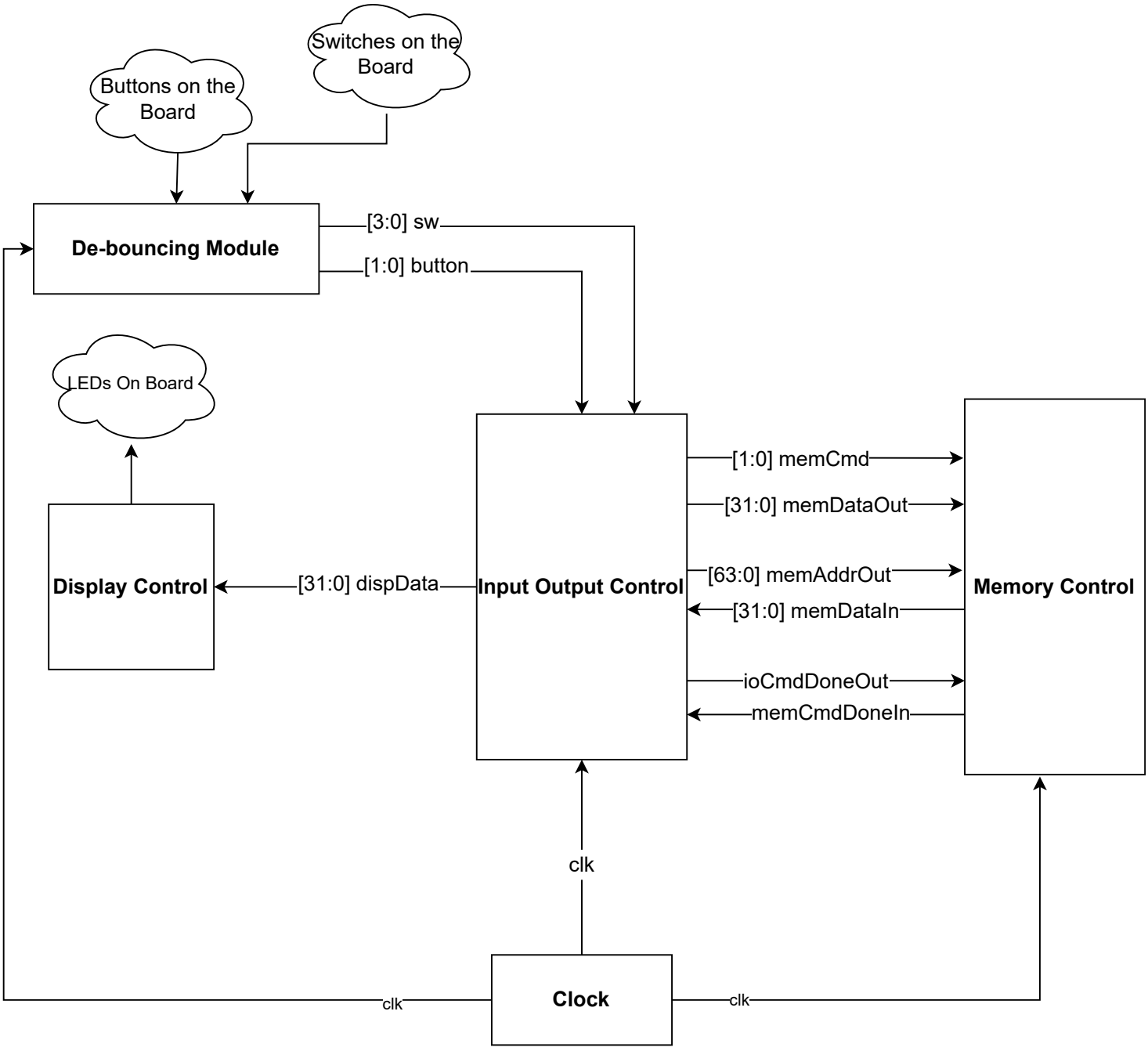
Switches on the Board
Buttons on the Board
De-bouncing Module
[3:0] sw
[1:0] button
LEDs On Board
Display Control
[31:0] dispData
Input Output Control
[1:0] memCmd
[31:0] memDataOut
[63:0] memAddrOut
[31:0] memDataIn
ioCmdDoneOut
memCmdDoneIn
Memory Control
clk
Clock
clk
clk

Description

Module: Input Output Control

```
module inOutControl(
    input clk,              /clk input
    input [1:0] button,     //post-debounced button input sent from debouncing module
    input [3:0] sw,         //pose-debounced switch input sent from the debouncing module
    input memCmdDoneIn,     //flag sent to InputOutputControl from the MemoryControl to signal if the MemoryControl is done
executing it's command
    input  [31:0] memDataIn,//data sent from the MemoryControl to InputOutputControl as a result of a read opertaion
    output [1:0] memCmd,    //flag sent to the MemoryControl from InputOutputControl to identify which command is being operated
    output [31:0] ioDataOut,//Data sent to the MemoryControl from InputOutputControl during a write command
    output [63:0] memAddrOut,//Address sent to the MemoryControl from InputOutputControl
    output ioCmdDoneOut     //Flag sent form InputOutputControl to the MemoryControl
                              // to singal wheter it is done with getting input or not
    output [31:0] dispData //This will be sent to a display module to be displayed on the LEDs idk exactly how these work so I just
                           //figured it would be 32-bits (8 bits per LED)..
);
```