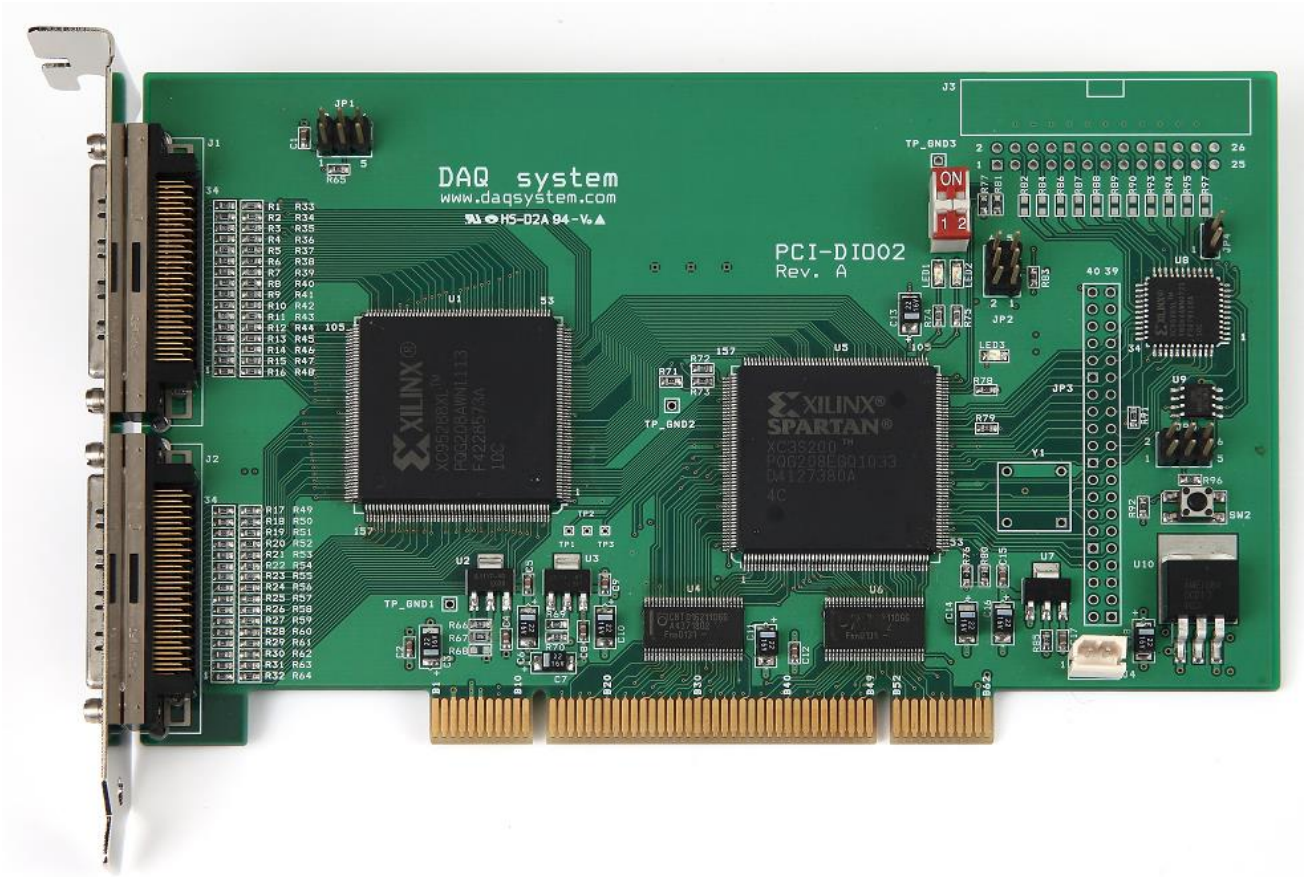
PCI-DIO02

API Manual

Version 1.0



DAQ SYSTEM
Measurement & Automation

Contents

Board Level API Functions

OpenDAQDevice ---------- **3**
ResetBoard ---------- **3**
CloseDAQDevice ---------- **4**

DIO(Digital Input Output) API Functions

DIN_Read ---------- **5**
Set_Direction ---------- **5**
DOUT_Read ---------- **6**
DOUT_Write ---------- **6**
Get_Direction ---------- **7**

Board Level API Functions

Overview

BOOL **OpenDAQDevice (int nModel, int nBoard)**

BOOL **ResetBoard (int nModel, int nBoard)**

BOOL **CloseDAQDevice (int nModel, int nBoard)**

OpenDAQDevice

This function opens the device. In the program using the PCI-DIO series board, the device must be opened by calling the function once at the beginning.

