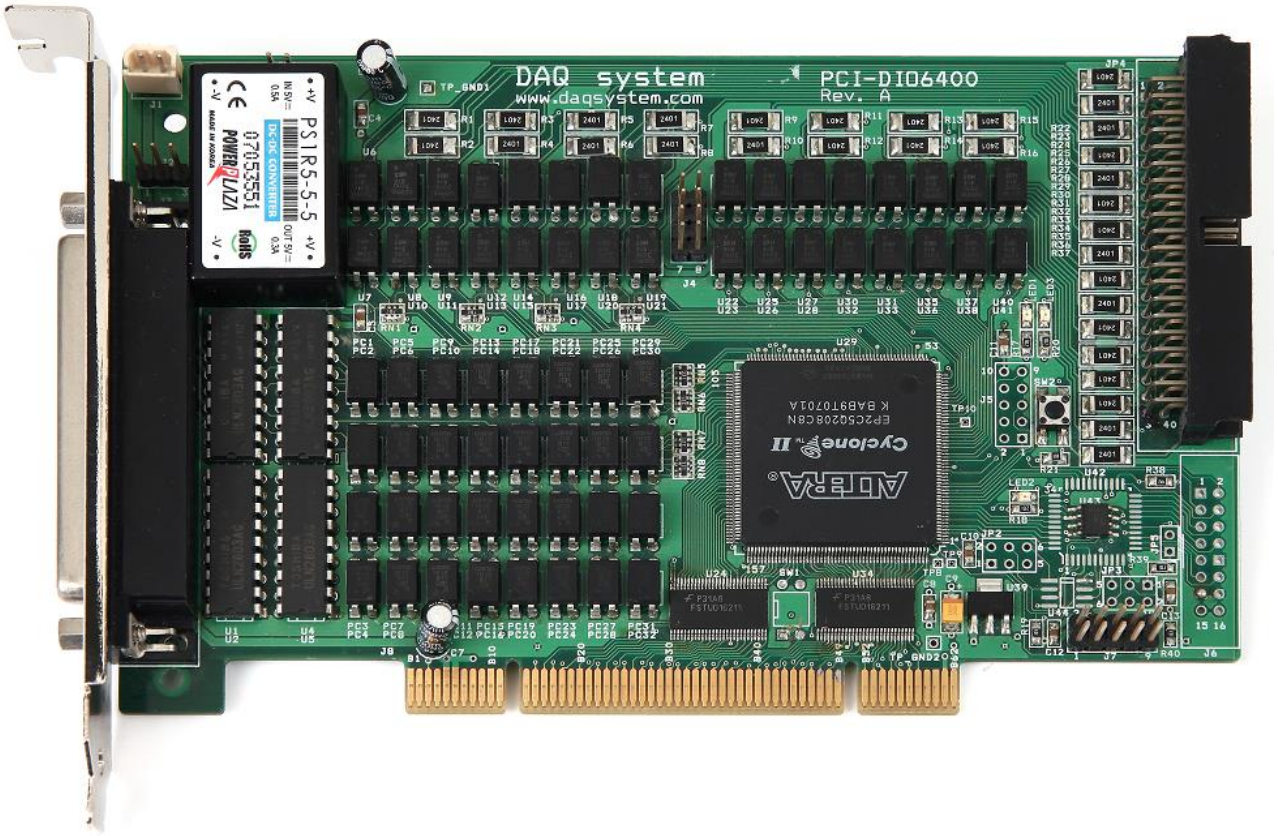
(c)PCI-DIO6400/01/02

API Manual

Version 1.0



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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 (c)PCI-DIO64xx 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 (c)PCI-DIO64xx series 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 (c)PCI-DIO64xx series 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 (c)PCI-DIO64xx 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 (c)PCI-DIO64xx series 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 *dwVal)

BOOL DOUT_Write (int nModel, int nBoard, int nReg, DWORD dwVal)

BOOL DOUT_Read (int nModel, int nBoard, int nReg, DWORD *dwVal)

BOOL Set_LED_Mode (int nModel, int nBoard, int nReg, int nMode)

DIN_Read

This function reads 32bit or 64bit digital input value.

BOOL DIN_Read (int nModel, int nBoard, int nReg, DWORD *dwVal)

Parameters:

nModel : Write down the (c)PCI-DIO64xx series 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'.

*dwVal : A pointer to 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.

DOUT_Write

This function outputs a 32-bit or 64-bit digital value to the output port.

BOOL DOUT_Write (int nModel, int nBoard, int nReg, DWORD dwVal)

Parameters:

nModel : Write down the (c)PCI-DIO64xx series 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'.

dwVal : 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.

DOUT_Read

This function reads the current value of the output port as 32bit or 64bit.

BOOL DOUT_Read (int nModel, int nBoard, int nReg, DWORD *dwVal)

Parameters:

nModel : Write down the (c)PCI-DIO64xx series 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'.

*dwVal : A pointer to 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.

Set_LED_Mode

This function displays the current input/output value with LED on the front panel, and you can set which value to display.

(Note) Only in case of Compact PCI board, there are 16 LED indicators on the front panel, so it is effective. In case of PCI board, this function is not used.

BOOL Set_LED_Mode (int nModel, int nBoard, int nReg, int nMode)

Parameters:

nModel : Write down the (c)PCI-DIO64xx series 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'.

nMode : Set the value to be output to the LED.

0 : Input 15 to 0

1: Inputs 31 to 16

2: Output from 15 to 0

3: Outputs 31 to 16.

(Note) Do not use values not defined above.

Return Value:

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

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

Memo

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