

autotech^{daily}TM

MONDAY
AUGUST 25, 2008
PAGE 1 OF 3



American
Iron and Steel
Institute

VIDEO PODCAST

Click [HERE](#) to view
this week's video
podcast:

Nissan's new U.S.
headquarters

electronics

MOBILEYE TO SUPPLY THREE-IN-ONE CAMERA TO BMW

BMW AG's 7 Series sedan will be the first car to use a single computer chip-based camera to perform three functions: automatic headlight dimming, lane-departure warning and automated traffic sign recognition.

The functions will run simultaneously, using computer algorithms and a chip design created by Netherlands-based Mobileye N.V. in a module developed and supplied to BMW by Continental AG. The project was begun at BMW's request more than two years ago with Siemens and continued after Continental acquired the supplier, according to a Mobileye.

Camera-based systems in cars to date have largely used stand-alone units in which each camera serves a specific purpose, such as lane-departure warning. Mobileye has supplied such systems to BMW, General Motors and Volvo for several years.

A typical in-car camera system can process about 15 frames per second. To bundle more functions onto the computer-chip camera, Mobileye increased the frame rate to 45. It also improved processing power to analyze the images more closely and enable sharing some frame data across the functions.

In the new Bimmer application, Mobileye expects its EyeQ1 chip system to improve nighttime safety by making it easier for drivers to switch between high- and low-beam headlamps without blinding oncoming traffic. Its traffic sign warning system is expected to be particularly valuable in Germany, where variable speed limit signs and special traffic information for different weather conditions can bewilder drivers.

The new system will warn drivers with instrument panel and head-up display information based on what the camera detects, integrated with information from the onboard navigation system's map data.

Mobileye says its work on the BMW system will enable future systems due to be released between 2009 and 2011 to bundle five or more features into a single camera. Additional functionality could include pedestrian detection and forward collision warning. The company didn't reveal specific vehicle programs but indicated it had contracts lined up for vehicles in Europe and North America.



SAE Corporate Learning Solutions

Know **how**. Know **better**. Know **faster**.

Get in the know about how your company can bring any of SAE's 120 technical seminars or e-seminars in-house for a **customized, convenient, and cost-effective** training solution.

Visit www.sae.org/corplearning or call 1-724-772-8529.

SAE International

MONDAY
AUGUST 25, 2008

PAGE 2 OF 3

hybrids

CHRYSLER REVS UP HYBRID PRODUCTION

Last week Chrysler LLC began production of the hybrid-electric versions of its Aspen and Dodge Durango full-size SUVs at the company's Newark, Del., assembly plant. The vehicles—Chrysler's first full hybrid models—feature the two-mode hybrid system co-developed with General Motors, Daimler and BMW.

Chrysler will begin selling the hybrid trucks this fall in the U.S. Base prices for the two vehicles are \$45,340 for the Durango and \$45,570 for the Aspen, which Chrysler notes is nearly \$8,000 below competitive hybrid full-size SUVs. Chrysler also says buyers can expect to receive an \$1,800 tax credit.

Teaming a 300-volt nickel-metal-hydride battery and electric motors with a four-speed automatic transmission and Chrysler's 5.7-liter Hemi V-8 engine with cylinder deactivation, the new hybrids are expected to improve fuel economy by up to 25% vs. their gasoline-only counterparts.

The hybrid system's two modes enhance fuel economy for both city and highway driving. At low speed and light loads, the vehicle can operate completely on electric power, engine power or any combination of the two. The second mode is used primarily at highway speeds, using the electric motor as a power assist when needed. Other unique components for the gasoline-electric trucks include an auxiliary power module, electric air conditioning and unique cooling module, high-voltage cables (AC and DC), hybrid gateway module, hydroelectric power steering pump and torque power inverter module.

materials

DEVELOPER BUYS IDLE TOYOTA EQUIPMENT TO BOOST BIOPLASTICS OUTPUT

Teijin Ltd. has purchased testing equipment from Toyota Motor Corp. that the Japanese textile maker plans to convert to make its new bioplastic fiber, *The Nikkei* reports.

Teijin launched bioplastic production last month. Located at the company's Iwakuni complex, the new operation can make 200 tons

of the environmentally friendly material per year.

