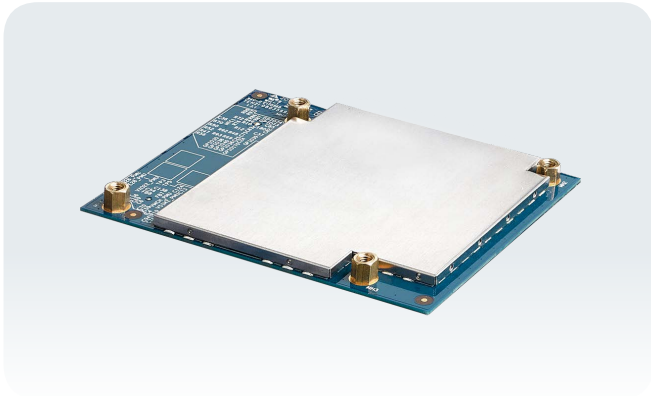


ESOM-MT-500

Arm-Based MediaTek Genio 500 System on Module



Features

- Octa-core MediaTek Genio 500 processor with quad Cortex-A73 and quad Cortex-A53
- Integrated Mali-G72 GPU and H.265/H.264 FHD video decoding
- Onboard 4GB 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 2.6 operating system



Specifications

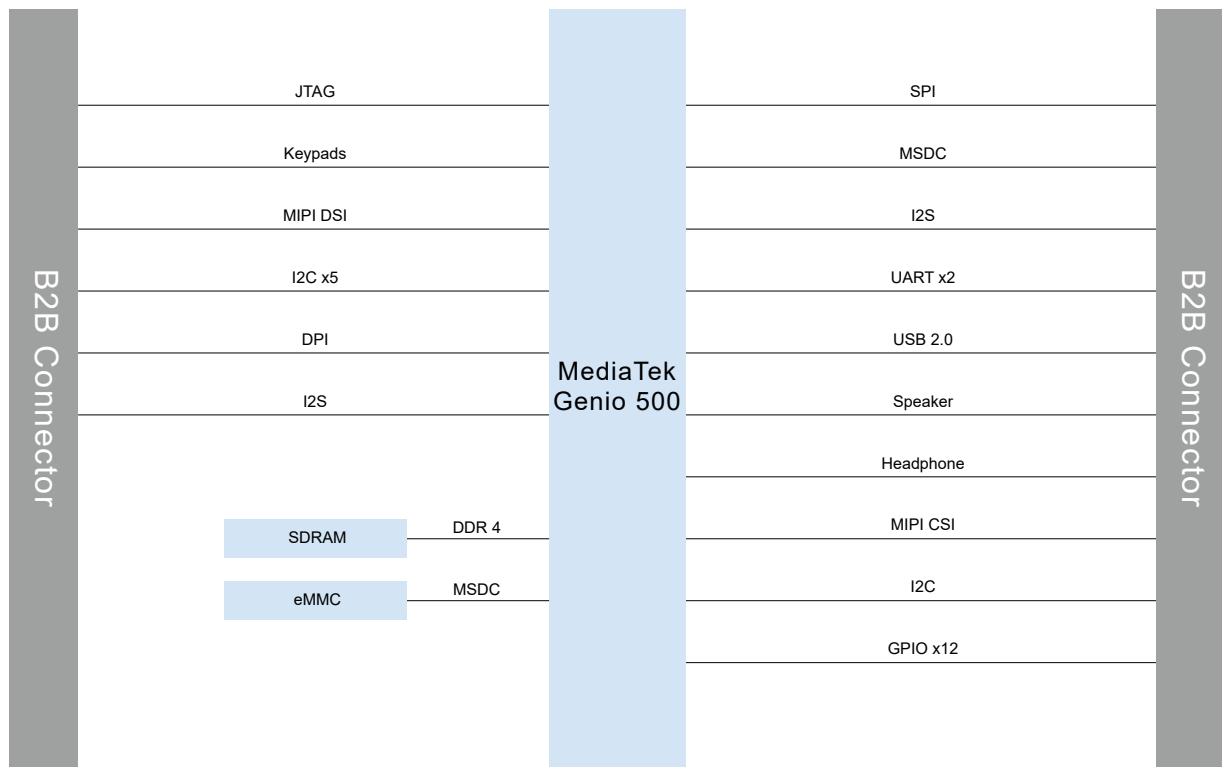
System	
Processor	MediaTek Genio 500 Processor with Quad-core Cortex-A73 @2.0GHz and Quad Cortex-A53 @2.0GHz
Memory	4GB LPDDR4 SDRAM
eMMC	16GB eMMC
OS	<ul style="list-style-type: none">▪ Android 10▪ Linux Yocto 2.6
I/O Interface	
Internal I/O	2 board to board Connector
Graphics	
Graphics Processor	<ul style="list-style-type: none">▪ ARM Mali-G72 high-performance GPU▪ 3D graphics accelerator capable of processing 2400M pixel/sec @ 800MHz▪ Graphics engine supporting OpenGL® ES 3.0, OpenCL ES 1.1, and Vulkan 1.0 hardware acceleration
Video	<ul style="list-style-type: none">▪ Video Encode:<ul style="list-style-type: none">- H.264: 1080p@30fps▪ Video Decode:<ul style="list-style-type: none">- HEVC: 1080p@30fps- H.264: 1080p@30fps▪ Vision DSP : Supports Cadence Tensilica Vision P6 dual-core @500MHz
Display	<ul style="list-style-type: none">▪ Digital Display : up to 1920 x 1080▪ MIPI DSI : up to 1920 x 1080
Camera	<ul style="list-style-type: none">▪ 4-lane MIPI CSI-2▪ Integrated image signal processor supports 25MP
Audio	
Audio Codec	MediaTek MT6358
Audio Interface	Mic-in, Line-out

Expansion	
USB	1 USB 2.0
UART	2 UART (2-wire)
SPI	1 SPI
I ² C	6 I ² C
GPIO	12 GPIO
Power	
Power Input	4.2V DC-in
Mechanical	
Dimensions (W x L)	70mm x 55mm (2.76" x 2.17")
Environment	
Operating Temperature	0°C to 60°C
Storage Temperature	-40°C to 85°C
Humidity	5% to 95% Humidity, Non-condensing
Relative Humidity	95% at 60°C
EMC	CE, FCC

Order Information

ESOM-MT-500	System on Module with MediaTek Genio 500 octa-core Processor, 4GB LPDDR4 SDRAM, 16GB eMMC
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Block Diagram



Dimension

Unit : mm/ inch

