

AIEC Grants Worldwide License of J1850VM Macrocell to NEC

Phoenix, Arizona, March 20, 2002 - Automotive Integrated Electronics Corporation (AIEC), a leading supplier of silicon Intellectual Property (IP) and System On Chip (SoC) solutions to the automotive industry, announced today that it has granted NEC Corporation a worldwide license to use its J1850VM macrocell.

AIEC's J1850VM macrocell is fully compatible with the SAE J1850 recommended standard, which is a data communication network (Class B) that allows sharing of vehicle parametric information. The intent of the network is to interconnect electronic modules within a vehicle using an "Open Architecture" approach. The architecture allows the addition or deletion of modules with minimal hardware and/or software impact on the remaining nodes. The macrocell supports single byte and consolidated headers using variable pulse width modulated bit encoding (fully compliant with DaimlerChrysler and General Motors standards).

The J1850VM macrocell advanced design significantly reduces the servicing of interrupts by the controlling microprocessor through sophisticated features like message filtering and buffering. In addition, the macrocell automatically handles the protocol details including arbitration, frame delimiters, error detection, and cyclic redundancy checking and generation. The intelligent hardware contained within the J1850VM macrocell simplifies software development with the removal of many low-level routines normally required to control less intelligent peripherals.

AIEC also offers a byte level interface (J1850VB) that requires each byte of a message to be handled by the controlling microprocessor. This is in contrast the J1850VM macrocell, which is a message level machine where the microprocessor handles entire messages. The message level machine (J1850VM) significantly off-loads the microprocessor for throughput limited applications, whereas the byte level machine (J1850VB) is better suited for applications where the microprocessor has excess throughput and is capable of handling communications at a lower level.

The J1850VM macrocell is part of AIEC's modular library of components. The J1850VM can be integrated with other peripherals as part of an Application Specific Integrated Circuit (ASIC) or it can be integrated with a microprocessor and associated memory as part of a complete SoC. A list of AIEC's automotive application-specific modular library components can be found on AIEC's website at www.aiec.com.

About AIEC

AIEC provides ASIC design services and custom SoC solutions for automotive OEMs. AIEC's platform-based architecture and rapid prototype development systems allow OEMs to quickly realize a system that is optimized for each particular application. These SoC solutions can be manufactured by multiple semiconductor suppliers of the OEMs choosing, ensuring the greatest continuity of supply and the highest levels of service at the lowest cost. Further information on AIEC is available at <http://www.aiec.com>.

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