Synaptics Astra^{TM} AI-Native IoT Platform Launches with SL-Series Embedded Processors and Machina Foundation Series Development Kit

Highly integrated Linux® and Android™ SoCs and dev kit are optimized for consumer, enterprise, and industrial applications and deliver an 'out-of-the-box' edge AI experience.

San Jose, CA, April 8, 2024 – Synaptics® Incorporated (Nasdaq: SYNA) today launched the Synaptics Astra platform with the SL-Series of embedded AI-native Internet of Things (IoT) processors and the Astra Machina^{TM} Foundation Series development kit. At a time when customers are asking for AI in virtually any product, Astra provides the structure, scalability, and flexibility to meet those demands. The SL-Series allows designers to bring AI directly to their products independent of the data center, solving for data privacy and latency. The family of embedded processors provides industry-leading compute capability at power-consumption levels that enable a wide range of consumer, enterprise, and industrial edge IoT applications.

embedded world 2024, Booth #4A-259: Join us to learn more about advances in edge AI compute, seamless and robust wireless connectivity, and automotive displays and infotainment. Email press@synaptics.com to set up an appointment.

"Sense, process, and connect are the fundamental elements of an IoT system and we have differentiated technologies in all three areas," said Michael Hurlston, President and CEO of Synaptics. "While we have historically been leaders in a handful of narrow processor verticals, today we are embarking on a journey to bring advanced AI capability to an incredibly wide range of edge IoT devices."

The SL-Series are high-performance embedded AI-native IoT processors that will be complemented by the power-optimized SR-Series.

The Synaptics Astra AI-native compute platform brings structure to IoT edge device design using scalable hardware, unified software, an adaptive open-source AI framework, a partner-based ecosystem, and seamless and robust wireless connectivity. The SL-Series of multi-core Linux or Android systems on chip

(SoCs) are based on Arm®Cortex®A-series CPUs and feature hardware accelerators for edge inferencing and multimedia processing on audio, video, vision, image, voice, and speech.

"The SL-Series delivers on the high-performance end of a roadmap of scalable edge AI IoT compute solutions and will soon be complemented by our power-optimized AI-enabling SR-Series of MCUs," said Vikram Gupta, SVP & GM IoT Processors and Chief Product Officer at Synaptics. "Combined with our easy-to-use AI frameworks, customers will be able to bring intelligent IoT products to the market quickly."

"Edge AI is transforming use cases across markets including smart home, city, agriculture, and retail," said Paul Williamson, SVP and GM, IoT Line of Business at Arm. "The Arm-powered Astra platform will deliver the performance and intelligence needed for this next generation of AI experiences."

Technical highlights
Each of the three devices in the SL-Series offers unique features and benefits, catering to different multi-modal application requirements and feature 'out-of-the-box' AI:

- The SL1680 is based on a quad-core Arm Cortex-A73 64-bit CPU, a 7.9 TOPS NPU, a high-efficiency, feature-rich GPU, and a multimedia accelerator pipeline. It is ideal for home and industrial control, smart appliances, home security gateways, digital signage, displays, point-of-sale systems, and scanners.
- The SL1640 is optimized for cost and power and is based on a quad-core Arm Cortex-A55 processor, a 1.6+ TOPS NPU, and a GE9920 GPU. It is ideal for smart home appliances, enterprise conferencing, smart speakers, displays and signage, consumer, and industrial control panels.
- The SL1620 is also based on a quad-core Arm Cortex-A55 CPU subsystem, a feature-rich GPU for advanced graphics and AI acceleration, superior audio algorithms, and dual displays. Applications include enterprise multimedia conferencing, smart appliances, home security gateways, digital signage, displays, point-of-sale systems, and smart speakers.

The Astra Machina Foundation Series development kit supports the SL-Series. The kit helps AI beginners and experts quickly unlock the processors' superior AI capabilities, powerful processing and graphics performance, and matching wireless connectivity, starting with Synaptics' SYN43711 and SYN43752 Wi-Fi® and Bluetooth® combo SoCs.

The Astra Machina Foundation Series development kit supports the SL-Series and helps developers at all stages of their AI journey, from beginners to experts.

To celebrate the official launch of Astra with the SL-Series processors, Synaptics is hosting a special invitation-only evening event at EW2024 on Tuesday, April 9th. For tickets, email press@synaptics.com or contact your local sales representative at sales@synaptics.com.

Availability
The SL-Series processors are available now. The Astra Machina Foundation Series development kit will be available in Q2, 2024. For more information:

- View the product briefs: SL1680, SL1640, SL1620, Machina Foundation Series
- Get images
- Read, *"Unleashing Astra: Synaptics' Vision for the Future of IoT and Edge AI"*
- Learn more

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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