

# ID MOS Digital I.P. SHORTFORM

## IM146: CAN controller

### PRODUCT DESCRIPTION

The IM146 is a stand-alone controller for the controller area network (CAN) protocol. The IM146 contains all necessary features required to implement a high performance communication protocol. The IM146 with a simple bus line connection performs all the functions of the physical and data-link layers. The application layer is provided by a microcontroller, to which the IM146 connects through general purpose non-multiplexed parallel 8-bits bus

### FEATURES

- CAN protocol V2.0 compatible (part A and part B - passive)
- 11-bit message identifier (to determine the message priority)
- Programmable bit rate (up to 1Mbits/s)
- Max system clock frequency – 16MHz (8 quanta per bit at 1Mbits/s)
- Bit-stuffing logic
- Powerful error handling
- Message acceptance filtering – according to Basic CAN
- Double receive buffer
- Readable Error Counters
- Host-overload condition detected automatically
- Interrupts: The following events are possible as interrupt triggering sources:
  - Bus/Error status change
  - Message sent
  - Message received
  - Receive data overrun
- General purpose, non-multiplexed host interface

