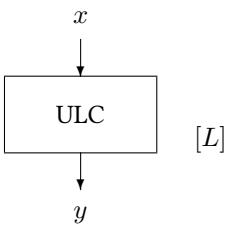
Block ULC

The ULC block tests whether the input signal is upward crossing a threshold level.





Name	ULC
Function	fb0039
Inputs	1
Outputs	1
Parameters	0 . . . [1]
Strings	0
Group	S

Inputs

1 Any input signal x.

Outputs

1 Indicator y for upward level crossing, y is set to one if x has crossed L from $x < L$, else y is set to zero

Parameters

1 Threshold level L (default $L = 0$)

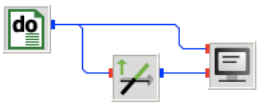
Strings

None

Description The output of this block is defined as

$$y = \begin{cases} 1 & \text{if } x \text{ has crossed } L \text{ from } x \leq L \text{ to } x > L \\ 0 & \text{else} \end{cases}$$

ulc.vseit



A DO block counts from one to five. The output is used by an ULC block with threshold 2.5. Both the counter and the output of the ULC block are displayed using the SCREEN block.

```
1.    0.
2.    0.
3.    1.
4.    0.
5.    0.
```

See also Block DLC.