CANopen-PN
PROFINET IO® / CANopen® Gateway

Connection of CANopen Devices and Networks to PROFINET IO
- PROFINET IO device (1440 bytes input and 1440 bytes output)
- CANopen manager

CANopen Gateway Easily Extendable via InRailBus
- In accordance with PROFIBUS International Document TC2-09-0002 and CANopen standard CiA 309-4
- Cable-free connection of esd CAN-CBX-I/O modules to the gateway
- InRailBus for CAN connection and power feed

Software Tools Inclusive
- PROFINET IO configuration tool GSDML-Composer
- Additional software tools for esd CAN boards (e.g. CANreal)

Linking PROFINET IO and CANopen
The CANopen-PN can link any PROFINET IO controller to a CANopen network. The gateway operates as a PROFINET IO device with a maximum of 1440 bytes input data and 1440 bytes output data on the PROFINET IO bus.

Applications
The CANopen-PN connects CANopen modules with CANopen (CiA® 301) applications to e.g. a SIMATIC-S7. A maximum number of 127 CANopen nodes can be connected to the gateway.

Physical Interfaces
The CAN high speed (ISO 11898-2) compatible interface allows a maximum data-transfer rate of 1 Mbit/s.
The 100 BASE-TX PROFINET IO interface is compatible to IEEE802.3 and runs at 100 Mbit/s.
The gateway is designed according to Profibus International Document TC2-09-0002 (CANopen-Integration_7012_d07_Jul09).

The PROFINET IO and the CAN interface are electrically isolated.

Configuration and CAN Protocols
The module can be configured via PROFINET IO configuration tool GSDML-Composer.
The esd CAN tools (CANreal, CANplot, CANrepro, CANscript, COBview) can be used additionally for CAN diagnostics.

(This product is under development. It will be available Q4 2013.)
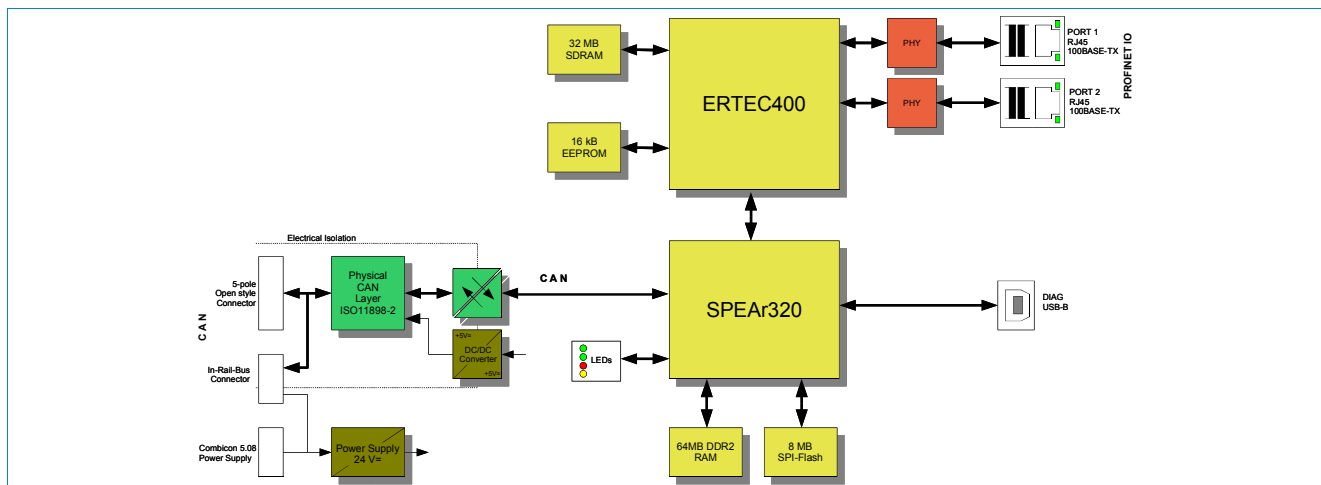
Technical Specifications:

CPU (PROFINET IO):	
Microcontroller	ERTEC 400, 150 MHz,
Memory	32 MB SDRAM, 16 kB EEPROM
CPU (Application):	
Microcontroller	SPEAr320S,
Memory	64MB DDR2 RAM, 8 MB SPI-Flash
CAN:	
CAN controller	ISO11898-1, integrated in SPEAr320S
CAN interface	5-pin open style 3.81 (CiA DR 303-1), 1 Mbit/s, ISO11898-2, electrically isolated
PROFINET IO:	
PN controller	ERTEC 400
PN interface	2x RJ45, 100BASE-TX, 100 Mbit/s, IEEE 802.3, electrically isolated
General:	
Supply voltage	Nominal: 24 VDC / 150 mA Min./ max.: 18 VDC / 32 VDC
Ambient temperature	0 °C ... +50 °C

General (continued):	
Relative humidity	Max. 90 % (non-condensing)
Dimensions	22.5 mm x 99 mm x 114.5 mm
Weight	135 g
Connectors	CAN: 5-pin open style 3.81 (CiA 303-1) PN: 2x RJ45 Power: 4-pin Combicon open style 5.0 or InRailBus

Order Information:		
Hardware		Order No.
CANopen-PN	PROFINET IO-CANopen Gateway documentation and GSDML-Composer	C.2921.02

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