



The SAK 82C900 is a stand-alone CAN-controller containing two independently running Full-CAN nodes according to the V2.0 part B (active) CAN specification at a maximum baud-rate of 1 Mbaud each. 32 independent message objects are available and can be assigned to both nodes. This product can either be used together with a host or in true stand-alone mode. Communication with a host is possible via a parallel (Infineon and Motorola compatible) or serial (SPI) interface. In stand-alone mode the SAK 82C900 needs an SPI compatible E²PROM for initialization. Further initialization can then continue with CAN-messages. This ensures that the SAK 82C900 is suitable for a wide variety of applications. When the SAK 82C900 is communicating via the serial interface, the remaining pins from the parallel interface can be used as additional I/Os. To reduce CPU-load and to improve real-time behavior, the SAK 82C900 has hardware Gateway and FIFO (32 message objects) functionality. Additionally, the SAK 82C900 has outstanding power-down features which can be controlled via CAN.

KEY FEATURES

TwinCAN-Features

- Full-CAN V2.0 part B (active)
- 2 independent CAN-nodes implemented on one chip
- Up to 1 Mbaud data transfer for each CAN-node
- Hardware gateway support
- Hardware FIFO support
- 32 independent message objects
- Acceptance filtering for each message object
- Flexible and powerful interrupt generation
- Extended CAN-analysing mode (comparable to "CAN-listen mode")

Basic Features

- Parallel Interface (Infineon and Motorola compatible); 8-bit mux
- Serial interface (SPI compatible)
- Stand-alone mode (automatic boot from external E²PROM)
- On-chip oscillator, clock prescaler and CLKOUT-pin
- Multiple interrupt pins
- Power saving and wake-up features
- Additional I/O-functionality
- I/O control via CAN supported
- Automotive temperature range: -40°C to +125°C
- Small P-DSO-28 package

Application

- All applications requiring one or two independent CAN-nodes
- Easy CAN extension of existing systems due to flexible interfaces
- Interconnection of independent CAN-bus systems with hardware support
- Improved real-time behavior compared to conventional solutions

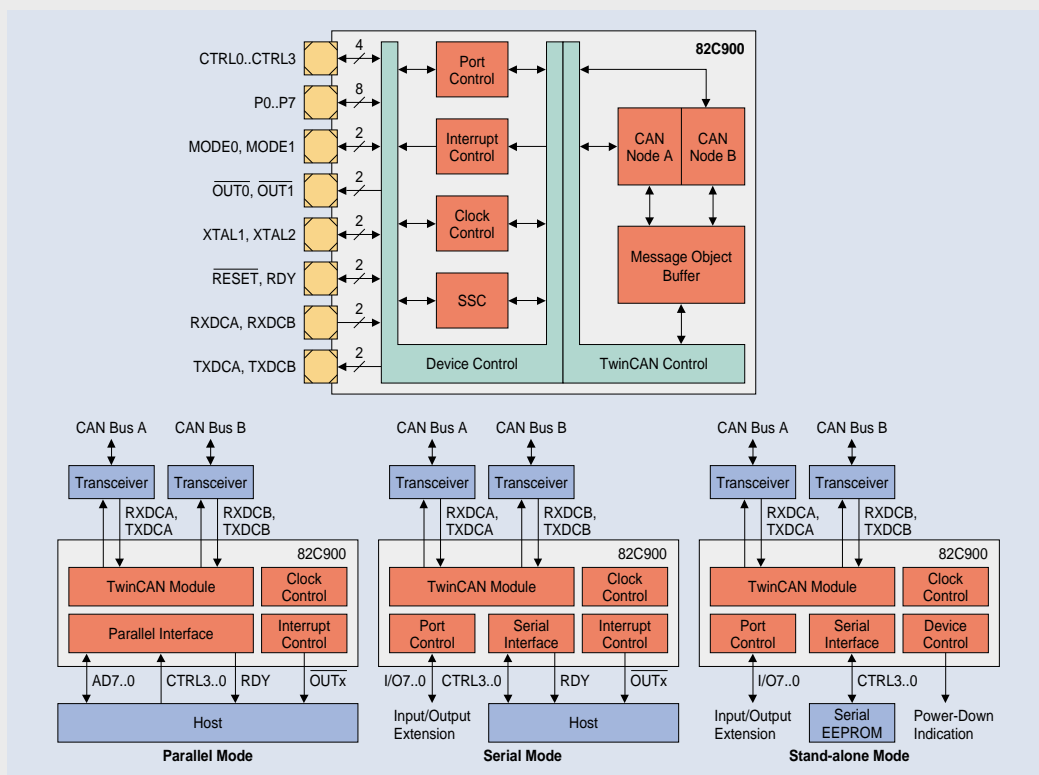
SAK 82C900

TwinCAN -

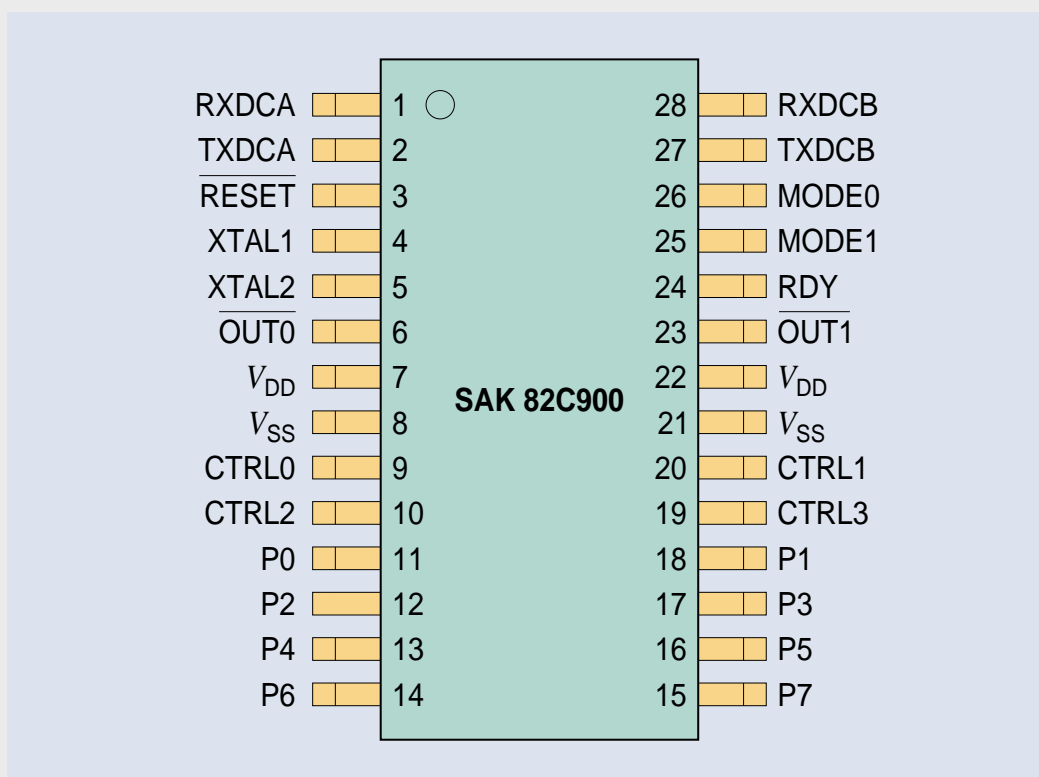
Because one is not enough

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SAK 82C900: BLOCK DIAGRAM



SAK 82C900: PIN CONFIGURATION

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