

# MediaTek helio | G Series & HyperEngine Game Technology

## MediaTek helio | G90 & G90T



### AI POWER

A mix of hardware (CPU, GPU & AI engines) that deliver up to 1TMACs performance. Fast and precise AI facial detection and AI to accelerate an array of camera applications.



### CAPTIVATING AI CAMERA

High-resolution single 64MP and 48MP super-sized camera support. Smooth, real-time previews and a remarkable night shot mode. Supports dual-camera arrays of up to 24MP + 16MP and captures ultra-fast video at up to 240fps. Triple-ISP design optimizes power and performance.



### GIGABIT-CLASS CONNECTIVITY

Cat-12 4G LTE modem with download speeds up to 1Gbps, 3x carrier aggregation and 4x4 MIMO technology.



### DUAL 'WAKE-UP WORD' SUPPORT

Integrated dual wake-up word support listens to more than one trigger word simultaneously. Wakes virtual assistants like Google Assistant or Amazon Alexa.

## WHAT'S INSIDE

<b>CPU</b>	Arm Cortex-A76 plus Cortex-A55 octa-core up to 2.05GHz
<b>GPU</b>	Arm Mali-G76 3EEMC4 with speeds up to 800MHz
<b>Memory</b>	LPDDR4x up to 10GB, 2133MHz
<b>Camera</b>	Single 64MP and 48MP Dual 24MP + 16MP
<b>Connectivity</b>	Cat-12 4G LTE modem (download speed up to 1Gbps and MediaTek smart antenna switching.)

MediaTek Helio G90 & G90T – our first G-Series chipsets – are exclusively designed to be the core of an incredible smartphone gaming experience. We combine the latest CPU and GPU cores with ultra-fast memory and massive AI performance to deliver fast, fluid action. Paired with MediaTek's HyperEngine game technology we tune your entire smartphone for mobile gameplay.



<http://i.mediatek.com/G90Series>

## MediaTek HyperEngine Game Technology



### INTELLIGENT NETWORK PREDICTION ENGINE

Optimizes the connection between your smartphone and cellular network. When it detects the Wi-Fi signal degrading, it triggers Wi-Fi and LTE concurrency that takes just milliseconds. This seamless exchange from one connection to the other keeps the network connection smooth and the game lag-free.



### RAPID RESPONSE ENGINE

Touchscreen input is accurately sensed without lag so you can pan and scroll and make your character run through the game world without a stutter. The lowest latency is delivered for in-game action-to-display to enable faster frame rates and smoother gameplay.



### CALL & DATA CONCURRENCY

Ensures the data connection always remains live & the game server connection never drops. Defer an incoming call without leaving the game so your gameplay is never interrupted.



### DUAL WI-FI CONNECTIONS

Allows a single smartphone antenna to be connected to two Wi-Fi bands or routers simultaneously (2.4GHz/5GHz). When one band or router is busy, data is seamlessly shifted to an alternative connection, decreasing the latency by 22%.



### PICTURE QUALITY ENGINE

Picture Quality Engine provides Support for the latest HDR10 standard with 10-bit Color Depth for vivid visuals on HDR-enabled smartphone displays for theater-like viewing. Deep picture quality enhancements bring better contrast, sharpness and improved fine details for true-to-life gaming experiences.



### INTELLIGENT RESOURCE MANAGEMENT

Technology for optimal performance that automatically delivers smoother, fluid, high performance frame rates. At the same time, power consumption is reduced. Gameplay is always fast and lasts longer.

**MEDIATEK**

Copyright 2019 © MediaTek, Inc. All rights reserved.