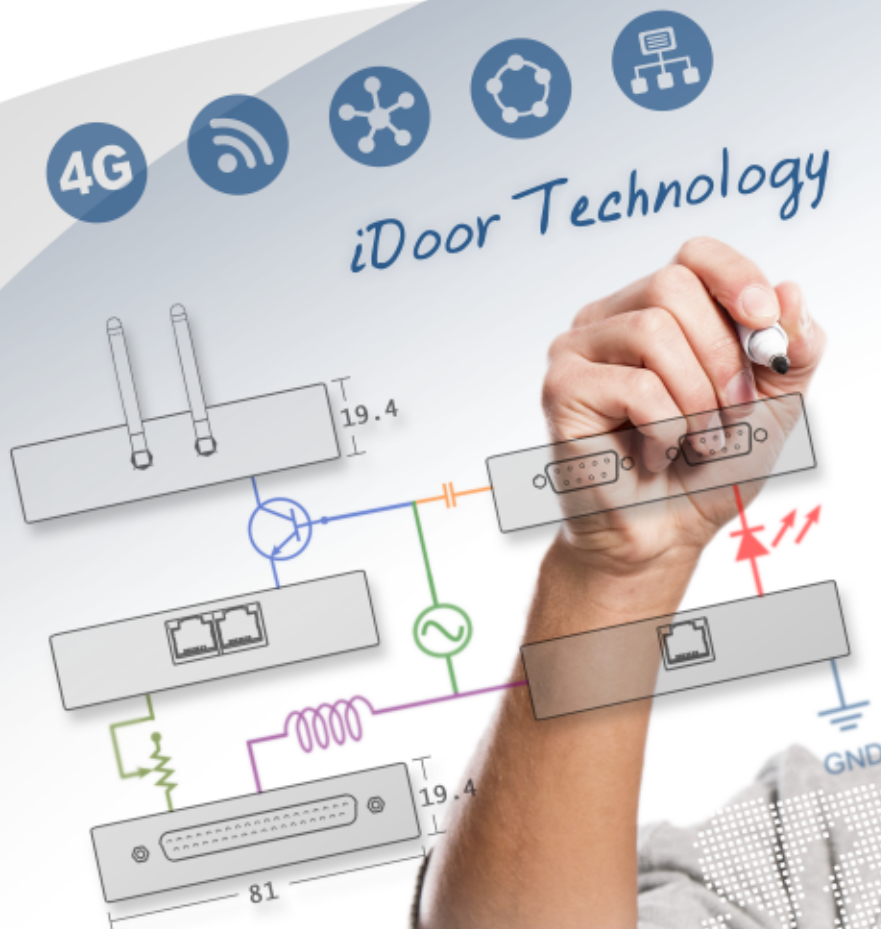


Advantech iDoor Technology

Standardized Interface Which Offers Flexible Expansion to System Functions Via a Variety of Modular I/Os



- Introduction
- Features & Functions
- Benefits & Advantages
- Selection Guide
- Naming Convention



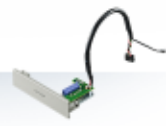
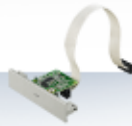
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Selection Guide

Memory/Storage/ External I/O

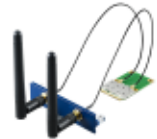


Model Name	PCM-2300MR	PCM-2300TP	PCM-23C1CF	PCM-23U1DG
Description	MR4A16B, MRAM, 2MByte	Trusted Platform Module (TPM)	CFast, Ejection Type I, CFast x 1	Internal Locked USB Slot for USB Dongle, USB x 1
Spec	<ul style="list-style-type: none"> 2MB MRAM Storage Speed 6 MB/Sec 	<ul style="list-style-type: none"> Compliant with TCG 1.2 Via LPC connector 	<ul style="list-style-type: none"> 1 port CFast I/O card CFast 3.0, Type I/II 	<ul style="list-style-type: none"> 1 port USB I/O card USB A type w/ lock



