Sontheim

CIN

CAN Interface & Ethernet-Bridge

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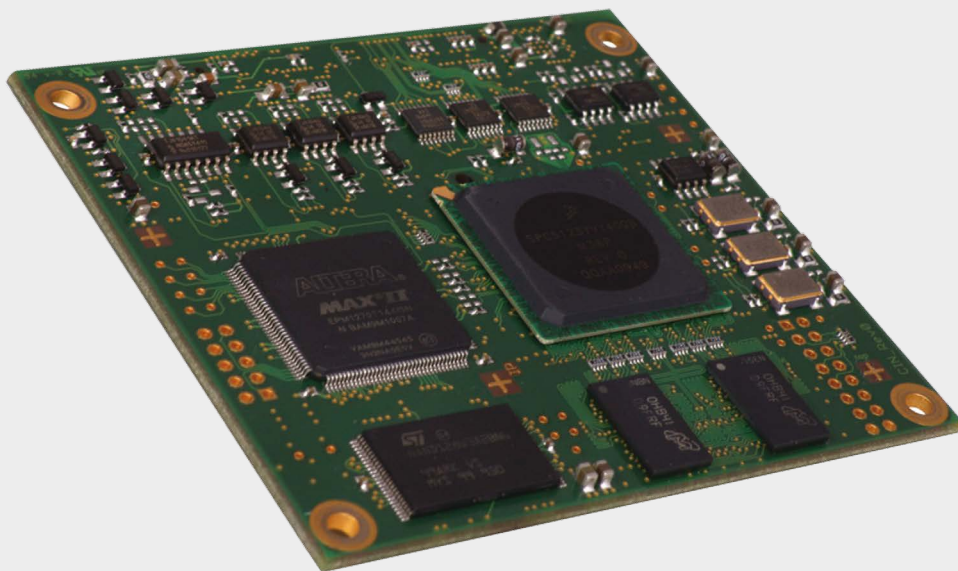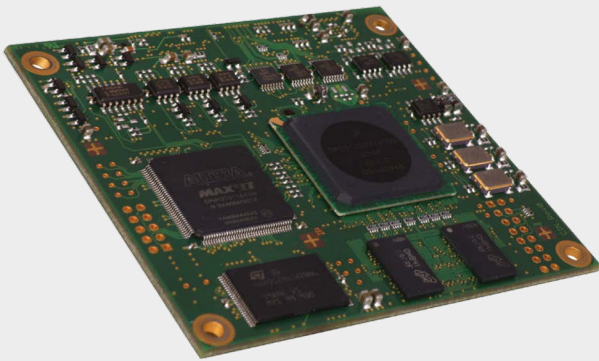
CIN

CIN is a board variant of the Sontheim CAN adapters with numerous interfaces for communication. Its extended temperature range and a number of diagnostic functions make it a perfect embedded module for industrial signal applications.

Key Features

32 bit	**Freescale microcontroller**
	Wide range of interfaces
	Can be used as a board solution or as a communication centre in the Diag-Box
	Internal flash and RAM memory
	Also suitable for harsh environments due to increased temperature range
	Extensive software support

Interfaces

There are four CAN interfaces next to two single-wire CAN, eight digital inputs and eight digital outputs. Moreover, CIN uses ethernet and I²C for controlling peripheral components. It is possible to have it assembled either as a piggyback board onto another PCB or in the Diag-Box as a high-performance communication node. The ethernet channel is also used for building up a gateway function for CAN-to-Ethernet.

Error frame detection

Similar to a CANUSB, CIN is equipped with error frame detection. This feature allows surveillance and monitoring of a CAN network. It has an own logic for detecting error frames and counting them up in a specific internal memory area. That is used for finding intermittent errors like falsified messages of a CAN participant.

Level measurement

This feature is designed for an analog measurement of CAN levels. It is used for doing diagnostics at vehicles of all kinds or machines. Erratic level indicate for example short circuits. They are often responsible for data loss.

Technical Data

CPU	Freescale MPC 512x
RAM	32 MB, optionally 64 and 128 MB available
Memory	16 MB
Ethernet/PHY	10/100 Mbit/s
CAN interfaces	4× CAN transceivers, first transceiver with wake-on-CAN function Bus termination: 120 Ω, optionally mounted on circuit board Diagnostics: ErrorFrame detection on separate FPGA for all channels Diagnostics: Analog level measurement with simultaneous measurement of CAN high and CAN low CAN channels are not galvanically isolated
Digital input	8×, power supply 3.3 V
Digital output	8×, power supply 3.3 V, 10 mA
Single wire CAN	2×
I²C	1×
Assembly	Customized circuit board solution or Diag-Box
Software support	CANexplorer 4, MDT®, ODX-Editor, SiECA132 MT-API and others on request
Operating temperature	−20 °C up to +85 °C
Storage temperature	−40 °C up to +85 °C
Power supply	+UBat (12 V or 24 V), +3.3 V, 5 V
More	Can also be used as CAN-to-Ethernet bridge/gateway

Order information

V930230120	CIN MPC5123 Error frame, level measurement

Mobile Automation

Industrial Automation

Diagnostics

Connectivity

We are looking forward to your enquiry!

Sontheim Industrie Elektronik GmbH

Georg-Krug-Straße 2
D-87437 Kempten
Phone: +49 (0) 831 575900-0
Fax: +49 (0) 831 575900-72
Email: info@s-i-e.de

Sontheim Electronic Systems L.P.

201 West 2nd Street
Davenport, IA 52801, USA
Phone: +1 563 888 1471
Email: info@sontheim-esys.com

www.s-i-e.de