I-9123

1 Port High Performance Intelligent CANopen Master Module

Features

- Standard CANopen specification CiA 301 v4.02
- Scan function for scanning all nodes on the same CANopen network
- Provide master listen mode
- Provide event trigger function for EMCY event, Node Guarding event and Heartbeat event
- Provide Event-triggered, remote-requested, cyclic and acyclic SYNC of PDO mode
- Allow dynamic PDO mapping
- The SDO communication supports segment protocol
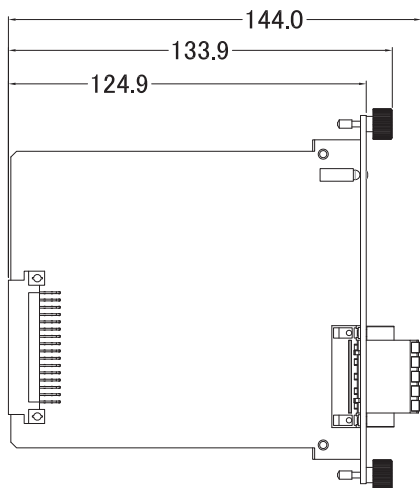- Support InduSoft Driver

Introduction

The I-9123 is a standalone CAN (Controller Area Network) controller, ideal for applications requiring distributed real-time control with high security. It is especially suited for networking intelligent devices, sensors, and actuators within a system or sub-system. Unlike conventional networks, the CAN protocol does not use direct addressing of devices but instead prioritizes messages. The I-9123 offers a cost-effective solution for CANopen applications, acting as a CANopen master device on a CAN bus. It adheres to the CiA 301 v4.02 standard and includes several communication service functions for interacting with slave devices on the network.

The module is equipped with an independent CAN bus communication port with a 5-pin screw terminal connector, supporting a wide range of CANopen applications. It is compatible with many 9000 series PACs, including the WP, XP, AXP, and EMP series, making it versatile for use in industrial automation, building automation, vehicle control, marine systems, and embedded networks.
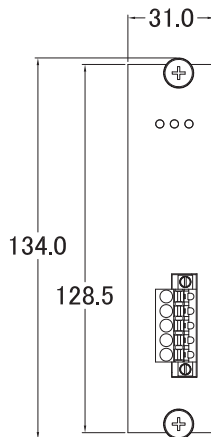
The CANopen master device also supports CANopen Motion Library, which follows the CiA-402 specification and supports the functions of position control, velocity control, torque control, synchronized control, etc. For more information, please refer to CANopen Motion Library webpage
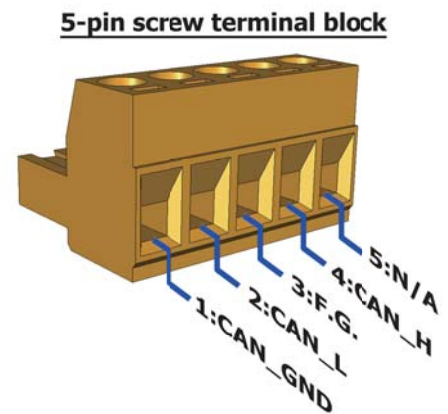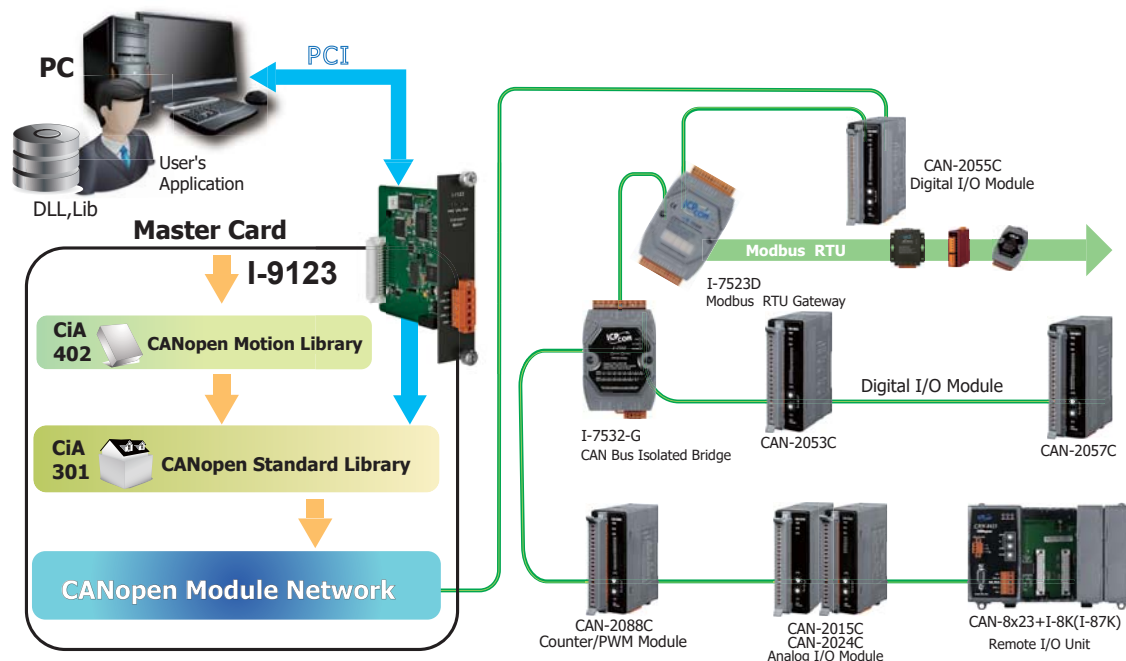
Dimensions (Units: mm)

Left View

Front View

Top View

Pin Assignments

5-pin screw terminal block

1:CAN_GND
2:CAN_L
3:F.G.
4:CAN_H
5:N/A

Applications

Specifications

Software	
Driver	WinPAC, XPAC, AXPAC, MPAC
SDK	VC++, VB.net, C#
CPU Module	
CPU	80186, 80 MHz or Compatible
EEPROM	16 KB
Flash	512
SRAM	512
Watchdog Timer	Hardware watchdog
LED Indicators	
Status	PWR LED, RUN LED, ERR LED
CANopen	
Controller	NXP SJA1000T with 16 MHz clock
Ports	1
Connector	5-pin screw terminal connector
Baud Rate	10 k ~ 1 M
Isolation	3000 VDC for DC-to-DC, 2500 Vrms for photo-couple
Terminal Resistor	Built-in 120
Protocol	CiA 301 v4.02
NMT	Master
Power	
Consumption	2 W
Mechanism	
Dimensions (mm)	31 x 91 x 115 (W x L x H)
Environment	
Operating Temp.	-25°C ~ +75°C
Storage Temp.	-30°C ~ +85°C
Humidity	10 ~ 90% RH, non-condensing

Ordering Information

I-9123 CR	1 Port High Performance Intelligent CANopen Master Module (RoHS)