

# CAN2.0 Network Controller

## Overview

The CAN2.0 is a stand-alone controller for a Controller Area Network. It provides an interface between a microprocessor and a CAN bus which carries out all the actions of data encoding/decoding, message management, bit timing and re-synchronization involved in transmitting and receiving data over a CAN network.

The CAN2.0 implements the BOSCH CAN Message Transfer Protocols 2.0A and 2.0B. Specification 2.0A is equivalent to CAN 1.2 and covers standard message formats (11-bit identifiers); specification 2.0B covers both standard and extended message formats (both 11-bit and 29-bit identifiers).

The CAN2.0 is broadly compatible with a Philips SJA1000 working in its PeliCAN mode. Its CPU interface is compatible with the Peripheral Virtual Component Interface (defined by VSIA) for ease of connection to a range of microprocessor buses.

- Software-driven bit-rate detection allowing hot plug-in support
- Synchronous PVCI\* compatible CPU interface for easy connection to a range of microprocessors
- Listen-Only, Self-Reception modes and Self-Test option
- Interrupt generated for each bus error
- Arbitration lost interrupt with record of bit position
- Programmable error limit warning
- Broadly compatible with Philips SJA1000 in its PeliCAN mode
- Verified against Bosch CAN2.0 test suite

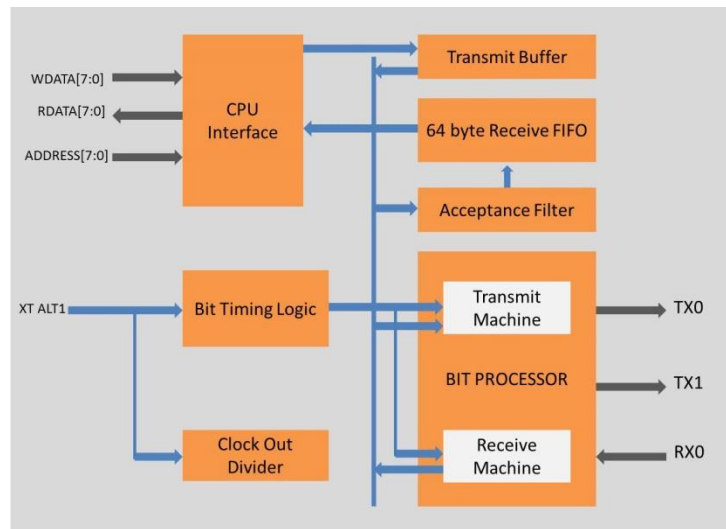
## Resource Utilization

Family	Logic	RAM	Performance
SmartFusion2 IGLOO2 RTG4	3436 LUTs	2 RAM64x18	665 MHz @ 8bit
ProASIC3	7622 Core Cells		395 MHz @ 8bit

## Related products

- AHCI compliant SATA3.0 Host Controller Design IP
- SATA3.0 Host/Device controller Verification IP

For pricing, evaluation and additional information contact [sales@sibridgetech.com](mailto:sales@sibridgetech.com)



## Features

- Full CAN 2.0 - both 2.0A (equivalent to CAN 1.2) and 2.0B
- 11-bit & 29-bit identifiers and Acceptance filtering
- Bit rates from less than 125KBaud to more than 1MBaud