

You CAN build up your connection so comfortably

SAE 81C90/91 Full CAN Controller

The SAE 81C90/91 is a standalone CAN Controller which meets Version 2.0B (passive) of the Controller Area Network Protocol specification.

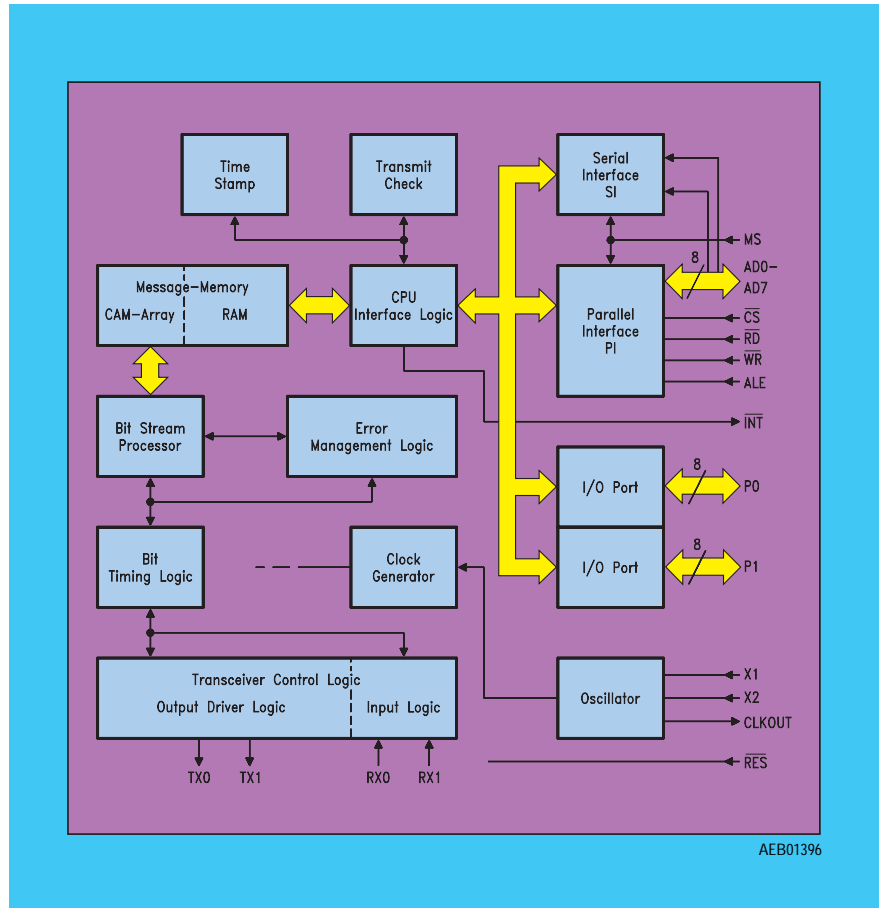
In order to fulfill the growing requirements of Controller Area Networks in automotive and industrial control applications it was designed as an enhancement for all microcontrollers. Beyond others the SAE 81C90/91 fits best to the Siemens C500 and C166 Microcontroller families. It incorporates all necessary functional units

for completely independent transmission and reception of messages using the CAN protocol. The flexible, programmable interface allows connection to different implementations of the physical layer. Furthermore, automatic time stamp generation for incoming messages, both a serial and a parallel host interface, and a transmit check unit are provided. Two 8-bit I/O ports (SAE 81C90) enhance the I/O capabilities of the host controller.

- Full CAN controller for data rates up to 1 Mbaud
- Complies with CAN specification V2.0 part A (part B passive)
- Up to 16 messages simultaneously (each with maximum data length)
- Message identifier reprogrammable „on the fly“
- Several transmit jobs can be sent with a single command
- Transmit check unit for additional data integrity
- Basic CAN feature
- Automatic time stamp for eight messages
- Two host interfaces (parallel and synchronous serial with a maximum transfer rate of 5 Mbaud)
- User-configurable outputs for different bus concepts
- Programmable clock output
- Programmable bit sampling rate
- P-LCC-28 package for the SAE 81C91
- P-LCC-44 package for the SAE 81C90 with two 8-bit I/O-Ports
- Temperature range: -40 °C to +110 °C



SAE 81C90/91 Block Diagram



SAE 81C90/91 Pin Configuration

