

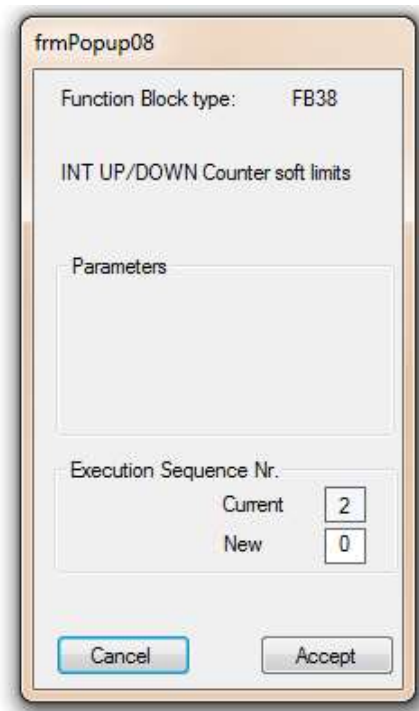
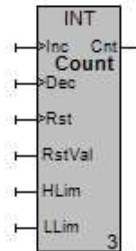
## Function Block 38

## 16Bit Up/Down Counter with soft limits

### Function Description

Output will increment/decrement by one for every 0-to-1 transition at the Inc/Dec inputs. High and Low limits and a Reset value are supplied by external signals. A 0-to-1 transition on the Rst pin will copy the value at the RstVal input to the counter output. Inc has priority over Dec and Rst has priority over both.

All Boolean input signals can be inverted.



### Input/Output Parameters

Type	Description	Data Type	Range
Input	Increment	Boolean	0, 1
Input	Decrement	Boolean	0, 1
Input	Reset	Boolean	0, 1
Input	RstVal	INT	-32678...+32767
Input	HLim	INT	-32678...+32767
Input	LLim	INT	-32678...+32767
Output	Counter value	INT	-32678...+32767

### Notes

If the RstVal value lies outside the High and Low limits, or the High limit is equal or less than the Low limit unpredicted results can occur.

Function block 38 can be executed in Cycle and Time tasks.

### Application