

## Amlogic M801

Amlogic M801 - Quad-core ARM Cortex A9-based SoC with six-core ARM Mali-450 MP6 GPU (although listed as an octa-core GPU on Amlogic's website) running at 600 MHz. Supports 2GB DRAM and 4K2K display output. 64-bit DRAM interface, manufactured on a 28nm HPM process.

### Features

1. Quad-core Cortex A9@2.0GHz
2. octa-core Mail-450 GPU@600MHz
3. Ultra Low Power
4. Trustzone and Trusted video path
5. DDR3/LPDDR3 Up to 2GB
6. Full 1080P HD Decoding
7. 1080P H.264 Encoding
8. Built-in HDMI 1.4b TX
9. Google Android 4.3
10. Google TV Version4
11. BGA package
12. 2.8nm HPM

### Application

1. Android TV box
2. OTT set top box
3. Tablet

### Other Products

Items	M802	M801	M803	M805
CPU	Quad Core Cortex-A9 Up to 2GHz	Quad Core Cortex-A9 Up to 2GHz	Quad Core Cortex-A5 Up to 1.5GHz	Quad Core Cortex-A5 Up to 1.5GHz
GPU	Octo Mali-450 Up to 600MHz	Octo Mali-450 Up to 600MHz	Quad Core Mali-450 Up to 400MHz	Quad Core Mali-450 Up to 400MHz
Memory	Dual 32-bit DDR3, DDR3L, LPDDR2/3 Up to 4GB	32-bit DDR3, DDR3L, LPDDR2/3 Up to 2GB	32-bit DDR3, DDR3L, LPDDR2/3 Up to 2GB	32-bit DDR3, DDR3L, LPDDR2 Up to 2GB
Storage	NAND Flash, BCH60 eMMC, SD, SPI Nor Flash	NAND Flash, BCH60 eMMC, SD, SPI Nor Flash	NAND Flash, BCH60 eMMC, SD, SPI Nor Flash	NAND Flash, BCH60 eMMC, SD, SPI Nor Flash
Video Decoder	4K2K H.264 AVC, VC-1, MPEG1/2/4	1080P H.264, VC-1, MPEG1/2/4	1080P H.265, H.264, VC-1, MPEG1/2/4	1080P H.265, H.264, VC-1, MPEG1/2/4
Video Encoder	H.264, 1080P	H.264, 1080P	H.264, 1080P	H.264, 1080P
Network	10/100 Ethernet	10/100 Ethernet	100/100/1000 RGMII	100/100/1000 RGMII
TV Output	4K2K HDMI1.4b, Analog	1080P HDMI1.4b, Analog	1080P HDMI1.4b, CVBS	1080P HDMI1.4b
Package	19mm x 19mm BGA	Pin-to-Pin to M802	Pin-to-Pin to M802	12mm x 12mm BGA
Supporting Panel Interface	TTL, LVDS, MIPI-DSI, eDP	TTL, LVDS, MIPI-DSI, eDP	TTL, LVDS, MIPI	TTL, LVDS, MIPI