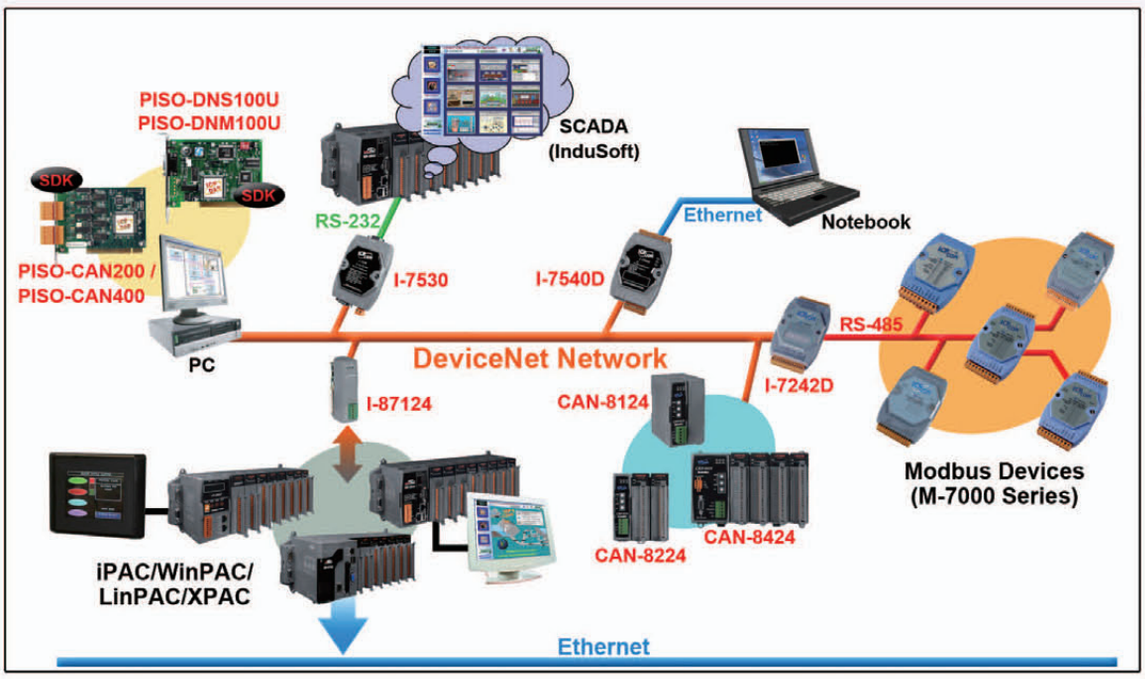
DeviceNet Series

DeviceNet based on the CAN bus is one of the world's leading device-level networks for industrial automation. In fact, more than 40% of end users surveyed by independent industry analysis report choose DeviceNet over other networks.

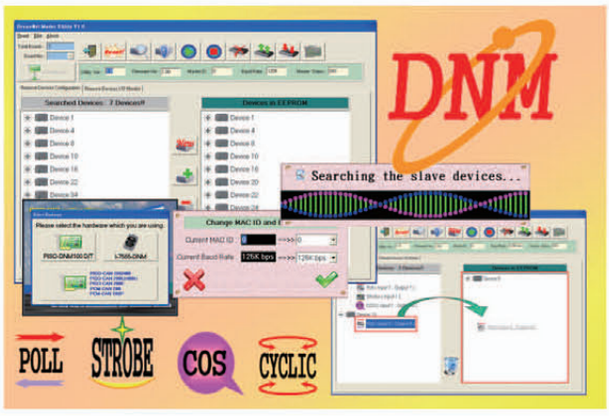
ICP DAS has been developing CAN based DeviceNet protocol products for several years, include PCI interface card, gateway, DeviceNet IO and DeviceNet module for ICP DAS's PACs — XPAC/WinPAC/LinCon/iPAC series main contol unit. We also help customers to resolve various DeviceNet network technology problems. In addition, we can provide DeviceNet solution for users. ICP DAS also holds DeviceNet conference, exhibition and training course all over the world.