BOOL **OpenDAQDevice (int nModel, int nBoard)**

Parameters:

nModel : Write down the PCI-DIO02 model number. from 0 to 3

nBoard : Shows the board number currently installed in the system.
The board number is set using the DIP switch of the board.

Return Value:

If device open is successful, the number of devices currently installed in the system (PC) is returned. In case of failure, "-1" is returned.

ResetBoard

This function initializes the device currently installed in the system (PC).

BOOL **ResetBoard (int nModel, int nBoard)**

Parameters:

nModel : Write down the PCI-DIO02 model number. from 0 to 3

nBoard : Shows the board number currently installed in the system.
The board number is set using the DIP switch of the board.

Return Value:

If the function call fails, "FALSE" is returned.

If the function call succeeds, "TRUE" is returned.

CloseDAQDevice

This function closes all open PCI-DIO series devices. When the use of the device is finished, be sure to close the device so that other programs can use it.

BOOL CloseDAQDevice (int nModel, int nBoard)

Parameters:

nModel : Write down the PCI-DIO02 model number. from 0 to 3

nBoard : Shows the board number currently installed in the system.
The board number is set using the DIP switch of the board.

Return Value:

If the function call fails, "FALSE" is returned.

If the function call succeeds, "TRUE" is returned.

DIO(Digital Input Output) API Functions

Overview

BOOL DIN_Read (int nModel, int nBoard, int nReg, DWORD *wVal)
BOOL Set_Direction (int nModel, int nBoard, BYTE byVal)
BOOL DOUT_Read (int nModel, int nBoard, int nReg, WORD *wVal)
BOOL DOUT_Write (int nModel, int nBoard, int nReg, WORD wVal)
BOOL Get_Direction (int nModel, int nBoard, BYTE *byVal)

DIN_Read

This function reads the input value.
(According to direction setting, 0~127 Digital input is received.)

BOOL DIN_Read (int nModel, int nBoard, int nReg, WORD *wVal)

Parameters:

nModel : Write down the PCI-DIO02 model number. from 0 to 3
nBoard : Shows the board number currently installed in the system.
The board number is set using the DIP switch of the board.
nReg : It was prepared for future expansion.
It is not currently used, but must be set to '0'.
*wVal : It is a variable from which to read the current value of the input port.

Return Value:

If the function call fails, "FALSE" is returned.
If the function call succeeds, "TRUE" is returned.

Set_Direction

This function sets whether to use each port from 0 to 127 as input or output.

BOOL Set_Direction (int nModel, int nBoard, BYTE byVal)

Parameters:

nModel : Write down the PCI-DIO02 model number. from 0 to 3
nBoard : Shows the board number currently installed in the system.
The board number is set using the DIP switch of the board.
byVal : Input/output direction setting value. '1' output / '0' input on each port

Return Value:

If the function call fails, "FALSE" is returned.
If the function call succeeds, "TRUE" is returned.

DOUT_Read

This function reads the output current value.

BOOL DOUT_Read (int nModel, int nBoard, int nReg, WORD *wVal)

Parameters:

nModel : Write down the PCI-DIO02 model number. from 0 to 3

nBoard : Shows the board number currently installed in the system.
The board number is set using the DIP switch of the board.

nReg : It was prepared for future expansion.
It is not currently used, but must be set to '0'.

*wVal : It is a variable from which to read the current value of the output port.

Return Value:

If the function call fails, "FALSE" is returned.

If the function call succeeds, "TRUE" is returned.

DOUT_Write

This function outputs the desired value to the output port.
(According to the direction setting, 0~127 digital output is possible.)

BOOL DOUT_Write (int nModel, int nBoard, int nReg, WORD wVal)

Parameters:

nModel : Write down the PCI-DIO02 model number. from 0 to 3

nBoard : Shows the board number currently installed in the system.
The board number is set using the DIP switch of the board.

nReg : It was prepared for future expansion.
It is not currently used, but must be set to '0'.

wVal : The value to write to the output port.

Return Value:

If the function call fails, "FALSE" is returned.

If the function call succeeds, "TRUE" is returned.

Get_Direction

This function reads the currently set direction value.

BOOL Get_Direction (int nModel, int nBoard, BYTE *byVal)

Parameters:

nModel : Write down the PCI-DIO02 model number. from 0 to 3

nBoard : Shows the board number currently installed in the system.
The board number is set using the DIP switch of the board.

*byVal : Variable from which to read input/output direction.

Return Value:

If the function call fails, "FALSE" is returned.

If the function call succeeds, "TRUE" is returned.

Memo

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