NXP’s launches the industry’s first ISO compliant CAN Partial Networking Solution

ECN Europe

NXP [1] has launched the first NWP ISO 11898-6 and AUTOSAR R3.2.1 compliant solution supporting CAN Partial Networking.

[2]

Picture: NXP

In current in-vehicle networking architectures, all ECUs are always active and consuming power when the vehicle is in use. By intelligently de-activating those Electronic Control Units (ECUs) that are currently not needed, with CAN partial networking engineers are able to significantly reduce vehicle fuel consumption and CO2 emissions without sacrificing performance or consumer experience.

At the Advances in Automotive Electronics International Congress in June, Ricky Hudi, managing E/E director at Audi, appealed to semiconductor suppliers and engineering partners to actively support the rapid introduction of CAN partial networking architectures and solutions.

“CAN Partial Networking is an area where we see great potential for energy savings,” Ricky Hudi said. “In addition, intelligent wake-up concepts improve the lifetime of ECUs and increase the operating reach of electrical vehicles. Audi and Volkswagen corporations have therefore started to introduce Partial Networking into the next generation of car models. Audi estimates a mid-term reduction potential on CO2 emissions of about 2.6 g/km and fuel savings of 0.11 litres/100km, when using CAN Partial Networking.

The stand-alone TJA1145 CAN transceiver and system basis chip UJA1168 are next-generation networking solutions, which combine analogue circuitry and high-density digital circuits. TJA1145 is a high-speed CAN transceiver, while UJA1168 is a CAN system basis chip with 5V/100mA microcontroller supply. Both support CAN Partial Networking by enabling “Selective wake-up” and “Selective sleep” functionality. Both chips come with a small footprint based on the HVSON14 package. For backwards compatibility reasons, the TJA1145 is also available in the SO14 package.

SOURCE [3]

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http://www.ecnmag.com/blogs/2011/08/nxp%E2%80%99s-launches-industry%E2%80%99s-first-iso-compliant-can-partial-networking-solution?qt-most_popular=0

Links:
[1] http://www.nxp.com
[2] http://ecneurope.files.wordpress.com/2011/08/240811-nxp.jpg
[3] http://ecneurope.wordpress.com/2011/08/24/nxp%e2%80%99s-launches-the-industry%e2%80%99s-first-iso-compliant-can-partial-networking-solution/