PCM-27D24DI

24-Channel Isolated Digital I/O w/ Counter mPCIe, DB37

NEW

iD••r RoHS COMPLIANT 2002/95/EC CE FCC
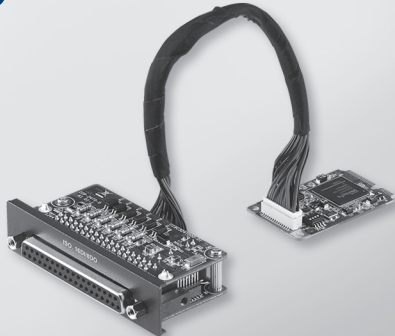
Features

- Meets Advantech iDoor technology standard
- PCI Express® Mini card specification revision 1.2 compliant
- Supports wide-input/output voltage (10-30 V_{DC}/5-30 V_{DC})
- High over-voltage-protection (70 V_{DC}) and voltage isolation (2,500 V_{DC})
- Easy configuration & efficient programming by Advantech DAQNavi
- I/O address automatically assigned by PCIe plug & play
- Keeps the output settings and values after system hot reset
- Supports embedded automation PC UNO-2200/2300/2400 series
- Supports control DIN-Rail PC UNO-1300/1400 series
- Supports control cabinet PC UNO-3200/3300/3400 series
- Supports control panel computers TPC-xx81/xx82 series
- Supports thin client panel computers TPC-xx51 series

Introduction

The PCM-27 series are digital input/output modules from Advantech iDoor Technology. They are all compatible with the PCI Express® Mini Card Specification Revision 1.2, including isolated / non-isolated RS-232/422/485 communication cards for automation control, Wi-Fi/3G/GPS/GSM/LTE wireless communication models for data exchange for management and machine level automation applications; the ZigBee module serves as an IoT terminal or controller, and PoE function for smart cameras in detection-inspection-production applications. This is a flexible design that enables customers to customize their features with iDoor Technology.

Specifications

General

- **Bus Type** — PCI Express Mini Card Revision 1.2
- **Certification** — CE, FCC class A
- **Connectors** — 1 x Female DB37
- **Dimensions** — Module: 51 x 30 x 12.4 mm (2" x 1.18" x 0.49")
  I/O Plate: 81 x 19.4 x 41 mm (3.19" x 0.76" x 1.61")
- **Power Consumption** — Typical: +3.3 V @ 400 mA
  Max.: +3.3V @ 520 mA

Isolated Digital Input

- **Input Channels** — 16
- **Input Voltage (Wet Contact)** — Logic 0: 0~3 V_{DC}
  Logic 1: 10~30 V_{DC}
- **Input Voltage (Dry Contact)** — Logic 0: Open
  Logic 1: Shorted to GND
- **Input Current** — 10 V_{DC} @ 2.97 mA
  20 V_{DC} @ 6.35 mA
  30 V_{DC} @ 9.73 mA
- **Input Resistance** — 5K Ohm
- **Interrupt Capable Channels** — 2 (IDI0, IDI8)
- **Isolation Protection** — 2,500 V_{DC}
- **Overvoltage Protection** — 70 V_{DC}
- **ESD Protection** — 4KV (Contact), 8KV (Air)
- **Opto-Isolator Response** — 50 µs

Isolated Digital Output

- **Output Channels** — 8
- **Output Type** — MOSFET
- **Isolation Protection** — 2,500 V_{DC}
- **Output Voltage** — 5 ~ 30 V_{DC}
- **Sink Current** — 100 mA max./channel
- **Opto-isolator** — Response 50 µs

Counter

- **Channels** — 2
- **Resolution** — 32 bits
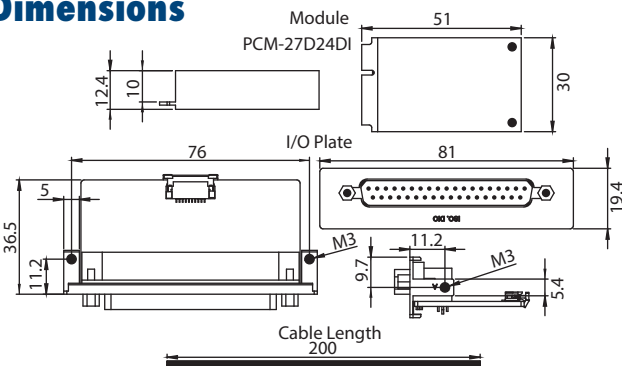- **Max. Input Frequency** — 1 kHz

Software

- **Tools & Drivers** — Advantech DAQNavi Tools & API Drivers
- **OS Support** — Microsoft® Windows® XP/7/8
  Linux Ubuntu 14.04, OpenSUSE 13.1, Fedora 20, Debian 6.08, Red Hat 6.5

Environment

- **Humidity (Operating)** — 5-95% RH, non-condensing
- **Operating Temperature** — -20 ~ 60°C (-4 ~ 140°F)
- **Storage Temperature** — -40 ~ 85°C (-40 ~ 185°F)

Dimensions

Module PCM-27D24DI — 51, 12.4, 10, 30

I/O Plate — 76, 81, 5, 36.5, 11.2, 9.7, 11.2, M3, M3, 19.4, 5.4

Cable Length 200

Ordering Information

- **PCM-27D24DI-AE** — Iso. Digital I/O, 16DI/8DO, mPCIe, DB37 x 1

Accessories

- **PCL-10137-1E** — DB-37 Shielded Cable, 1m
- **PCL-10137-2E** — DB-37 Shielded Cable, 2m
- **PCL-10137-3E** — DB-37 Shielded Cable, 3m
- **ADAM-3937-BE** — DB-37 Wiring Terminal, DIN-rail Mount

Last updated: 27-Jun-2018