



Synaptics Brings Tactile Sensing and Edge AI to NVIDIA Isaac Sim and Holoscan

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Synaptics Capacitive Tactile Sensing (CTS) module captures touch data and Astra® Edge AI processors run inference on device, now supported on NVIDIA Isaac Sim™ and Holoscan.

SAN JOSE, Calif., Sept. 15, 2026 (GLOBE NEWSWIRE) -- Synaptics® Incorporated (Nasdaq: [SYNA](#)) today announced its first CTS module powered by the SN6012T touch controller is now supported by the open robotics simulation framework, NVIDIA Isaac Sim. The Synaptics CTS module is designed for dexterous robotic hands, grippers, and other Physical AI systems to detect contact and pressure distribution, supporting more precise grip control, object manipulation, and responsive interaction.

The CTS module works effortlessly with [Synaptics Astra® Edge AI processors](#). These processors serve as a multimodal sensing, inferencing, and connectivity hub unifying touch, vision, motor control, and other sensory signals into synchronized streams to facilitate hierarchical AI systems with support of NVIDIA Holoscan.

As Physical AI platforms increasingly operate in highly dynamic environments and interact directly with humans and objects, developers need simulation environments that capture how contact and force behave at the point of touch. This simulation environment delivers a way to prototype tactile interactions and generate synthetic sensor data. It helps developers expedite validation cycles by enabling perception algorithms before deploying on physical hardware.

The CTS platform is expected to provide:

- **An optimized standard tactile module:** High 2.5mm pitch taxel density with a 5x12 taxel array, supporting force ranges up to 100N with 0.1N resolution.
- **Faster response, low-hysteresis proprietary sensor design:** 10x faster rebound response than traditional foam sensors.
- **Native Newton engine support:** Built from the ground up for NVIDIA's Newton physics simulation engine.

The Astra AI-native processor platform is designed to:

- Aggregate touch, vision, and motion data into unified streams, delivered to NVIDIA Holoscan over standard Ethernet.
- Offload sensor collection and synchronization from central compute, so robotic platforms can interpret contact, grip, and movement locally.
- Bring localized Edge AI intelligence to humanoids, grippers, and industrial systems, cutting integration complexity.

"Tactile sensing is essential for fast, accurate, and robust robotics and humanoid experiences across all markets," said Rahul Patel, President and CEO, Synaptics. "Combining Synaptics' touch modules and Astra Edge AI processors with NVIDIA's Isaac Sim and Holoscan platform capabilities enables processing of multi-sensory modalities, simplifying integration hurdles and accelerating time-to-market for developers through faster validation cycles."

"The next generation of Physical AI depends on closing the gap between what robots learn in simulation and how they respond to contact in the real world," said Deepu Talla, Vice President of Robotics and Edge AI at NVIDIA. "Synaptics is bringing CTS tactile sensing and Astra Edge AI processors to NVIDIA Isaac Sim and Holoscan, helping developers simulate touch and process multimodal sensor data for more precise grip control, object manipulation, and responsive robotic interaction."

About Synaptics Incorporated

Synaptics (Nasdaq: [SYNA](#)) is driving innovation in AI at the Edge, bringing AI closer to end users, and transforming how we engage with intelligent connected devices, whether at home, at work, or on the move. As a go-to partner for forward-thinking product innovators, Synaptics powers the future with its cutting-edge Synaptics Astra® AI-Native embedded compute, wireless connectivity, and multimodal sensing solutions. We're making the digital experience smarter, faster, more intuitive, secure, and seamless. From touch, display, and biometrics to AI-driven wireless connectivity, video, vision, audio, speech, and security processing, Synaptics is the force behind the next generation of technology enhancing how we live, work, and play.

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Forward-Looking Safe-Harbor Statement

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, including statements regarding the capabilities of Synaptics' CTS module and Astra processors, their integration with NVIDIA Isaac Sim and Holoscan, developer adoption, and market opportunities in robotics and edge AI. These statements involve risks and uncertainties including product development delays, competitive pressures, adoption rates for simulation and edge AI platforms, supply chain constraints, and macroeconomic

conditions. For more information on risks, please refer to Synaptics' most recent Form 10-K and 10-Q filings with the SEC. Synaptics disclaims any obligation to update forward-looking statements except as required by law.

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