

# Himax Introduces Industry First 288Hz 8K TV TCON Solution

Collaboration with World-Class Display Panel Makers Drives Innovation for Emerging Gaming TV

Market

**TAINAN, Taiwan** – **January 14, 2022** – Himax Technologies, Inc. (Nasdaq: HIMX) ("Himax" or "Company"), a leading supplier and fabless manufacturer of display drivers and other semiconductor products, today announced the Company has made an exceptional breakthrough with the introduction of an industry first 288Hz 8K TV TCON (8K TV Timing Controller) solution for the ultra-high-resolution 8K, gaming TV market. By collaborating with major world-class TV panel makers, Himax has emerged as a leader in this rapid growing gaming TV segment.

The advanced gaming TV market requires high-resolution and high refresh rate display performance for immersive gaming and entertainment. Himax has emerged as an industry leader by showcasing innovative 8K display technologies that feature VRR (Variable Refresh Rate) Dynamic Compensation and Horizontal Line-OD (Line Over-Drive) to overcome the inherited image quality problems from high frame rate displaying. The Company's industry first 288Hz 8K display technology, developed in collaboration with world-class panel leaders, has been widely deployed to customers' newly launched 75-inch 8K TV models and surpasses the 60Hz/120Hz display barrier bringing 288Hz ultra-high frame rate image refreshing along with ultra-high-resolution 8K image quality for an extremely smooth gaming experience.

Himax has been devoted to developing panel driver IC and timing controller display image processing technologies for decades. To answer the rapid-growing trend towards 8K resolution, Himax introduced the worlds' first 8K TV TCON as early as 2018 in collaboration with leading Korean panel manufacturers for their 65-inch and 75-inch 8K TV leading to successful mass-production and high customer satisfaction. It was then universally adopted by leading China panel makers and started large volume shipment in 2019. In 2021, Himax's 8K TV TCON shipment reached record high with an annual growth rate exceeding 50%, an indication of the successful market penetration.

For 8K TV panel development, the most critical challenges are the sluggish liquid crystal response time from high resolution display, and also the higher production cost. In partnership with global TV panel houses, Himax pioneered the 1D1G architecture introduction, deployed a-Si process to replace Oxide process and implemented proprietary luminance compensation technology to 8K 120Hz panel models which effectively improved the manufacture yield for much lower production cost. To meet higher picture quality requirements for 8K TV, Himax's 8K TV TCON incorporates proprietary inhouse image quality improvement IPs, that include Line-OD, DLCS (Digital Low Color Shift), De-Mura (Mura Compensation), and SHR (Super High Resolution Processor). In addition, the TCON also deploys state-of-the-art P2P (Point-to-Point) high-speed transmission interface, running up to 3Gbps, to enable the most-adaptive panel compatibility, which also work with Himax's large-sized driver ICs for a more complete one-stop-shop bundle solution to customers.

"The introduction of various new types of entertainment for film or gaming drives the progress and the evolution of display technology which also changes the way we live. The successful introduction of 288Hz 8K TV TCON demonstrates our leadership capabilities to answer what customers and the market crave. Himax will continue to push the envelope and drive innovation in display technology in support of our partners and customers," concluded Jordan Wu, President and CEO of Himax Technologies.

#### About Himax Technologies, Inc.

Himax Technologies, Inc. (NASDAQ: HIMX) is a fabless semiconductor solution provider dedicated to display imaging processing technologies. Himax is a worldwide market leader in display driver ICs and timing controllers used in TVs, laptops, monitors, mobile phones, tablets, automotive, digital cameras, car navigation, virtual reality (VR) devices and many other consumer electronics devices. Additionally, Himax designs and provides controllers for touch sensor displays, in-cell Touch and Display Driver Integration (TDDI) single-chip solutions, LED driver ICs, power management ICs and LCoS micro-displays for augmented reality (AR) devices and heads-up displays (HUD) for automotive. The Company also offers CMOS image sensors, wafer level optics for AR devices, 3D sensing and ultralow power smart sensing, which are used in a wide variety of applications such as mobile phone, tablet, laptop, TV, PC camera, automobile, security, medical device, home appliance, AloT, etc. Founded in 2001 and headquartered in Tainan, Taiwan, Himax currently employs around 2,000 people from three Taiwan-based offices in Tainan, Hsinchu and Taipei and country offices in China, Korea, Japan, Israel, and the US. Himax has 3,041 patents granted and 482 patents pending approval worldwide as of December 31, 2021. Himax has retained its position as the leading display imaging processing semiconductor solution provider to consumer electronics brands worldwide.

http://www.himax.com.tw

#### **Forward Looking Statements**

Factors that could cause actual events or results to differ materially from those described in this conference call include, but are not limited to, the effect of the Covid-19 pandemic on the Company's business; general business and economic conditions and the state of the semiconductor industry; market acceptance and competitiveness of the driver and non-driver products developed by the Company; demand for end-use applications products; reliance on a small group of principal customers; the uncertainty of continued success in technological innovations; our ability to develop and protect our intellectual property; pricing pressures including declines in average selling prices; changes in customer order patterns; changes in estimated full-year effective tax rate; shortage in supply of key components; changes in environmental laws and regulations; changes in export license regulated by Export Administration Regulations (EAR); exchange rate fluctuations; regulatory approvals for further investments in our subsidiaries; our ability to collect accounts receivable and manage inventory and other risks described from time to time in the Company's SEC filings, including those risks identified in the section entitled "Risk Factors" in its Form 20-F for the year ended December 31, 2020 filed with the SEC, as may be amended.

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