6 – HOW TO USE THE PITC4641 AS A REPLACEMENT FOR THE PDIO484 BOARD

6.1 Introduction

UNIFLOW-200 hardware and firmware are permanently improved by the manufacturer.

A new PITC4641 pulse input board has been introduced, and the previous PDIO484 pulse input board has been discontinued as of 01.01.2023.

This document describes how to use PITC4641 board instead of PDIO484 board.

6.2 Firmware compatibility

To implement and use features, procedures described in this document firmware version required:

230301 or higher.

6.3 Differences between PITC4641 and PDIO484 boards

The available signal channels in the two boards are as follows:

| Signal channel	PITC4641	PDIO484
Pulse/frequency input	4	4
Digital input	6	8
Digital output	4	4
Pulse output	1	none

Instead of the last 2 digital inputs one pulse output channel is available on the PITC4641 board.

The pulse output channel can repeat the pulse train received on any of the pulse input channels. It is usually utilized in the proving application.

6.4 Differences in parametrization

In the UNISetup program the relevant parameters will be displayed for both type of boards, as show below.

In the new parameter projects PITC4641 shall be selected as type of the board and the parameters will be set up for this type.
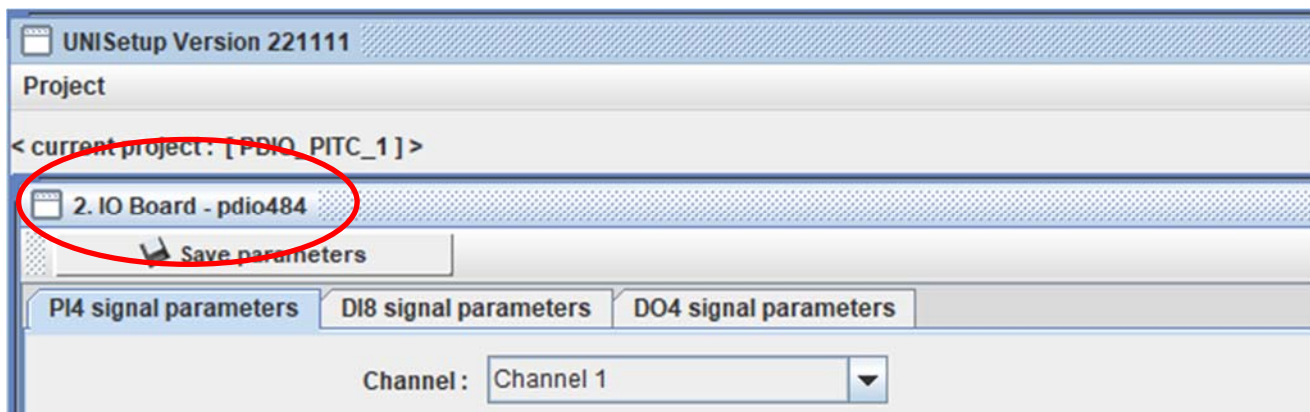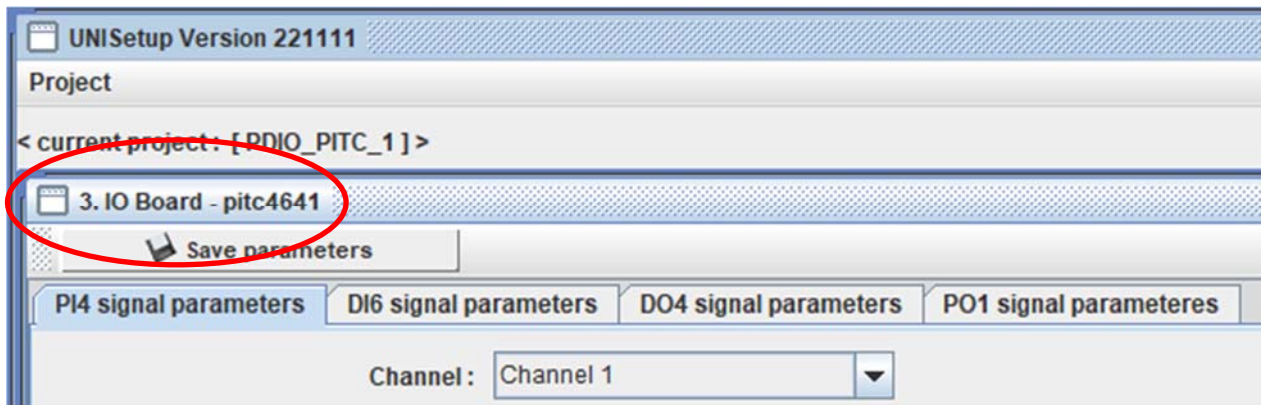
Existing parameter projects with PDIO484 board parameters will also work with the PITC4641 board without any modification.

If one has a project for a certain application with PDIO484 board and replaces the DPIO484 board with PITC4641 board, or, want to utilize the parameter project in a new UNIFLOW-200 supplied with PITC4641 board, the existing parameter project can be downloaded and it will work with PITC4641 board.

The only limitation is that, if the digital input channels DI11 and DI12 were defined in the existing project, a warning message appears on the display after the project download, saying channels DI11 and DI12 do not exist on the PITC4641 board.

Compatibility in the opposite way is also provided.

If one has a parameter project for a certain application with PITC4641 board and replaces the PITC4641 board with PDIO484 board, or, want to utilize the parameter project in UNIFLOW-200 with PDIO484 board, the existing parameter project can be downloaded and it will work with PDIO484 board.

The only limitation in this case is that, if the pulse output channels PO15 was defined in the existing project, a warning message appears on the display after the project download, saying channels PO15 do not exists on the PDIO484 board.

6.5   Wiring terminals

The wiring terminals for the PDIO484 and PITC4641 boards are shown below.

Connecting cable prepared for PDIO484 board can be used for PITC4641 board as well, with the limitation that on pins 25 and 12 no digital inputs but pulse output is available.

Connecting cable prepared for PITC4641 board can be used for PDIO484 board as well, with the limitation that on pins 25 and 12 not pulse output, but digital inputs are available.

PDIO484 Pulse/frequency and digital input and digital output module		
Channel No	25-pin 'D sub' F (+)	(-)
1 (PI)	14	1
2 (PI)	15	2
3 (PI)	16	3
4 (PI)	17	4
5 (DI)	22	13
6 (DI)	9	13
7 (DI)	23	13
8 (DI)	10	13
9 (DI)	24	13
10 (DI)	11	13
11 (DI)	25	13
12 (DI)	12	13
13 (DO)	18	5
14 (DO)	19	6
15 (DO)	20	7
16 (DO)	21	8

PITC4641 Pulse/frequency and digital input and pulse and digital output module		
Channel No	25-pin 'D sub' F (+)	(-)
1 (PI)	14	1
2 (PI)	15	2
3 (PI)	16	3
4 (PI)	17	4
5 (DI)	22	13
6 (DI)	9	13
7 (DI)	23	13
8 (DI)	10	13
9 (DI)	24	13
10 (DI)	11	13
11 (DO)	18	5
12 (DO)	19	6
13 (DO)	20	7
14 (DO)	21	8
15 (PO)	25	12

PI – pulse input

DI – digital input

DO – digital output

PO – pulse output