

CAN-8423

CANopen Remote I/O Unit with 4 I/O Expansions

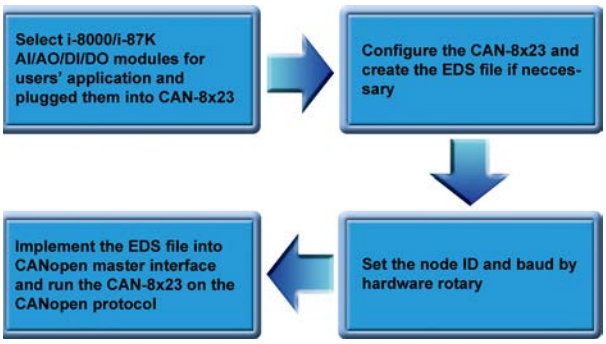
Features

- NMT: Slave
- Error Control: Node Guarding/Heartbeat Producer
- No. of PDOs: 16Rx, 16Tx
- PDO Modes: Event Triggered, RTD, Cyclic and Acyclic SYNC
- Emergency Message available
- CANopen Version: DS-301 v4.02
- Device Profile: CIA 401 v2.1
- Produce EDS file Dynamically
- CAN, ERR, and Tx/Rx LED indicator
- Support Hot Swap and Auto-Configuration for high profile I-87K I/O modules

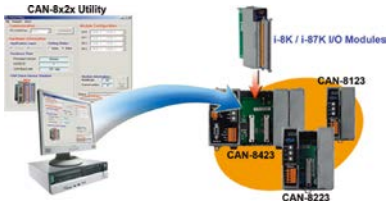
Introduction

The CAN-8423 main control unit is specially designed for the slave device of CANopen protocol. It follows the CANopen Spec DS-301 V4.02 and DSP-401 V2.1, and supplies many features for users, such as dynamic PDO, EMCY object, error output value, SYNC cyclic and acyclic ... etc. The CAN-8423 supports up to 4 slots for I/O expansion and suits with a lot of ICP DAS DI / AI / DO / AO modules. User can choose DI/DO/AI/AO modules of I-87K series or I-8000 series to fit the customized practice applications. In addition, we also provide CAN-8x23 Utility to allow users to create the EDS file dynamically.

Design Flowchart

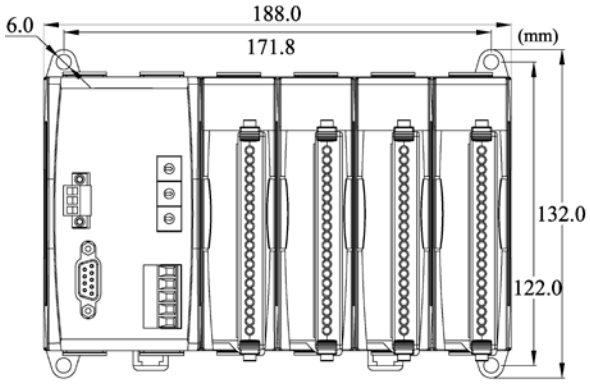


Utility Features

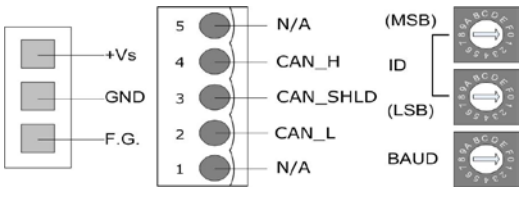


CAN-8x23 main unit can be plugged in the I-8K/I-87K IO modules to create a customized CANopen slave device and application. The CAN-8x23 Utility tool can configure the IO connection path, assembly and application objects information and create the EDS file of the device.

