



**IEEE Southeastern Michigan Section
Spring Section Conference & Dinner
Thursday, Mar 29, 2007 5pm – 9pm
Fairlane Center, University of Michigan – Dearborn**

Vehicular Technology Chapter Speaker



Road to AUTOSAR – The New Automotive Embedded Software Solution

Bruce Emaus

President of Vector CANtech, Chair of IEEE Southeast Michigan Vehicular Technology, & Chair of SAE Embedded Software Standards

Abstract:

As automotive electronic product architectures built upon a multitude of ECUs distributed across different subsystems continue to migrate toward higher levels of distributed-ness with increasing system complexity, the high utility of software components in the development of automotive embedded systems is rapidly influencing the industry to push forward with a new automotive software architecture called AUTOSAR. This presentation discusses the essential business case for AUTOSAR and the challenges of developing embedded software within the automotive industry. The influences of distributed functions, protocol choice, use of multiple vehicle networks, U.S. regulatory agendas, product liability, and the use of an OEM-directed supplier-based business model are examined. This partially historical and systems engineering perspective makes a compelling case that without a major focus on complexity reduction, the development of automotive distributed systems and embedded software would be near impossible.

Biography:

Bruce Emaus is the President of Vector CANtech, a company that primarily specializes in distributed embedded system development tools, embedded software components, and process lifecycle management solutions for the automotive electronics industry. Mr. Emaus is also the IEEE Southeastern Michigan Vehicular Technology Chapter Chair and chairman of the SAE Embedded Software Standards.

With over 35 years of product development experience covering embedded software, electronics hardware, systems and information engineering, he is a leading expert in the area of distributed embedded systems, small area network protocols, and the business issues across distributed automotive electronics.

Evening Schedule:

4:30pm – 5:00pm Registration and Check-In
5:00pm – 5:45pm First half technical sessions, seven parallel sessions for chapter speaker
5:45pm – 6:00pm Vendor exhibition and networking
6:00pm – 6:45pm Second half technical sessions, seven parallel sessions for chapter speaker
6:45pm – 7:15pm Vendor exhibition and networking
7:15pm – 8:00pm Buffet Dinner from Park Place Catering
7:30pm – 8:00pm Awards program during dinner
8:00pm – 9:00pm Keynote speaker

You get your choice of two (2) of the fourteen technical session, plus networking, vendor showcases, dinner and the keynote speaker.

Registration will be online beginning in February at <http://www.ieee-sem.org>: \$25 for IEEE Members (including members of other ESD Affiliate Council Societies), \$30 non-members, \$10 students/retirees/unemployed. Location is: 19000 Hubbard Drive, Dearborn, Fairlane Center Building, University of Michigan – Dearborn. This event is a technical and professional service to the local IEEE members – this is not a "fundraiser". Contact: Prof. Chris Mi (mi@ieee.org), Conference Chair.