Enable PWM outputs

SD024 | Posted on April 2, 2021 | Updated on May 27, 2025



Benoît STEINMANN Software Team Leader imperix • in

Table of Contents

- Simulink block
 - Signal specification
- PLECS block
 - Signal specification
- C++ functions

This block issues a request to **enable** or **disable** the PWM outputs, similar to the "Enable outputs" button of BB Control utility software.

It issues a **enable PWM** request command when a rising edge signal is applied on its input port. If the target is in BLOCKED state it will change to OPERATING.

It issues a **disable PWM** command when a falling edge signal is applied to its input port. The core state of the target will be changed to BLOCKED.

More information on the core state is available on the <u>Core state block page</u>.

Enabling the PWM outputs must be done with the utmost precaution to avoid causing serious damage to the converter. Imperix recommends using the enable/disable button in Cockpit.

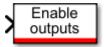
Simulink block

Signal specification

Applying a rising edge signal to this input port issues an **enable PWM** request.

Applying a falling edge signal this input port issues a **disable PWM** request.

An input signal > 0 is considered as a logical 1 while other values are considered as a logical 0.



PLECS block

Signal specification

Applying a rising edge signal to this input port issues an **enable PWM** request.

Applying a falling edge signal this input port issues a **disable PWM** request.

An input signal > 0 is considered as a logical 1 while other values are considered as a logical 0.



C++ functions

```
CoreStart — Enable the PWM outputs
```

```
void CoreStart();Code language: C++ (cpp)
```

This function is used to set the core state to OPERATING. Thus, enabling the target's PWM outputs.

```
CoreStop — Disable the PWM outputs
```

```
void CoreStop();
Code language: C++ (cpp)
```

This function is used to set the core state to BLOCKED. Thus, disabling the target's PWM outputs.