

TPI GPI - Helper block

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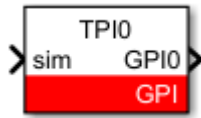
The TPI GPI helper block is a wrapper that simplifies the use of the [GPI block](#) with the [all-in-one programmable inverter](#) (TPI8032 22kW).

The TPI GPI helper block is available starting from [version 2024.2](#) of the SDK. The TPI8032 is **required** to use this driver. Please refer to its [datasheet](#) for more information on the location, numbering, and voltage levels of the GPIs.

Simulink GPI helper block

Signal specification

- The output signal returns the value of one GPI pin.
- The `sim` input signal is used in simulation and documented in [Simulation essentials with Simulink \(PN135\)](#).



Parameters

- Device ID selects which TPI to address when used in a multi-device configuration.
- GPI bit selects one pin to read.
- Show simulation input port defines if the simulation input is displayed or not.

Block Parameters: TPI GPI

TPI GPI
Reads the value of one General Purpose Input (GPI) pin of a TPI.

Parameters

Device ID (default=0)

GPI pin (0 to 7)

Simulation input

☒ Show simulation input port

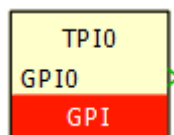
If ticked, the value of the input port is directly fed through to the output port in simulation. In code generation, the input port is disregarded.

OK Cancel Help Apply

PLECS GPI helper block

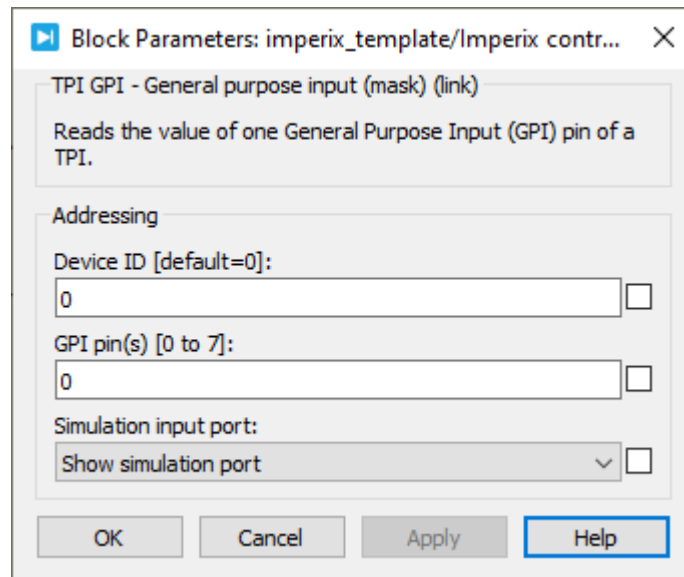
Signal specification

- The output signal returns the value of one GPI pin.
- The target input port (only visible at the atomic subsystem level) is used in simulation and documented in [Simulation essentials with PLECS \(PN137\)](#).



Parameters

- Device ID elects which TPI to address when used in a multi-device configuration.
- GPI bit selects one pin to read.
- Show simulation input port defines if the simulation input is displayed or not.



C++ functions

There are no C++ helper functions for the TPI. Please refer to the [generic GPI functions](#).