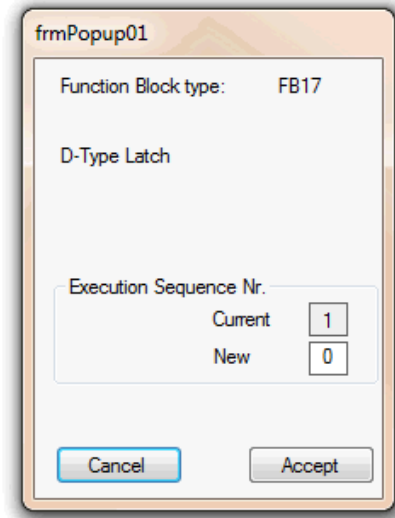
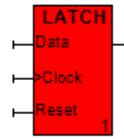


## Function Block 17 D-Type Latch with Reset

### Function Description

This function memorizes the state that was present on the Data input at the time the Clock input changed from logic 0 to 1. The reset input is dominant and, when at logic 1, will set the output to logic 0. All 3 inputs can be inverted.



### Popup Parameters

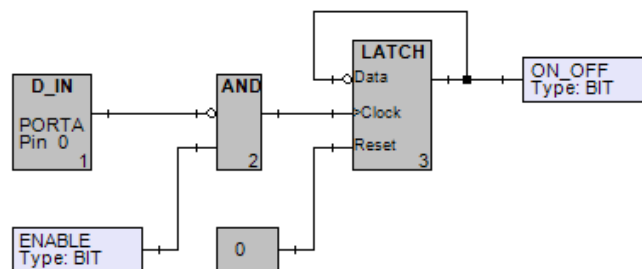
Execution sequence number.

### Input/Output and Parameters

Type	Description	Data Type	Range
Input 1	Input signal Data	Boolean	0, 1
Input 2	Input signal Clock	Boolean	0, 1
Input 3	Input signal Reset	Boolean	0, 1
Output	Output signal	Boolean	0, 1

### Application Example

In the following example the D-Type Latch (FB17) is used as an ON/OFF switch. The ON\_OFF output signal will change state every time the push button, connected to PORTA Pin 0, is operated. The AND function block serve to enable or disable the push button action. The signal from the push button is inverted at the AND gate's first input because when the button is not operated PORTA Pin 0 is pulled high.



### Notes:

Function block 17 can be executed in Cycle and Time tasks.