

MediaTek helio P10

MEDIATEK

A premium performance platform for super-slim device designs from our powerful MediaTek helio family

MediaTek helio P10 is a high-performance, high-value SoC focused on the growing demand for slim form-factor smartphones that provide premium, flagship features. As the world's first product to use TSMC's 28nm HPC+ process, the MediaTek helio P10 allows for reduced processor power consumption, saving up to 30% energy compared to existing smartphone SoCs manufactured using the conventional 28nm process.

Camera



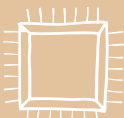
21MP single camera/16MP + 8MP dual camera with the world's first TrueBright ISP engine for greater sensor light capture, enhanced color resolution, and less than 200ms shot-to-shot delay.

Modem



Third generation integrated 4G WorldMode modem with LTE Cat-6, supporting 2x20 carrier aggregation with 300/50Mbps data speeds for cutting edge connectivity and transfer rates.

Processing



Up to 2 GHz, True Octa-core 64-bit Cortex-A53 CPU for fastest performance in the mainstream segment.

Graphics



Powerful dual-core 64-bit Mali-T860 graphics core clocked at up to 700MHz, delivering an uncompromised user experience.

MediaTek helio P10

| | |
|---------------------|--|
| Process | 28nm HPC+ |
| CPU | 8x Cortex-A53, up to 2.0GHz |
| Memory | 1x LPDDR3 933MHz up to 4GB eMMC 5.1 |
| Camera | 21MP@24fps 16MP@30fps w/ ZSD Dual ISP w/improved 3A/denoise/ demosaic/sharpness |
| Video Decode | 1080p 30fps H.264/265 |
| Video Encode | 1080p 30fps H.264 |
| Graphics | ARM Mali-T860 MP2 up to 700MHz |
| Display | FHD 1920x1080 w/ 12 Blending Layers |
| Modem | LTE FDD/TDD R11 Cat-6 with 2x20 CA (300/ 50Mbps), DC-HSPA+, TD-S CDMA, EDGE CDMA2000 1x/EVDO Rev. A (3.1/1.8Mbps, SRLTE) LTE/GPS Co-clock Supported |
| RF | Single RF for LTE 2x20 CA/WCDMA/TD/EDGE/ C2K 14/14 Primary/ Diversity RX Ports |
| Connectivity | Wi-Fi abgn w/ throughput up to 90Mbps GPS / Glonass/Beidou TTFF & Drift, BT/FM |


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(continued)

Display Full HD display at 60FPS with MediaTek's suite of MiraVision 2.0 display technologies, including UltraDimming, BluLight Defender, and Adaptive Picture Quality.



Audio Hi-fidelity, hi-clarity audio with 110dB SNR & -95dB THD to meet consumer demand for superior audio performance.



GENIUS DEVICES



MediaTek processing power-efficiency with CorePilot technology + High-capacity 4100mAH battery = **up to 2 days of use per charge**

MediaTek 4G CAT-6 WorldMode modem + fast Sprint LTE+ network & roaming agreements = **impressive connectivity**

Octa-core MediaTek helio P10 MT6755M CPU at up to 1.8GHz + Dual-core ARM Mali-T860 GPU = **great Android 6.0 & apps experience**

LG X POWER™
for Sprint and Boost Mobile

Figure 1. MediaTek helio P10 System Architecture

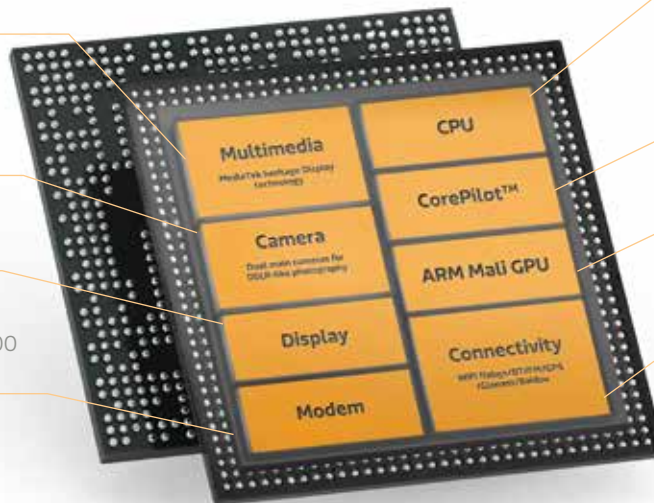
MiraVision™ technology built in for best viewing experience under all lighting conditions

21MP@24fps w / ZSD • dual camera
16MP @ 30fps + 8MP

Dual ISP with RWWB sensor support

Full-HD 1920x1080 (60fps)
w/12 blending layers

LTE FDD/TDD R11 Cat-6 with 2x20 CA,
DC-HSPA+, TD-S CDMA, EDGE CDMA2000
1x/EVDO Rev. A (SRLTE)



Octa-core 64-bit CPU
up to 2.0GHz

CorePilot™ Heterogeneous
computing scheduling
algorithm to achieve extreme
performance & power efficiency

ARM Mali-T860 MP2
up to 700MHz

Integrated connectivity solution
for broad array & high speed
connectivity experience

*Unit sizes shown are for illustrative purposes only.

Product brief data based on MediaTek helio P10 MT6755. Features and specifications may vary for other chip variants (MT6755M).

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