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The Global Semiconductor Industry Analysts

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Cloud-based tech alerts drivers of approaching bikes

I have spoken with Brent Massey, CEO and co-founder of Ridar Systems LLC., whose company has developed a cloud-based mobile technology to alert drivers [of cars] when riders [of motorcycles & bicycles] are close by. The system that connects cycles and bikes with four-wheel vehicles is fairly simple and straightforward

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China's Tsinghua Secures \$22 Billion in State Backing

China's Tsinghua Unigroup Ltd. announced it secured deals that would provide it with an additional 150 billion yuan (about \$21.8 billion) in financing from two government-backed sources.

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Tiny transistors made from self-assembled carbon

While carbon nanotubes can be used to make very small electronic devices, they are difficult to handle. Now, researchers from the University of Groningen, the University of Wuppertal, and IBM Zurich, have developed a method to select semiconducting nanotubes from a solution, and make them self-assemble on a circuit of gold electrodes.

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TALK TO US



MIPI Goes Beyond Mobile, Camera

-- The specification originally designed to connect a mobile-phone camera to a host processor has come a long way. After earning universal respect within the mobile ecosystem, this successful spec is moving decisively beyond mobile.

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NXP Shows First FD-SOI Chips

SANTA CLARA, Calif. – NXP will ship this year as many as five SoCs made in Samsung's 28nm fully depleted silicon-on-insulator (FD-SOI) process, including one that has been sampling for six months.

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Cloud-Based Tech Alerts Drivers Of Approaching Bikes

I have spoken with Brent Massey, CEO and co-founder of Ridar Systems LLC., whose company has developed a cloud-based mobile technology to alert drivers [of cars] when riders [of motorcycles & bicycles] are close by.

The system that connects cycles and bikes with four-wheel vehicles is fairly simple and straightforward.

Riders and drivers simply need a smartphone (Android or iOS), cellular signals (3G, 4G, LTE), and a Ridar app downloaded from an app store or an insurance company.

Once the vehicle exceeds 10mph, the Ridar Systems launches its app in background, alerts drivers if a rider is approaching from behind, in front of or in a blind-spot. It can override phone calls, music, or turn-by-turn mapping if a collision is imminent.

China's Tsinghua Secures \$22 Billion in State Backing

SAN FRANCISCO—China's Tsinghua Unigroup Ltd. announced it secured deals that would provide it with an additional 150 billion yuan (about \$21.8 billion) in financing from two government-backed sources.

The China Development Bank pledged 100 billion yuan (about \$14.5 billion) in financing while China's Integrated Circuit Investment Fund will invest up to 50 billion yuan (about \$7.3 billion) in China's largest semiconductor company, according to a statement posted by Tsinghua in late March.

Tsinghua said the financing was provided to the company for upgrades and to enhance its core competitiveness.

Tsinghua has in recent months pledged to invest \$54 billion to build two huge memory chip fabs in China.

Tiny Transistors Made From Self-Assembled Carbon Nanotubes

While carbon nanotubes can be used to make very small electronic devices, they are difficult to handle. Now, researchers from the University of Groningen, the University of Wuppertal, and IBM Zurich, have developed a method to select semiconducting nanotubes from a solution, and make them self-assemble on a circuit of gold electrodes.

The team acknowledges the results look deceptively simple: a self-assembled transistor with nearly 100 percent purity and very high electron mobility — but it took ten years to get there. University of Groningen Professor of Photophysics and Optoelectronics Maria Antonietta Loi designed polymers which wrap themselves around specific carbon nanotubes in a solution of mixed tubes. Thiol side chains on the polymer bind the tubes to the gold electrodes, creating the resultant transistor.

MIPI Goes Beyond Mobile, Camera

MADISON, Wis. -- The specification originally designed to connect a mobile-phone camera to a host processor has come a long way. After earning universal respect within the mobile ecosystem, this successful spec is moving decisively beyond mobile.

The MIPI Alliance just last week unveiled MIPI CSI-2 v2.0. The new spec, according to the industry group, can now respond to complex imaging needs of IoT, wearables, AR/VR, drones and automotive systems.

We recently caught up with Haran Thanigasalam, Intel senior platform architect and MIPI Alliance Camera Workgroup Chairman via phone, asked him to break it down for us.

NXP Shows First FD-SOI Chips

SANTA CLARA, Calif. – NXP will ship this year as many as five SoCs made in Samsung's 28nm fully depleted silicon-on-insulator (FD-SOI) process, including one that has been sampling for six months. Samsung is expected to announce its FD-SOI roadmap in May and is already working on RF and in-house embedded MRAM for it.

An NXP executive showed the first samples of the products at an event here, a key milestone in a long journey for FD-SOI. The next big step is finding an embedded non-volatile memory for the process, given embedded flash is expected to hit limits at 14nm.