

# The Embedded I/O Company

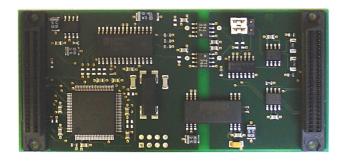
# TIP810 CAN Bus IP

## Application Information

The TIP810 is an IndustryPack® compatible module with a complete CAN bus interface using the Philips SJA1000 CAN controller. The Philips SJA1000 CAN controller is a stand-alone controller for the Controller Area Network (CAN) used within automotive and general industrial environments.

It is the successor of the PCA82C200 CAN controller (Basic CAN) from Philips Semiconductors which was used on the TIP810-10 V1.0. Additionally, a new mode of operation (PeliCAN) is implemented on the SJA1000 which supports the CAN 2.0B protocol specification with several new features. The SJA1000 has the capability to transmit, receive and perform message filtering on standard and extended messages.

The TIP810 supports an 8 bit bus interface which permits byte accesses to the internal registers of the SJA1000 controller. The physical interface supports both, CAN high-speed (according to ISO11898) and modified RS485. Both physical interfaces are optically isolated from the CAN controller. An on board DC/DC converter supplies the isolated parts of the TIP810.

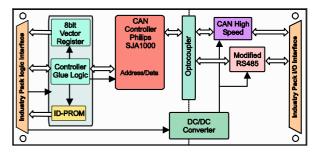


For First-Time-Buyers the Engineering Documentation TIP810-ED is recommended. The Engineering Documentation includes TIP810-DOC, schematics and data sheets.

The CAN Software Support TIP810-SW-xx provides functionality to route CAN messages to dedicated processes.

# **Technical Information**

- O Interface according to IndustryPack specification
- O Identification-PROM supports auto-configuration
- O Single Size IndustryPack
- O CAN bus interface based on Philips SJA1000 controller
- Physical interface: CAN High Speed (according to ISO 11 898) and modified RS485
- O Physical interface optically isolated from CAN controller
- O On board DC/DC converter
- O Maximum transfer rate 1 Mbit/s (bus length up to 40 m)



### Order Information

**RoHS Compliant** 

TIP810-10R CAN Bus IP

**None RoHS Compliant** 

```
TIP810-10 None RoHS compliant version of TIP810-
10R
```

#### **Documentation**

TIP810-DOC	User Manual
TIP810-ED	Engineering Documentation, includes TIP810-DOC

#### Software

TIP810-SW-25	Integrity Software Support
TIP810-SW-42	VxWorks Software Support
	(Legacy and VxBus-Enabled Software Support)
TIP810-SW-65	Windows XP/XPE/2000 Software Support
TIP810-SW-72	LynxOS Software Support
TIP810-SW-82	LiNUX Software Support
TIP810-SW-95	QNX 6 Software Support

For other operating systems please contact TEWS.

TEWS TECHNOLOGIES GmbH keeps the right to change technical specification without further notice. All trademarks mentioned are property of their respective owners.

09/2009