

What feature or trend will become hot technology in automotive infotainment the next year? (Part II)

Kasey Panetta, Associate Editor



What feature or trend will become hot technology in automotive infotainment the next year?

Tullio Cettolin, Strategic Marketing Director of the Automotive Division at Micron Technology, www.micron.com

Consumers love the world of apps and instant Internet connectivity, and now they want it in their cars, too. Maybe they want to listen to their favorite Hawaiian music station via Tune-In during their daily commute on the U.S. continent. The automotive industry is getting the message. By 2017, approximately 60 percent of all cars leaving the factories will be connected to the Internet, making the Connected Car another node in the network—an extension of people’s digital social lifestyle. Automotive-specific, Internet-enabled infotainment platforms require more complex electronics than a standard radio or navigation system. While most automotive systems have traditionally relied on memory that is integrated on the microcontroller die, today’s systems need a lot more computing power and a lot more memory—both DRAM and Flash. In 2012 the average car contained memory worth US-\$12.8, with the spectrum ranging from \$2 in low-end models to more than \$100 in luxury cars. Going forward, demand for automotive memory is expected to grow 25% faster than demand in the average semiconductor market. A promising Flash memory solution for automotive applications is e•MMC™ memory—a standardized version of the managed NAND architecture addresses potential NAND design concerns internally, using error correction code, wear leveling, etc., so the designer has less to worry about. e•MMC memory is available from several suppliers. Micron offers e•MMC devices in densities of 4GB to 64GB. Also interesting to note: Advanced driver assistance systems (ADAS) like multi-purpose camera systems for lane departure, traffic sign recognition, and emergency brake assist (EBA) are almost as memory-hungry as infotainment systems, in terms of both Flash and DRAM.



Andy Gryc, Senior Product Marketing Manager, Automotive, QNX

The new generation of cars already in the design stage will be as different from today's cars as a smartphone is from an old rotary dial phone. Between the head unit with its powerful infotainment system and dozens of electronic control units (ECUs) managing everything from fuel consumption to emergency braking, today's automobiles have become sophisticated computing platforms with more lines of code than the most modern aircraft. And this is just the beginning. With the advent of the connected car, every vehicle is becoming just one component in a complex of integrated computing platforms. Several technological developments have converged to enable this integration. Bluetooth connectivity to mobile devices brought into the vehicle and 4G network connectivity to the cloud have ended the automobile's solitary existence. The latest generation of smartphones offers powerful—and personalized—computing resources: applications, such as a personal calendar running on a phone can be integrated with an in-vehicle application, such as a navigation system, to provide the user with required departure times and late warnings, and even call or text ahead to anyone who might be waiting. Finally, access to the cloud means direct communication with other vehicles, roadside infrastructure, and an ever-expanding choice of applications and services. As consumers begin to understand that anything they can access on their phones—or for that matter on their laptops—can be brought into their cars, providing it does not compromise safety, we can expect the automobile to become an integrated part of the tools we use to help us manage our lives. Soon, when you step into a taxi you will know that your phone has already pushed your destination and required arrival time at the airport to the taxi's navigation system, which calculates the best route given current traffic conditions, while your phone confirms your expected arrival with the airline check-in.



Robert Tolbert, Product Marketing / Business Development Manager, Automotive Infotainment Processors, Texas Instruments Incorporated (TI)

From horse and buggy to the “connected car,” we have seen technological advancements pervade the automotive industry, and we will continue to see further

What feature or trend will become hot technology in automotive infotainment

Published on Electronic Component News (<http://www.ecnmag.com>)

development even within the next 12 months, especially in the infotainment segment. The way information is being presented to the end user will continue to change. Currently, luxury vehicle drivers are seeing more displays in their cars such as rear seat entertainment and more multitasking capabilities for these displays, especially for the center console. Manufacturers are moving away from a single, center display controlled by knobs and are moving toward a graphical user interface used on tablets, smart phones and now laptops, providing consumers with the "touch screen" experience. In years past, the vehicle has been equipped with a very simple display that had a one or two line reading that showed the radio station and maybe some scrolling content that displayed the artist or the actual song being played. Several things are changing - the displays are becoming more complex and larger in size; more screens are being put in vehicles; and the cluster where the speedometer sits is turning digital. Consumers will enjoy full displays that have multiple overlays meaning more elements will appear on a screen with transparency behind them. This way drivers will be able to change to different modes without exiting their current screen. The screen will display more information and have multifunctions such as a cloud-based applications menu. Consumers will begin seeing more displays in addition to the center console and back seats. Screens will begin appearing on the passenger side as well. Why should all the fun be in the back? Some of these capabilities are currently adopted in luxury vehicles, but it will propagate into affordable vehicles in only a matter of time. Infotainment will continue to change and enhance the driver and passenger experience.

See more answers about automotive infotainment, [here](#). [1]

Source URL (retrieved on 04/19/2015 - 6:06pm):

<http://www.ecnmag.com/blogs/2013/06/what-feature-or-trend-will-become-hot-technology-automotive-infotainment-next-year-part-ii>

Links:

[1] <http://www.ecnmag.com/blogs/2013/06/what-feature-or-trend-will-become-hot-technology-automotive-infotainment-next-year>