ul></li><li>▪ Video Decode:<ul style="list-style-type: none"><li>- HEVC: 1080p@60fps</li><li>- H.264: 1080p@60fps</li></ul></li><li>▪ Vision DSP : Supports Cadence Tensilica Vision P6 and HIFI4</li></ul>
<b>Display</b>	<ul style="list-style-type: none"><li>▪ Digital Display : up to 1920 x 1080</li><li>▪ 4-lane MIPI DSI : up to 1920 x 1080</li></ul>
<b>Camera</b>	<ul style="list-style-type: none"><li>▪ Dual 4-lane MIPI CSI-2</li><li>▪ Integrated image signal processor supports 13MP</li></ul>
Audio	
<b>Audio Codec</b>	MediaTek MT6390/6357
<b>Audio Interface</b>	2 Mic-in, 1 Headphone-out

Expansion	
<b>USB</b>	<ul style="list-style-type: none"><li>▪ 1 USB 2.0 Host</li><li>▪ 1 USB 2.0 OTG</li></ul>
<b>UART</b>	2 UART (2-wire)
<b>SPI</b>	1 SPI
<b>I<sup>2</sup>C</b>	5 I <sup>2</sup> C
<b>GPIO</b>	14 GPIO
<b>MSDC</b>	1 MSDC
<b>ADC</b>	1 ADC
<b>PWM</b>	2 PWM
<b>Battery Gauge</b>	1 Battery Gauge
Wireless	
<b>Wi-Fi &amp; BT</b>	<ul style="list-style-type: none"><li>▪ MediaTek MT6631</li><li>▪ Dual band (2.4GHz &amp; 5GHz ) single stream Wi-Fi 802.11 a/b/g/n/ac RF</li><li>▪ Bluetooth 5.0</li></ul>
Power	
<b>Power Input</b>	4.2V DC-in
Mechanical	
<b>Dimensions (W x L)</b>	60 mm x 45 mm (2.36" x 1.77")
Environment	
<b>Operating Temperature</b>	-40°C to 85°C
<b>Storage Temperature</b>	-40°C to 85°C
<b>Humidity</b>	5% to 95% Humidity, Non-condensing
<b>Relative Humidity</b>	95% at 85°C
<b>EMC</b>	CE, FCC

## Order Information

<b>ESOM-MT-350</b>	System on module with MediaTek Genio 350 Quad-core Processor, 2GB LPDDR4 SDRAM, 16GB eMMC
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# Block Diagram



# Dimension

Unit : mm/ inch