The four-year-old Toyota equipment, which was idled this spring, will be dismantled and moved from the automaker's Hirose plant to Teijin's Matsuyama facility. The newspaper says unspecified upgrades will be made to the machines to ready it for use in the proprietary bioplastic process, which Teijin aims to put into service next summer to increase its annual capacity to 1,200 tons. Through further investment, Teijin eventually plans to increase output to 10,000 tons per year.

Mass production is expected to reduce the price premium for the material, currently twice that of traditional plastics. Mazda Motor Corp. will be one of the first to use the biofiber, starting with seats in the current fiscal year.

Talk Back

Click below to enter your answer or post your comments on the *AutoTech Daily* blog:

QUESTION:

How much should the government loan the U.S. auto industry to help it weather the current downturn?

- nothing
- \$15 billion
- \$25 billion
- \$35 billion
- \$45 billion or more

Look for results—and a new question—in next Monday's issue.

PREVIOUS QUESTION:

The traditional domestic OEMs' share of the U.S. auto market is 47% and falling. Where will it be in 5 years?

- | | |
|-----|-----------|
| 23% | above 47% |
| 0% | 47% |
| 18% | 45% |
| 7% | 43% |
| 52% | below 43% |

AUTOTECH DAILY

is a publication of
Hampton AutoBeat LLC
Box 33068
Bloomfield Hills, MI
48303-3068

Bill Hampton, Publisher
(248) 540-2530
bill@autotechdaily.com

SUBSCRIPTIONS:

Paula Doan
(888) 771-6430
paula@autotechdaily.com

ADVERTISING:

Dan Keelan
(248) 455-7252
DKeelan@cbs.com

NEWS:

Steve Plumb
(610) 917-2276
steve@autotechdaily.com

transmissions

HYUNDAI AFFILIATE TO MAKE SIX-SPEED TRANSMISSIONS IN GEORGIA

South Korea's Hyundai Powertech will build a \$150 million factory in West Point, Ga., to supply six-speed automatic transmissions to Hyundai Motor Corp. and its Kia Motors Corp. affiliate for vehicles built at their new plants in Montgomery, Ala., and West Point, respectively. Powertech America is fully owned by Hyundai.

Transmission production is expected to begin in February 2010, a few months after Kia begins making its next-generation Sorento SUV at the new West Point plant. Currently, the only Kia model with a six-speed automatic transmission is the Borrego full-sized SUV. The new Sonata sedan also is expected to use the Powertech transmission.

diesels

NO DIESELS IN BENTLEY'S FUTURE

Volkswagen AG's Bentley arm tells *Autocar* it has no plans to market a diesel-powered vehicle because many of its cars are sold in the U.S. and Asia, where demand for diesel power is low. *Autocar* adds that Bentley owners in Europe have been less than enthusiastic when queried in consumer clinics about putting a diesel in the ultra-luxury marque.

The British auto enthusiast magazine says Bentley is instead moving ahead with plans to make its entire lineup capable of running on ethanol and other biofuels made from waste material by 2012. The company currently is developing an all-new engine for its next-generation Arnage and Continental.

research

AUSTRALIA, CHINA TO PARTNER ON ALTERNATIVE POWER RESEARCH

Researchers from the Chinese Academy of Sciences and Australia's University of Queensland will work together to develop clean energy technologies, including those related to hybrid and fuel cell vehicles. This includes developing new materials designed to more effectively produce and store hydrogen.

The partners also will evaluate solar and clean coal processes. The \$3.9 million program will be led by Max Lu, a professor at Queensland's Center of Excellence for Functional Nanomaterials. The Chinese experts are from the Chinese Academy of Sciences' Dalian Institute of Chemical Physics and Institute of Metals Research.

recall

SMART RECALL

BMW AG is recalling 43 Smart ForTwo models in the U.S. to fix poorly painted vehicles that could suffer from insufficient adhesion of the windshield and roof, potentially causing them to separate. The initiative is the first recall for the tiny Smart brand in the U.S.

The problem began with a single batch of paint that didn't meet specifications. Smart later determined that a formulation used to repaint the vehicles could lead to de-lamination, including in areas where the windshield and roof had been affixed with adhesive.

Smart plans to repaint the affected areas to meet proper specifications. The recall begins this week.