

# PCM-37D24DI

24-Channel Isolated Digital I/O, M.2 B+M key (3042, PCIe\*1), DB37

NEW



## Features

- Meets Advantech iDoor technology standard
- M.2 2242 B+M Key compliant (PCI Express)
- Supports wide-input/output voltage (10-30 V<sub>DC</sub>/5-30 V<sub>DC</sub>)
- High over-voltage-protection (70 V<sub>DC</sub>) and voltage isolation (2,500 V<sub>DC</sub>)
- Easy configuration & efficient programming by Advantech DAQNav
- I/O address automatically assigned by PCIe plug & play
- Keeps the output settings and values after system hot reset
- Compatible with embedded automation PC UNO-1/2/3/4 series
- Compliant with FCC/CE Class A Certification
- Operation temperature 0~60 degree support

## Introduction

The PCM-37D24DI is a DIO (Digital Input/Output) port that allows devices to send and receive binary signals for communication and control in various applications. It enables effective control and communication and is widely used in automation, data acquisition, and control systems to efficiently manage and monitor external devices.

This is a flexible design that enables customers to customize their features with iDoor Technology.

## Specifications

### General

- Bus Type** M.2 3042 B+M Key compliant
- Interface** PCIe Express
- Certification** CE, FCC class A
- Connectors** 1 x Female DB37
- Dimensions** Module: 42 x 30 x 10 mm (1.65" x 1.18" x 0.39")  
I/O Plate: 81 x 41 x 19.4 mm (3.19" x 1.61" x 0.76")  
Typical: +3.3 V @ 400 mA  
Max.: +3.3V @ 520 mA
- Power Consumption**

### Isolated Digital Input

- Input Channels** 16
- Input Voltage (Wet Contact)** Logic 0: 0~3 V<sub>DC</sub>  
Logic 1: 10~30 V<sub>DC</sub>
- Input Voltage (Dry Contact)** Logic 0: Open  
Logic 1: Shorted to GND
- Input Current** 10 V<sub>DC</sub> @ 2.97 mA  
20 V<sub>DC</sub> @ 6.35 mA  
30 V<sub>DC</sub> @ 9.73 mA
- Input Resistance** 5K Ohm
- Isolation Protection** 2,500 V<sub>DC</sub>
- Overvoltage Protection** 70 V<sub>DC</sub>
- ESD Protection** 4KV (Contact), 8KV (Air)
- Opto-Isolator Response** 100 µs

### Isolated Digital Output

- Output Channels** 8
- Output Type** MOSFET
- Isolation Protection** 2,500 V<sub>DC</sub>
- Output Voltage** 5 ~ 30 V<sub>DC</sub>
- Sink Current** 100 mA max./channel
- Opto-isolator** Response 50 µs

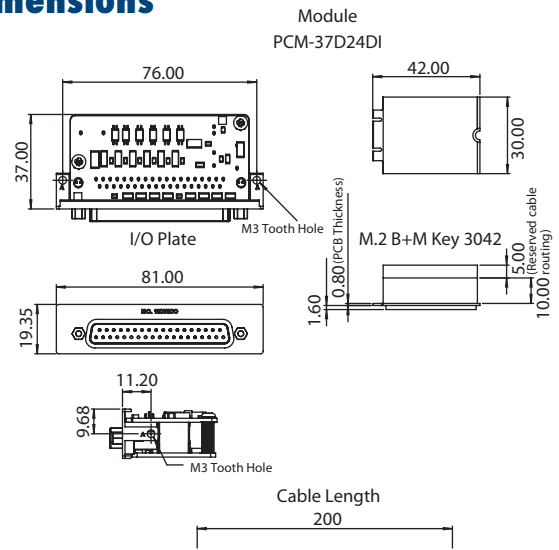
### Software

- Tools & Drivers** Advantech DAQNav 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

- Operating Humidity** 10 ~ 95% RH @ 40 °C/104 °F, non-condensing
- Operating Temperature** 0 ~ 60°C (32 ~ 140°F)
- Storage Temperature** -20 ~ 80°C (-4 ~ 176°F)

## Dimensions



## Ordering Information

- PCM-37D24DI-AE** Iso. Digital I/O, 16DI/8DO, M.2 B+M key (3042, PCIe\*1), 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