



CANopenIA-XA

Philips CANopen Instant Access Protocol chip in LQFP44



Instant Access to CANopen Networks

Description

The CANopenIA-XA chip provides instant access to CANopen networks. The CANopen protocol stack is implemented on-chip and is entirely configurable via an external EEPROM.

CANopenIA-XA allows the implementation of a CANopen node with digital and analog I/O signals without a single line of software development. Using CANopenIA-XA, the development time for CANopen nodes can be shortened by several weeks or months.

Additional operating modes allow CANopenIA-XA to be either used as a stand-alone CANopen implementation or as a communication co-processor in a multiple MCU system.

Ordering Information

Part Number	Temperature °C	Description
CANopenIA-XA	0° to 70°	LQFP package (44 pins)

CANopen Features

- Fully supports CiA (CAN in Automation) DS301 standard
- Support for several device profiles in preparation
- Implementation based on ESAcademy's COCO CANopen Core
- CANopenIA-XA setup tool provided for configuration
- EDS and DCF files automatically generated
- High performance digital I/O. Maximum internal delay for input and output is 100 microseconds.

Configuration Options

- Mode 1: (no software development, configuration done by EEPROM) Digital I/O mode with up to 20 signals
- Mode 2: (no software development, configuration done by EEPROM) Analog I/O mode with high resolution components connected via SPI
- Mode 3: (easiest method to add CANopen to an existing application) CANopen co-processor communicating with host processor via shared memory or serial interface

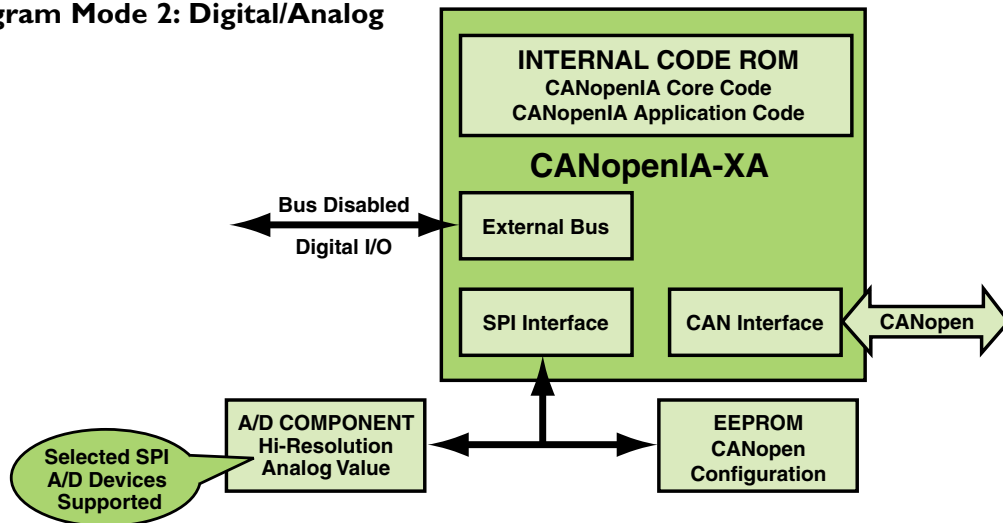
Chip Features

- Based on the Philips 16-bit XA-C3
- Operating frequencies is 24 MHz
- CANopenIA code executes from internal code memory
- Full duplex UART for configuration and maintenance
- SPI communication port for analog components
- Available in 44-pin LQFP package

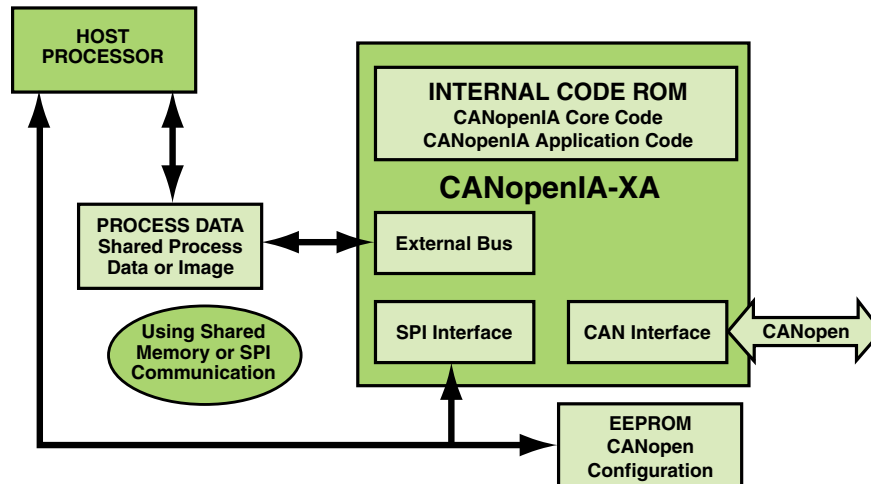
Website for additional information

<http://www.canopenia.com/philips>

Block Diagram Mode 2: Digital/Analog



Block Diagram Mode 3: CANopen Coprocessor



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