

SELEC CONTROLS

WINDOW COMPARATOR

-SW Assignment 4-

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1 Problem statement

Design "Window Comparator" function in which the output indicates whether the input signal is within the parameter range bounded by different thresholds.

2 Variable Specification

| No. | Variable | Description | I/O | Data Type | Range | |
|-----|------------------|---------------------------|--------|-------------------|-------|------------|
| 1 | lowerThresh (LT) | Lower Threshold set-point | Input | Unsigned Long Int | 0 | 4294967295 |
| 2 | upperThresh (UT) | Upper Threshold set-point | Input | Unsigned Long Int | 0 | 4294967295 |
| 3 | userInput (IS) | Input for comparision | Input | Unsigned Long Int | 0 | 4294967295 |
| 4 | winCompFlag | Off if IS > UT or IS<LT | Output | Bool | 0 | 1 |

3 Flowchart

References

[1] this is fun

[2] this is also fun