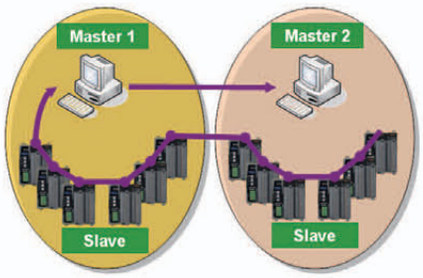
DeviceNet Series Key Features

- Comply with DeviceNet specification Volume I, Release 2.0 & Volume II, Release 2.0
- Support Group 2 Server and UCMM connection
- I/O Operating Modes: Poll, Bit-Strobe, Change of State / Cyclic
- Master series support Auto-Search function
- Master series provide input 512 bytes and output 512 bytes memory size for each slave
- Slave series support DeviceNet heartbeat and shutdown messages
- Slave series provide EDS file
- Selectable MAC ID (0 ~ 63) and baud rate (125, 250, 500 kbps)
- Built-in jumper or DIP switch for 120Ω terminator resistor of CAN bus
- Built-in watchdog
- 3000 V_{DC} isolation for DC-to-DC
- 2500 Vrms isolation on CAN bus

DeviceNet Master Utility



Multi-Master Feature



DeviceNet Series Selection Guide

	Product	Interface	Description	Page
Gateway	I-7241D	DeviceNet <--> DCON	DeviceNet Slave/DCON Master Gateway	3-03
	I-7242D	DeviceNet <--> Modbs RTU	DeviceNet Slave/Modbus RTU Master Gateway	3-05
	GW-7243D	DeviceNet <--> Modbus TCP / RTU	DeviceNet Slave/Modbus TCP,RTU Master Gateway	3-07
	GW-7434D	DeviceNet <--> Modbus TCP	DeviceNet Master/Modbus TCP Server Gateway	3-09
Master	I-7565-DNM	USB <--> DeviceNet master	USB/DeviceNet Master Converter	3-11
	I-87124	DeviceNet master	I-87K DeviceNet Master Module for XP/WP/VP series MCU	3-13
	I-8124W	DeviceNet master	I-8K DeviceNet Master Module for XP/WP/VP series MCU	3-15
	PISO-DNM100U	DeviceNet master	Built-in DeviceNet Master Firmware Universal PCI board	3-17
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Slave	PISO-DNS100U	DeviceNet slave	Built-in DeviceNet Slave Firmware Universal PCI board	3-19
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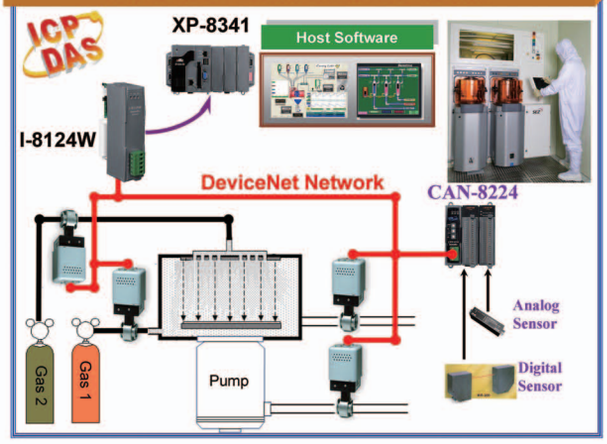
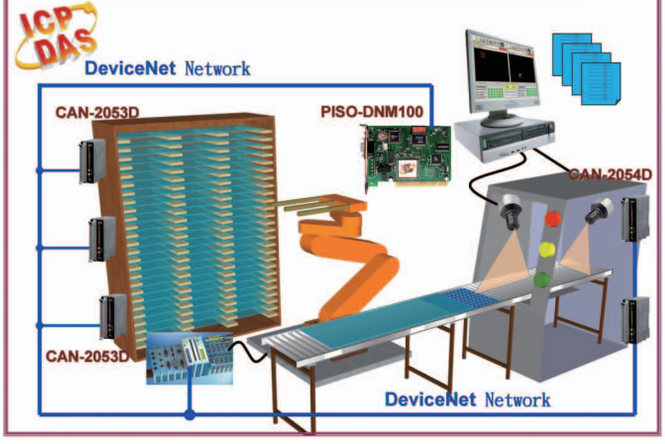
Application Stories

CVD/PECVD Semiconductor Machine



This system utilizes XP-8341 and I-8124W as the controlling center of the remote I/O devices. I-8124W provides DeviceNet master engine to collect the remote I/O data, including pneumatic valve “MKS 683” and Beckhoff DeviceNet I/O. XP-8341 exists an operating program to control the situation in the chamber. It is important to control the reacting time of the wafer in the chamber which have some kind of gas inside. After tuning timing and pressure parameter, this series equipment has been developed successfully and works in some semiconductor factories.

LCD Glass Inspection System



The system is to check that the LCD glass is good or not. Nowadays, the LCD is larger and larger. They need a system to check glass instead of human. There exists a DeviceNet network to control all remote I/O devices. The PC and PISO-DNM100U acts the DeviceNet master and accesses the remote device like sensor, barcode, robot and etc. There exists inspection software in the PC. It would make the robot to load the glass into the equipment. Complete inspecting the glass, the software would record the result of the glass and unload the glass. This system really helps finding defect glass and improving the quality of the product.