MediaTek helio | G Series
& HyperEngine Game Technology

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 game play.

MediaTek helio | G90 & G90T

AI POWER
A mix of hardware (CPU, GPU & AI engines) that deliver up to 1 TMACs 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 21MP + 16MP and captures ultra-fast video at up to 240fps. Triple-ISP design optimizes power and performance.

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.

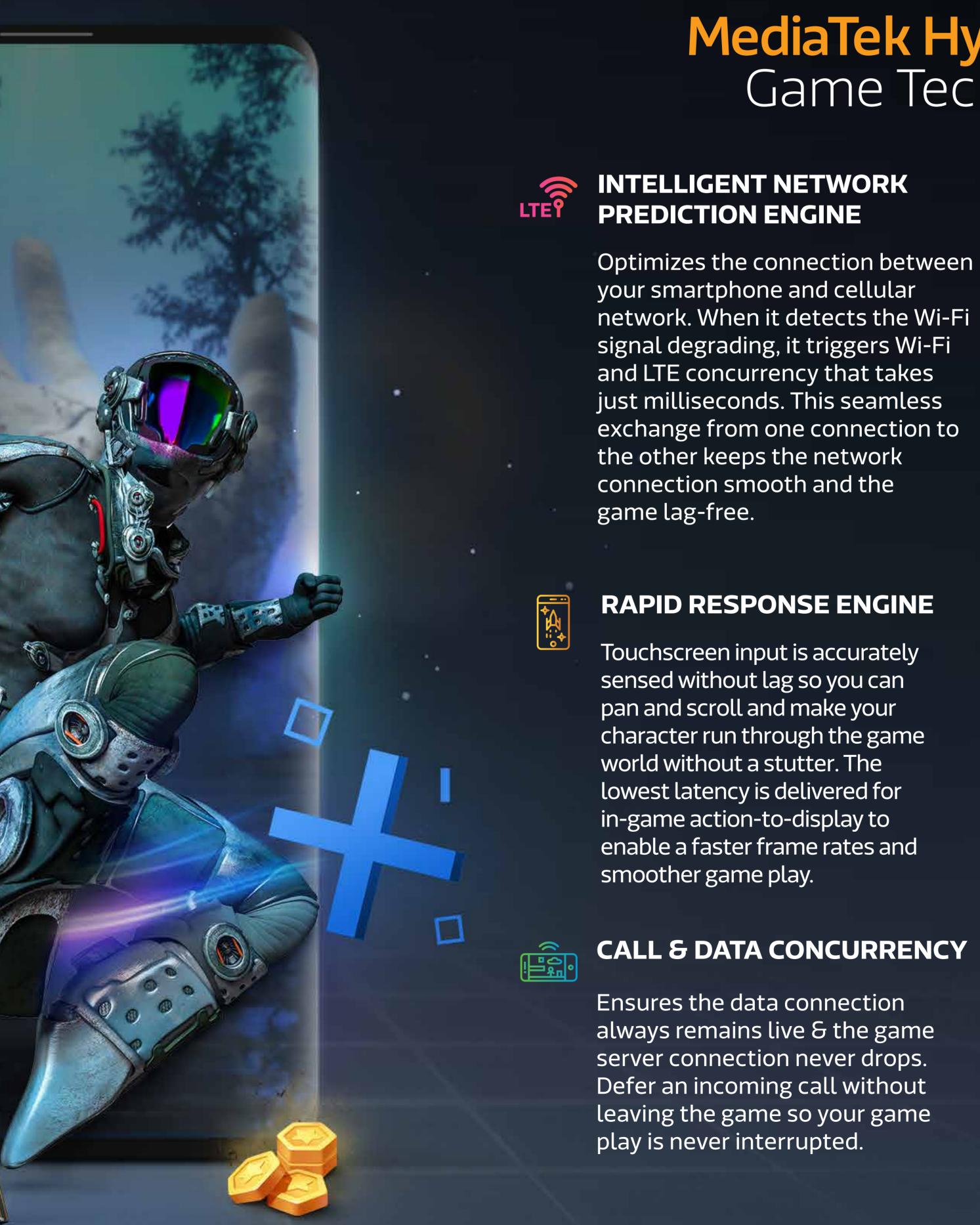### GIGABIT-CLASS CONNECTIVITY
Cat-12 4G LTE modem with download speeds up to 1Gbps, 3x carrier aggregation and 4x4 MIMO technology.

WHAT'S INSIDE

CPU	Arm Cortex-A76 plus Cortex-A55 octa-core up to 2.05GHz
GPU	Arm Mali-G76 3EEMC4 with speeds up to 800MHz
Memory	LPDDR4x up to 10GB, 2133MHz
Camera	64MP single & 21MP + 16MP dual
Connectivity	Cat-12 4G LTE modem (download speed up to 1Gbps and MediaTek smart antenna switching.)

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 a faster frame rates and smoother game play.

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 game play is never interrupted.

DUAL WI-FI CONNECTIONS
Allows a single smartphone antenna to be connected to two Wi-Fi bands (2.4GHz/5GHz) or two routers simultaneously. When one of the bands or routers is busy, the data can be seamlessly shifted to the alternative connection to ensure reliability, decrease latency and reduce game jitter.

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

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.

This Chip Changes Everything

http://i.mediatek.com/G90Series

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