

b<>com *Sublima* Implemented on Synaptics VS680 SoC for First AI-Enabled Frame-Accurate SDR-to-HDR Video Conversion for Set-Top Boxes

Algorithm fully leverages VS680's optimized NPU and market-leading TOPS for the AI efficiency, performance, and security required to enhance protected video in real time on edge devices.

Amsterdam, The Netherlands, September 12, 2024 – b<>com and Synaptics® Incorporated (Nasdaq: [SYNA](#)) announced today that b<>com has implemented its market-proven *Sublima*™ algorithm on Synaptics' [VS680](#) multimedia system on chip (SoC). This is the first AI-enabled frame-accurate, dynamic SDR-to-HDR video conversion for set-top boxes (STBs). The algorithm fully leverages the VS680's optimized neural processing unit (NPU), 7.9 TOPS performance, heterogeneous architecture, and security capabilities. The combination provides an efficient, AI-enriched approach to process video in real-time for enhanced video experiences on STBs, over-the-top (OTT) streaming devices, and smart TVs.

****Sublima* on the VS680 will be showcased at this week's IBC in Synaptics' Booth Hall 1, C.20. For a demonstration of this and Synaptics' suite of multimedia and wireless connectivity solutions, email: press@synaptics.com.***

"This is the first time we have used an Edge-optimized AI approach for our HDR conversion technology. The VS680 platform provides a more compact and efficient way to seamlessly convert video content to the immersive and realistic HDR format," said Tania Pouli, Director of Strategy Video at b<>com. "Importantly, *Sublima* achieves this while maintaining video quality and competitive price points for consumer and industrial video systems."

Synaptics' NPU-powered SoC enables *Sublima*'s frame-by-frame dynamic conversion to improve the quality and energy consumption compared to other less efficient static conversion methods.

"b<>com takes full advantage of the VS680's NPU, CPU, and GPU heterogeneous architecture by using the SyNAP toolkit to securely balance the *Sublima* algorithm and optimize it for performance, power, and accuracy," said Siddarth Chandrasekar, Sr. Director of Product Marketing at Synaptics. "This is a strong example of how the SyNAP toolkit can be used to deliver differentiated AI-enhanced user experiences."

Synaptics' highly integrated VS680 supports multiple DNN frameworks, including TensorFlow™ Lite, NN API, and OpenVX™. An ISP that is fully integrated into the secure multimedia pipeline provides an optimized system solution for Edge AI vision.

Availability

Sublima on the VS680 is available now. For more information:

- View the [VS680](#) product brief
- Learn more about [*Sublima*](#)

About b<>com

b<>com explores, designs and delivers tomorrow's digital technologies to accelerate transitions. Drawing on its team of industrialists and academics, the Institute of Research and

Technology develops R&D projects to enhance the competitiveness of businesses. It promotes augmented intelligence and energy efficiency to improve industrial processes. The goal is to provide innovative solutions to market needs and meet the challenges of decarbonisation and digital trust. Its technologies are developed for critical infrastructure, defense, agri/agro, security, healthcare, Industry 5.0, and cultural and creative industries. Its experts develop innovative, secure digital technologies (cloud, cybersecurity, AI) that serve signal, content and network processing (connectivity, video & sound, digital twins, human factors).

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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 AI-enhanced video, vision, audio, speech, and security processing. Follow Synaptics on [LinkedIn](#), [X](#), and [Facebook](#), or visit www.synaptics.com.

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