Advantech iDoor Technology

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

iDoor Technology

ADVANTECH

Enabling an Intelligent Planet

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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	• 2MB MRAM Storage • Speed 6 MB/Sec	• Compliant with TCG 1.2 • Via LPC connector	• 1 port CFast I/O card • CFast 3.0, Type I/II	• 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	OXPCIe952 UART, Isolated RS-422/485, DB9 x 2	OXPCIe952 UART, Isolated RS-232, DB9 x 2	OXPCIe954 UART, Non-Isolated RS-422/485, DB37 x 1	OXPCIe954 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	• 2000Vdc isolation protection • RTS/CTS/Xon/Xoff flow control		• Non isolation 4 COM ports • 50 bps ~ 921.6 kbps serial speed(RS-422/485)		• 2 port PoE (Power Over Ethernet) • Singel port 15.4W of DC power	• 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	• 1 port GbE LAN • IEEE 1588 precision time protocol ready	• 2 port USB 3.0 • USB A type	• Atheros AR9462 • 802.11 a/b/g/n 2T2R w/ Bluetooth 4.0	• 3.75G HSPA+GPS • 2 SIM holders with switch for redundancy	• 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	• CAN 2.0 A/B • 1Mbps, 16MHz	• 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	• 16DI, 8DO • 2500Vdc isolation protection

Naming Convention

PCM - 26 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-Eithernet/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's innovativ
devices. iDoor Techno
costly extra devices wi
integrators can leverag
instance, as embedded
become widely availab
line for their customer

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 c
that represents the primary colors of their logos. I
red is the most obvious color for EtherCAT logo, s
color is defined as PANTONE 1795C and the black
representative color of the POWERLINK logo, cons
used a black a plate.

iDoor Technology

Industrial PC Trends

e iDoor Technology is a new modular way of adding flexible functionality to a wide range of
ogy gives system integrators the flexibility to choose functions they need without purchasing
th functions they'll never use. By using standardized components and interfaces,
e current state-of-the-art technologies as well as up and coming IPC trends. For
l operating systems improve and higher performance storage methods
e, the IPC supplier is able to seamlessly integrate them into the product
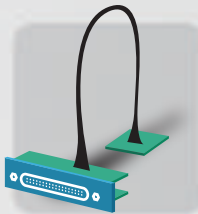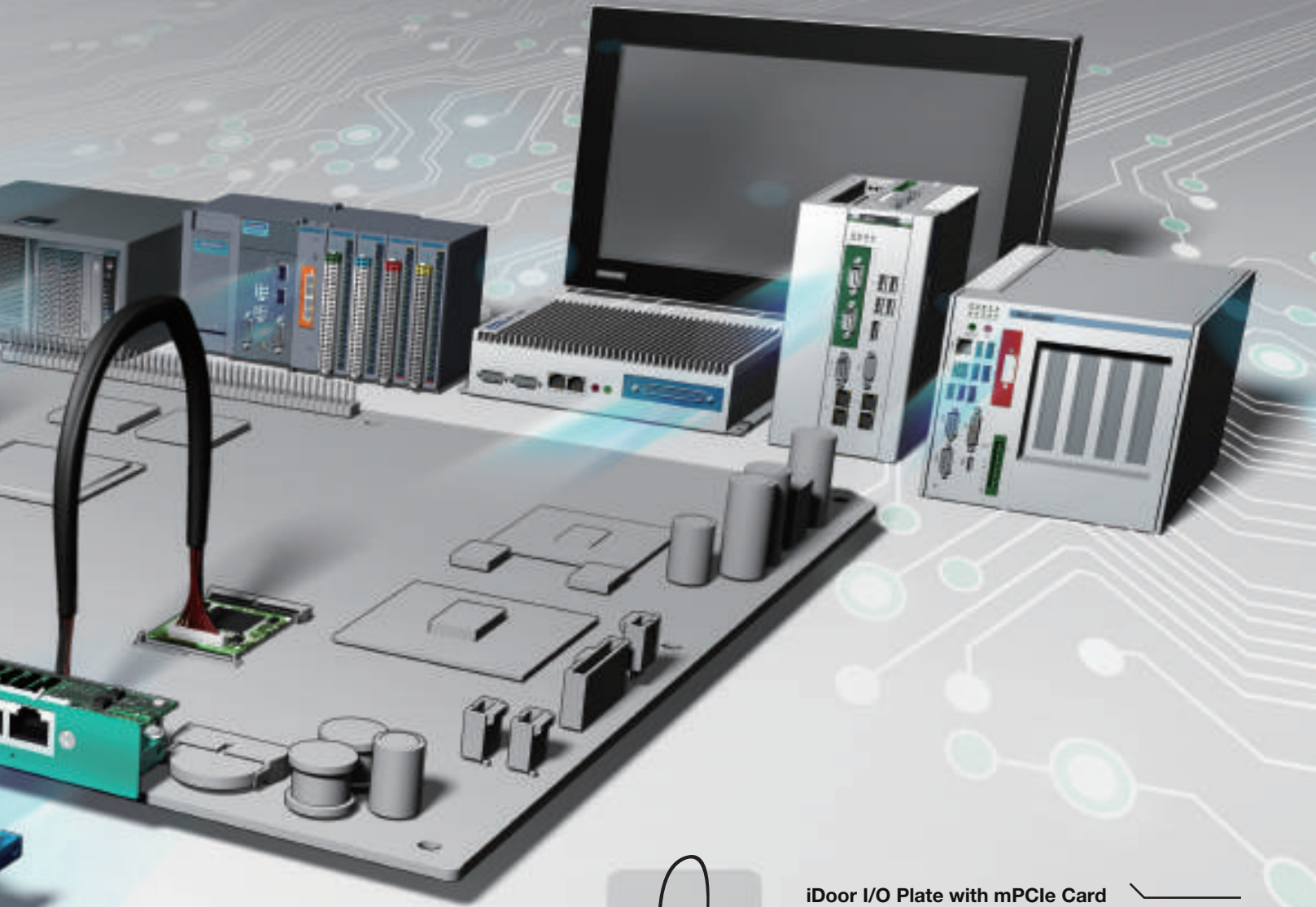
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Integration of Multiple Functions

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.

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.

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.
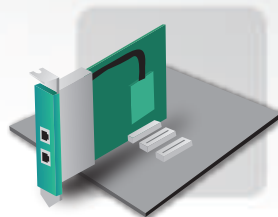
PCI/PCIe I/O Plate with mPCIe Card

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.

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.

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.

Advantech Innovative Design Concept- Simple, Flexible, Reliable

As a leading provider of Industrial PC, Advantech devoted to innovation product/service development. To be the pioneer in intelligent automation technology, the i-concept represents the intelligent, integrated and intuitive design which covers the innovation of service model, user behavior and cutting-edge technology that opens a new era of industrial automation.

iKey

An integrated intelligent key brings simplified intuitive operation for configuring your automation panel. With a flexible software design, customized functions are easier to carry out.

iDoor

A standardized modular Interface which offers flexible expansion to increase the number of applications and expand system functions through the variety of standardized modular I/Os.

iLink

A Reliable Long Distance Transmission Technology which transfers video signals and touch control over a single Ethernet cable which overcomes interference in harsh environments not only for data connections, but also for a cost effective multiple display solution.

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More Information

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