Communication

Model Name	PCM-24D2R4	PCM-24D2R2	PCM-24D4R4	PCM-24D4R2	PCM-24R2PE	PCM-24R2GL
Description	OXPCle952 UART, Isolated RS-422/485, DB9 x 2	OXPCle952 UART, Isolated RS-232, DB9 x 2	OXPCle954 UART, Non-Isolated RS-422/485, DB37 x 1	OXPCle954 UART, Non-Isolated RS-232, DB37 x 1	Intel i350, GbE, PoE IEEE 802.3af, PD, RJ45 x 2	Intel i350 PCIe, GbE, IEEE 802.3ab, RJ45 x 2
Spec	<ul style="list-style-type: none"> 2000Vdc isolation protection RTS/CTS/Xon/Xoff flow control 		<ul style="list-style-type: none"> Non isolation 4 COM ports 50 bps ~ 921.6 kbps serial speed(RS-422/485) 		<ul style="list-style-type: none"> 2 port PoE (Power Over Ethernet) Singel port 15.4W of DC power 	<ul style="list-style-type: none"> 2 port GbE LAN Intel i350



Model Name	PCM-24R1TP	PCM-24U2U3	PCM-24S2WF	PCM-24S23G	PCM-24S24G
Description	Intel 82574L, GbE, IEEE 1588 PTP, RJ45 x 1	USB 3.0 mPCIe Express Card, USB x 2	Atheros AR9462, 802.11 a/b/g/n 2T2R w/ BT4.0, SMA x 2	6-band HSPA Cellular Module, GPS, SIM Holder, SMA x 2	LTE Bands, UMTS/HSPA Bands, GPS/GPRS Bands, SMA x 2
Spec	<ul style="list-style-type: none"> 1 port GbE LAN IEEE 1588 precision time protocol ready 	<ul style="list-style-type: none"> 2 port USB 3.0 USB A type 	<ul style="list-style-type: none"> Atheros AR9462 802.11 a/b/g/n 2T2R w/ Bluetooth 4.0 	<ul style="list-style-type: none"> 3.75G HSPA+GPS 2 SIM holders with switch for redundancy 	<ul style="list-style-type: none"> LTE/UMTS/HSPA GPS/GPRS bands 2 SIM holders with switch for redundancy



Fieldbus Protocol

Model Name	PCM-26D2CA	PCM-26D1PB
Description	SJA1000 CANBus, CANOpen, DB9 x 2	Hilscher netX100 FieldBus, ProfiBus, DB9 x 1
Spec	<ul style="list-style-type: none"> CAN 2.0 A/B 1Mbps, 16MHz 	<ul style="list-style-type: none"> Hilscher netX100 9.6kbps~12Mbps

Digital/ Analog I/O



Model Name	PCM-27D24DI
Description	Digital I/O, 16 DI / 8 DO, Isolation, DB37 x 1
Spec	<ul style="list-style-type: none"> 16DI, 8DO 2500Vdc isolation protection

Naming Convention

PCM - 2 6 D 2 C A

Category

23-Memory / Storage / External I/O
24-Communication
25-Display
26-Fieldbus
27-Digital/Analog I/O

Connector

R-RJ45 C-CFast
D-DB9 S-SMA/DFP/SD
U-USB H-HDMI/DP

Port

0-No Connector
1-One Connector
2-Two Connectors

Function

PB-ProfiBus
PN-ProfiNet
EI-Ethernet/IP
EC-EtherCAT
AB-APAXBus

CA-CANOpen
PL-PowerLink
WF-WiFi/BT
3G-3G/GPS
ZB-ZigBee

OF-Optical Fiber
PE-PoE
TP-Precision Time Protocol
DC-Daisy-Chain
MR-MRAM

DI-Digital I/O
AI-Analog I/O
R4-Multi-drop RS-422/485
R2-Single-ended RS-232
ID-Intelligent Displays

