

CAN Datasheet

Controller Area Network module

Overview

 This IP is three channels of the CAN (Controller Area Network) module that complies with the ISO 11898-1 Standards. The CAN module transmits and receives both formats of messages, namely the standard identifier (11 bits) (identifier is hereafter referred to as ID) and extended ID (29 bits).

Key Features

- Protocol: ISO 11898-1 compliant (standard and extended frames)
- Reception
 - Data frame and remote frame can be received.
 - Selectable receiving ID format (only standard ID, only extended ID, or both IDs)
 - Programmable one-shot reception function
 - Selectable from overwrite mode (message overwritten) and overrun mode (message discarded)
 - The reception complete interrupt can be individually enabled or disabled for each mailbox.
- Transmission
 - Data frame and remote frame can be transmitted.
 - Selectable transmitting ID format (only standard ID, only extended ID, or both IDs)
 - Programmable one-shot transmission function
 - Selectable from ID priority mode and mailbox number priority mode
 - Transmission request can be aborted (the completion of abort can be confirmed with a flag)
 - The transmission complete interrupt can be individually enabled or disabled for each mailbox.

Block diagram

