

### TIP818 Fault-Tolerant Extended CAN Bus IP

#### Application Information

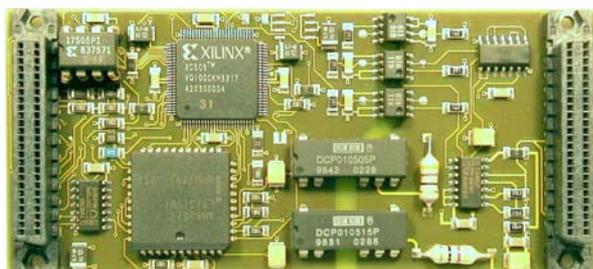
The TIP818 is an IndustryPack® compatible module and provides a complete CAN bus interface using the Intel 82527 CAN controller. The Intel 82527 CAN controller supports the standard data and remote frame as well as the extended data and remote frame according to CAN specification 2.0 part A and part B. It has the capability to transmit, receive and perform message filtering on extended and standard messages.

The TIP818 provides a 16 bit bus interface which permits word and byte accesses to the internal registers of the CAN controller.

The physical interface is a fault tolerant CAN transceiver, which supports the communication between the CAN protocol controller and the physical bus. The interface is optically isolated from the CAN controller.

The fault tolerant CAN transceiver supports transmission capability on either bus wire, if one of the bus wires is corrupted. The failure detection logic automatically selects a suitable transmission mode.

The TIP818 is designed for fault tolerant CAN applications (based on Philips fault tolerant CAN transceiver TJA1053 or similar types) with up to 32 nodes and a baud rate up to 125 kbaud.

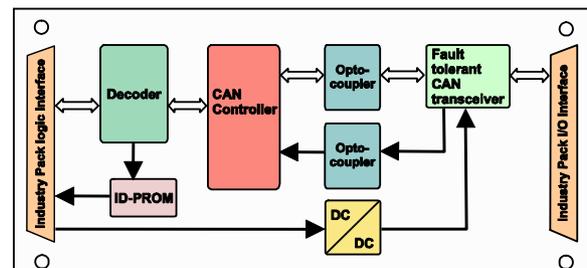


For First-Time-Buyers the Engineering Documentation TIP818-ED is recommended. The Engineering Documentation includes TIP818-DOC, schematics and data sheets of TIP818.

Software Support (TIP818-SW-xx) is available for different operating systems.

#### Technical Information

- Interface according to IndustryPack specification
- Identification-PROM supports auto-configuration
- Single Size IndustryPack
- CAN controller Intel 82527 supports CAN specification 2.0, part A and B
- Fault tolerant CAN transceiver based on Philips TJA1053 with up to 32 nodes and 125 kbaud transfer rate
- CAN bus isolated by optocouplers
- Operating temperature -40 to +85°C



**Order Information**

**None RoHS Compliant**

**TIP818-10** Fault Tolerant Extended CAN Bus IP  
(None RoHS compliant)

**Documentation**

**TIP818-DOC** User Manual  
**TIP818-ED** Engineering Documentation, includes  
TIP818-DOC

**Software**

**TIP818-SW-25** Integrity Software Support  
**TIP818-SW-42** VxWorks Software Support  
(Legacy and VxBus-Enabled Software  
Support)  
**TIP818-SW-65** Windows XP/XPE/2000 Software  
Support  
**TIP818-SW-72** LynxOS Software Support  
**TIP818-SW-82** LINUX Software Support  
**TIP818-SW-95** QNX 6 Software Support

For other operating systems please contact TEWS.