U3-USB 3.0
HD-HDMI
4G-4G/LTE
DG-Dongle
GL-Gigabit LAN



Advantech iDoor Technology

iDoor Technology

Leading Industrial PC Trends

Advantech's innovative iDoor Technology is a new modular way of adding flexible functionality to a wide range of devices. iDoor Technology gives system integrators the flexibility to choose functions they need without purchasing costly extra devices with functions they'll never use. By using standardized components and interfaces, integrators can leverage current state-of-the-art technologies as well as up and coming IPC trends. For instance, as embedded operating systems improve and higher performance storage methods become widely available, the IPC supplier is able to seamlessly integrate them into the product line for their customers.

Simple, Flexible, Reliable



The optimized mechanism design simplify iDoor with I/O plate, I/O module and mPCIe card. It makes it easier to assemble and install. Modular design makes iDoor high flexibility for any configuration. With Advantech's rugged and strict design and comprehensive testing, iDoor provides a reliable offering.

Easy Maintenance



With Advantech's iDoor mechanical design, the user finds it easy to install iDoor into many kinds platform and fixes into the chassis. iDoor also provides a standard cable for internal cable routing and management. With the captive screw and locked USB which is easy for users to maintain.

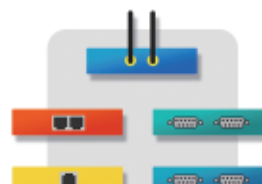
Standard Interface



The standard dimensions of the 81 x 19.4 mm I/O plate with mPCIe interface supports the following models:

- Embedded DIN-Rail Controller: UNO-1000 series
- Embedded Automation PC: UNO-2000 series
- Embedded BOX IPC: UNO-3000 series
- Embedded Automation Panel: TPC series

Versatile Color Identification



For easy identification, iDoor has opted to use a color convention that represents the primary colors of their logos. For Example, the red is the most obvious color for EtherCAT logo, so the I/O plate color is defined as PANTONE 1795C and the black is the representative color of the POWERLINK logo, consequently, we used a black a plate.

Integration of Multiple Functions



With the versatile functionality of iDoor, the system is suitable for different vertical applications. iDoor application modules include memory/storage/external I/O, Fieldbus protocol (Ethernet/IP, Profibus, Profinet, EtherCAT, Powerlink, and so on), communications WAN / MAN / LAN and digital / analog I/O.

Fast-customization



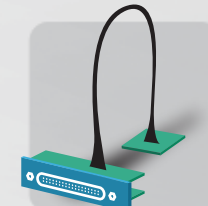
The opensource nature of this technology allows system integrators to develop their own mPCIe card, their own exclusive iDoor functions, and even iDoor shell colors (eg: combining company Logo), to shape their brand images through color recognition. For those key accounts, they can integrate industry expertise in automation applications via iDoor.

Supports Different Platforms



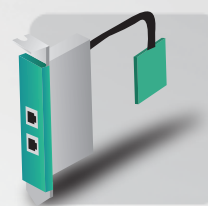
iDoor Technology is not only designed to work exclusively with Advantech's products but also gives system integrators the ability to use iDoor modules on any industrial PC that has a spare PCIe slot. With the extended plate and adapter solution, it will suitable for the IPC platform. The flexible design will make iDoor fulfill any other 3rd party uses.

iDoor I/O Plate with mPCIe Card



An iDoor module uses a mini PCIe slot embedded on the motherboard. Most market requirements can be fulfilled by mPCIe card suppliers.

PCI/PCIe I/O Plate with mPCIe Card



For users who have standard IPC on hand but need expansion, we provide the optimization plate that customers can utilize to enlarge the expansion through the mPCIe interface.

PCI/PCIe I/O Plate with mPCIe Card in PCIe Adapter Card



Some customers need more expansion but are limited by the number of available mPCIe slots. We provide a PCIe adapter which gives an additional mPCIe slot which connects through an existing PCIe slot to maximize the expansion.