

### **Automotive IQ**

2017 TOP FIVE

WHICH CONTENT CAUGHT THE ATTENTION OF 45.000 AUTOMOTIVE IQ MEMBERS?

CHECK OUT THE TOP 5 CONTENT PIECES FOR 2017!









### MEASURING DISTANCE WITH LIGHT IN THE AUTOMOTIVE INDUSTRY: LIDAR, RADAR, AND CAMERAS

Whether it is a safety feature or a fully autonomous vehicle, information about the distance to other vehicles on the road, unexpected road obstacles, or permanent structures near the road is of paramount importance. This webinar discusses methods of measuring distance with light (emphasizing Time of Flight LiDAR) that either are or have the potential to be employed by the industry.





## TOP 5 MERGERS & ACQUISITIONS IN AUTOMOTIVE HISTORY

Mergers & acquisitions occur for reasons such as to synergise complementary strengths and weaknesses, to eliminate competition and ensure growth, to facilitate easier entries into new markets, and the global automotive industry we know today has been shaped by such M&A's since the mid 80's.





## AUTOMOTIVE SOFTWARE DEVELOPMENT: RELIABILITY & SAFETY

The modern car is often referred to as a computer on wheels. And this is not far off the mark, with complex ADAS and hybridized powertrains requiring millions of lines of software code to keep them on the road. This growing complexity attributed to the rising number of functions and the increasing interaction between them, as well as increasing safety requirements is forcing software developers to look at alternatives to the traditional document based (alternatively often referred to as hand-coded) development.





### AUTOMOTIVE HUMAN MACHINE INTERFACE - AN AUTOMOTIVE IQ EBOOK

As we move towards fully autonomous driving, considerations of the interface between the human and the machine becomes increasingly important, as millions of lines of software determines the controlling and displaying of the cars. Automotive IQ presents this free 50-page eBook focusing on Automotive HMI, giving you a plethora of information in the form of articles, interviews and industry insights.





# THE RISE OF 48V TECHNOLOGY - AN AUTOMOTIVE IQ EBOOK

In recent years 48 volt technology has been identified as an answer to some of the challenges faced by the automotive industry, and we are beginning to see the fruition of development in this area. Emission targets are a key driver for 48 volt systems, and electric vehicles and full hybrid vehicles have already demonstrated significant improvements in fuel efficiency. The EU has set fleet average targets for CO2 of 95g/km by 2020, while China has installed targets of 117g/km by the same year. The US market has compelled manufacturers to reach average fuel economy targets of 54.5mpg by 2025. As the previous flirtation with higher voltage systems in the early 1990's showed however, the cost of implementation in mass volume manufacturing has to be balanced against the benefits. Thus the development of mild-hybrid vehicles has gained traction in terms of efficiency and cost.



#### **INTRODUCING AUTOMOTIVE IQ**

Automotive IQ is an international online platform focusing on providing automotive industry professionals with a central resource for knowledge on topics such as Powertrain, Electrics/Electronics, Chassis Systems and Car Body & Materials.

Membership is free. By becoming a member you have access to a plethora of industry-relevant information through expert interviews, white papers, our blog, presentations and podcasts. You will also find links to our upcoming automotive conferences focusing on current topics and future trends within the auto industry.

Most importantly, the Automotive IQ is a community. We are dedicated to creating a learning environment for sharing best practices and finding solutions to challenges within the automotive industry.

