

Hisense Selects Synaptics' DBM10L Processor For First Al-Enabled Always-On Voice Remote Control

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AMSTERDAM, The Netherlands, Sept. 09, 2022 (GLOBE NEWSWIRE) -- Synaptics[®] Incorporated (Nasdaq: SYNA) today announced that Hisense, a global leader in consumer electronics and home appliances, selected the DBM10L with its dedicated neural processing unit (NPU) to implement the first artificial intelligence (AI)-enabled always-on voice (AOV) remote control unit (RCU), the EFR3B86H. Hisense paired the DBM10L-equipped RCU with its state-of-the-art 65A9H 4K OLED TV, where Synaptics' high-performance edge-AI processing and low power are vital to ensure the ultimate AOV end-user experience.

"Hisense consistently stays ahead of the curve when it comes to enabling innovative and intuitive features," said Venkat Kodavati, SVP and Chief Product Officer at Synaptics. "With end users' increasing reliance upon voice and voice assistants such as Alexa, we are very excited to have worked with them to bring that same experience to TV remote controls. Our collaboration on a high-performance AOV implementation creates the opportunity for remotes to now become a more integral and critical user-engagement platform for the smart home."

Synaptics' DBM10L and AOV will be on display at IBC2022: email press@synaptics.com or contact your local Synaptics sales representative to book time at our IBC Balcony Booth BS17.

While a reliable and responsive AOV experience for remote controls is increasingly desirable, it is challenging to execute in battery-driven applications. "This is particularly true in noisy environments as more noise translates to more power consumption to prevent performance degradation," said Shay Kamin Braun, Director of Product Marketing at Synaptics.

The DBM10L enables a superior AOV user experience that combines high performance with ultra-low power consumption, allowing devices to operate for extended periods using a single pair of AAA batteries. "Along with upcoming innovations such as biometrics for voice

authentication for online purchases, AOV remote controls for TVs and other consumer devices can now provide greater convenience for users and higher attachment rates for equipment and service providers," said Kamin Braun.

Synaptics' DBM10L Always-On Voice Technology Powers Hisense OLED TV Remote Control



Hisense selected the DBM10L SoC, with its dedicated neural processing unit (NPU) to implement the first artificial intelligence (AI)-enabled always-on voice (AOV) remote control unit (RCU), the EFR3B86H. Hisense paired the DBM10L-equipped RCU with its state-of-the-art 65A9H 4K OLED TV, where Synaptics' high-performance edge-AI processing and low power are vital to ensure the ultimate AOV end-user experience.

The DBM10L AOV solution

To solve the power consumption challenge while delivering the best performance for AOV applications, Synaptics built an ultra-low-power voice engine around its DBM10L system-on-chip (SoC), which combines the dedicated NPU with a low-power DSP. The solution comprises the DBM10L and proven algorithms for filtering, noise suppression, beamforming, wake word detection, and voice activity detection. Optimizations allow deep neural network (DNN)-based wake-word detection and other edge AI algorithms to run on the DBM10L's NPU, targeting high performance at ultra-low power with low latency, while different voice and audio processing algorithms run optimally on the integrated low-power DSP.

Availability

The EFR3B86H AOV remote control is shipping now with the Hisense TV model 65A9H. For more information on the DBM10L, visit www.synaptics.com/DBM10L or contact your local Synaptics sales representative.

For more about the potential of AOV RCUs and how they are changing how we interact with home devices, see "Always-On Voice Makes Content Control Seamless and Intuitive".

About Hisense

Founded in 1969, Hisense is one of the largest consumer electronics and home appliances companies in the world. Hisense offers a broad range of technology-driven products that are manufactured and distributed across the world, including smart TVs, smart phones, refrigerators, freezers, and air conditioners, among other products. Hisense has a workforce of over 70000 worldwide, and its flat-panel TV market share in China has been No.1 for 13 consecutive years. Currently, Hisense boasts several subsidiaries, with sales revenue reaching CNY 100.3 billion in 2016. For more, visit www.hisenseme.com.

About Synaptics Incorporated

Synaptics (Nasdaq: SYNA) is changing how humans engage with connected devices and data, engineering exceptional experiences throughout the home, at work, in the car, and on the go. Synaptics is the partner of choice for the world's most innovative intelligent system providers who are integrating multiple experiential technologies into platforms that make our digital lives more productive, insightful, secure, and enjoyable. These customers combine Synaptics' differentiated technologies in touch, display, and biometrics with a new generation of advanced connectivity and Al-enhanced video, vision, audio, speech, and security processing. Follow Synaptics on LinkedIn, Twitter, and Facebook, or visit www.synaptics.com.

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