Dimensions



Pin Assignments



ID: Node ID Baud: Device Baud Rate

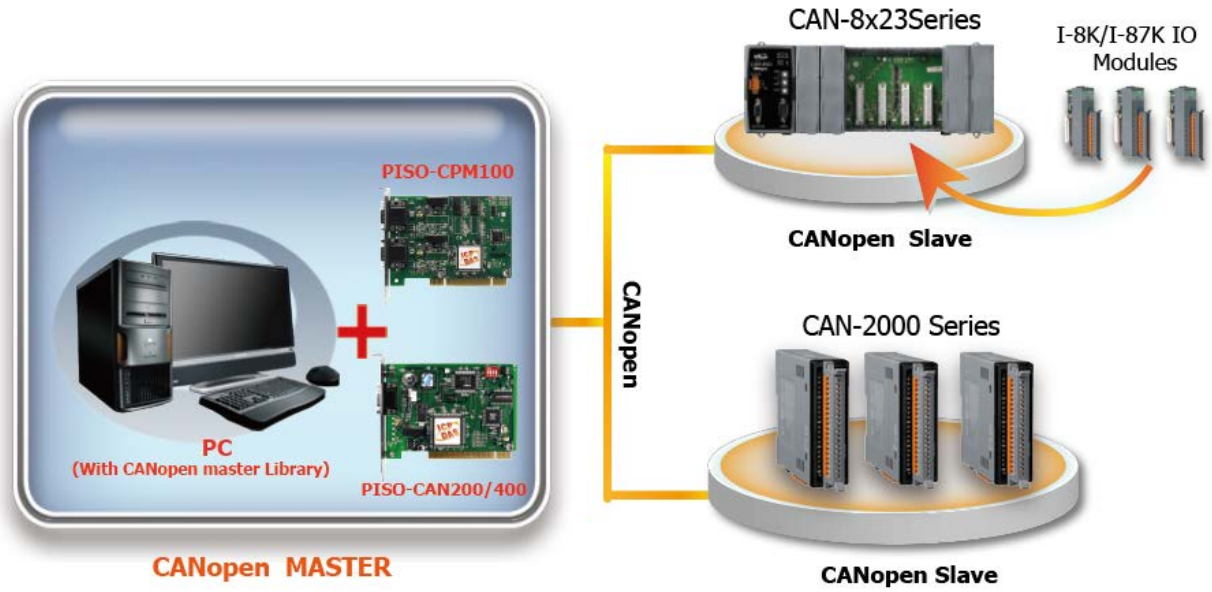
Rotary Switch Value	Baud rate (K BPS)
0	10
1	20
2	50
3	125
4	250
5	500
6	800
7	1000

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Specifications

Hardware	
CPU	80186, 80 MHz or compatible
SRAM/Flash/EEPROM	512 KB / 512 KB / 2 KB
NVRAM	31 bytes (battery backup, data valid for up to 10 years)
RTC (Real Time Clock)	Yes
Watchdog	Watchdog IC
Expansion Slot	4 slots
CAN Interface	
Controller	NXP SJA1000T with 16 MHz clock
Transceiver	NXP 82C250
Connector	5-pin screwed terminal block (N/A, CAN_L, CAN_SHLD, CAN_H, N/A)
Baud Rate (bps)	10 k, 20 k, 50 k, 125 k, 250 k, 500 k, 800 k, 1 M (By rotary switch)
Transmission Distance (m)	Depend on baud rate (for example, max. 1000 m at 50 kbps)
Isolation	3000 V_{DC} for DC-to-DC, 2500 Vrms for photo-couple
Terminal Resistor	Jumper for 120 Ω terminal resistor
Specification	ISO-11898-2, CAN 2.0A
Protocol	CANopen DS-301 ver4.02, DS-401 ver2.1
UART Interface	
COM 1	RS-232 (For configuration)
LED	
Round LED	PWR LED, RUN LED, ERR LED
Power	
Power supply	Unregulated +10 ~ +30 V_{DC}
Mechanism	
Dimensions	188mm x 132mm x 91mm (W x L x H)
Environment	
Operating Temp.	-25 ~ 75 °C
Storage Temp.	-30 ~ 80 °C
Humidity	10 ~ 90% RH, non-condensing

Application



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Ordering Information

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