



## Synaptics Disrupts Automotive Industry with Innovative TDDI Solutions

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### High-Performance Single-Chip Solution Integrates Touch and Display Technology for UHD Touchscreens up to 17 inches

DETROIT and SAN JOSE, Calif., Sept. 25, 2018 (GLOBE NEWSWIRE) -- **SID Vehicle Displays Conference** -- Synaptics Incorporated (NASDAQ: [SYNA](#)), the leading developer of human interface solutions, today announced its innovative TD7800 family of Automotive TDDI products is now shipping in full production, and has been selected by leading Tier 1s and OEMs for upcoming vehicle launches. Pioneered by Synaptics, our touchscreen Automotive TDDI solutions integrate sophisticated touch and display technologies into a single chip, while enabling superior optical performance over conventional touchscreens. Synaptics' Automotive TDDI combines a lower BOM and a simplified supply chain, with faster and easier integration for display manufacturers, global Tier 1s and OEMs. Automotive display manufacturers will be sampling panels with Synaptics' Automotive TDDI in the coming weeks.

Featuring Ultra HD resolution and support for displays up to 17 inches, Synaptics works very closely with display manufacturers to develop full in-cell Automotive TDDI solutions, a technology invented by Synaptics in 2010 for the mobile market. By leveraging our investment in mobile TDDI displays with over 300 million units shipped, display manufacturers are very familiar with Synaptics' evaluation tools, empowering them with high-efficiency and faster bring-up times.

Synaptics' Automotive SafeView™ image processing and tools comprise of industry-leading display performance including: **Local Area Auto Contrast Optimization** (LAACO) enables contrast control by region to optimize light and dark areas of an image simultaneously; **Sunlight Readability Enhancement** (SRE) increases image visibility in bright sunlight with auto-adjustment of gamma for improved contrast and optimal viewing; **Independent White-Point** adjusts color hues (RGBCMY) and white point independent of each other, producing vivid images across display variations; Supports **one billion colors**, Synaptics-enabled displays deliver the smoothest, most-natural color tones across the entire display, producing the reddest reds, greenest greens and bluest blues -- and every shade in between.

"Synaptics is a key supplier with proven automotive display and touch experience. We have been a long-term provider of display drivers and touch controllers for automotive since 2001, with numerous brands and models on the road globally today. Our mission is to obtain the major market share of automotive display by 2020 with our unique TDDI solutions, said Sunil Thomas, vice president, Automotive, Synaptics.

Synaptics Automotive also ensures superior electromagnetic compliance (EMC) performance in the harsh automotive in-cabin environment with compliance in ISO11452 (EMC Susceptibility) and CISPR25 (EMC emissions).

#### TD7800 Key Features:

- Integrated single-die touch and display (TDDI)
- Ultra HD (can write 4K)
- Supports a-Si (single, dual and triple gate) and LTPS (3 and 6 MUX) for up to 17" displays
- SafeView™ image processing LAACO, SRE, independent white point, and one billion color displays
- Automotive Safety Integrity Level (ASIL) compliance
- AEC-Q100 Grade 2 and IAFT16949 compliant
- ISO11452 (EMC Susceptibility) and CISPR25 (EMC emissions) compliant

Automotive TDDI combines Synaptics' best-in-class touch controller IP and display driver technology with its proven systems level expertise into a single-chip solution. TDDI delivers lower overall system cost, simplifies the supply chain and enables thinner devices, brighter displays and borderless designs for both full in-cell and hybrid in-cell panel stack-ups. Synaptics Automotive TDDI solutions feature innovative and patented touch controller capabilities, such as support for up to ten fingers, low-power wake-up gestures, gloved touch, and superior performance in moist conditions.

#### SID Vehicle Displays Conference:

Please join us at the SID Vehicle Displays Conference in Detroit, Sept. 25-26, and learn about our game-changing innovations in HMI exclusively for automotive. To make an appointment, please contact your Synaptics account representative.

#### Technical Presentation:

Synaptics' system architect expert Petr Shepelev will present a paper at the symposium focused on Automotive TDDI and SafeView technologies.

#### About Synaptics:

Synaptics is the pioneer and leader of the human interface revolution, bringing innovative and intuitive user experiences to intelligent devices. Synaptics' broad portfolio of touch, display, biometrics, voice, audio, and multimedia products is built on the company's rich R&D, extensive IP and dependable supply chain capabilities. With solutions designed for mobile, PC, smart home, and automotive industries, Synaptics combines ease of use, functionality and aesthetics to enable products that help make our digital lives more productive, secure and enjoyable. (NASDAQ: [SYNA](#)) [www.synaptics.com](http://www.synaptics.com).

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