

MediaTek Pentonic 2000

Flagship 8K 120Hz TV SoC with integrated MEMC, AI Engine & multiple Picture-in-Picture



World's First 7nm-class TV SoC

World's first commercial TV SoC using TSMC N7 (7nm-class) process

- Unparalleled performance & power efficiency
- Continuing MediaTek smart TV leadership



Flagship Features & Incredible Performance

Leading the industry with our in-chip 8K 120Hz MEMC and AI processor, and the most powerful CPU and GPU combination.

- Up to 8K resolution at 120Hz refresh rate
- In-chip 8K 120Hz MEMC
- In-chip multi-core AI engine
- Industry's most powerful CPU & GPU in a Smart TV
- Ultra-fast UFS 2.1 storage



Industry-leading AI-image Enhancement

In-chip AI engine improves performance and power-efficiency compared to other multi-chip platforms.

- AI-Super Resolution 2.0+ with detail creation
- AI-Picture Quality Scene Recognition 2.0
- AI-Picture Quality Object Recognition 3.0 with richer PQ enhancement



Global Video and TV Decoding Built-in

Leading the industry with new video codecs and global TV broadcast standards, including the latest ATSC 3.0, in a single platform.

- First to market with VVC (H.266) support
- Latest AV1 support for streaming
- Commonly used HEVC, VP9, AVS3 standards
- Global TV broadcast demod platform



MediaTek Intelligent View

Exclusive Technology showcasing a "display wall" of different media sources in a single panel.

- Multiple views in one display; put big TVs to better use!
- Watch multiple streams/inputs on one 'display wall'
- More content shown vs previous generation
- Picture quality adjustments can be applied to every view, not just the main input
- Switching between primary and sub-views is a seamless experience
- Move sub-views while the content inside still plays without interruption



Integral Voice Assistant Support

Industry-leadership in voice assistant devices and smart home integration

- Up to 4X directional microphones
- AI-Voice technologies
- Use voice for direct TV control or engage with voice assistant services



Ultra-fast Connectivity

Enabling low-latency Cloud gaming and 8K streaming without interruption.

- Up to Wi-Fi 6E
- Supports 5G option
- HDMI 2.1 support
- USB connectivity