

**MOHA-MM-ED**  
**24-7**

First Edition  
2026-02-23

---

---

---

**Access System Controller**

- Up to 12 users across 3 floors
- Variable Display brightness
- Compatible with a LED matrix and a card reader for extra functionality

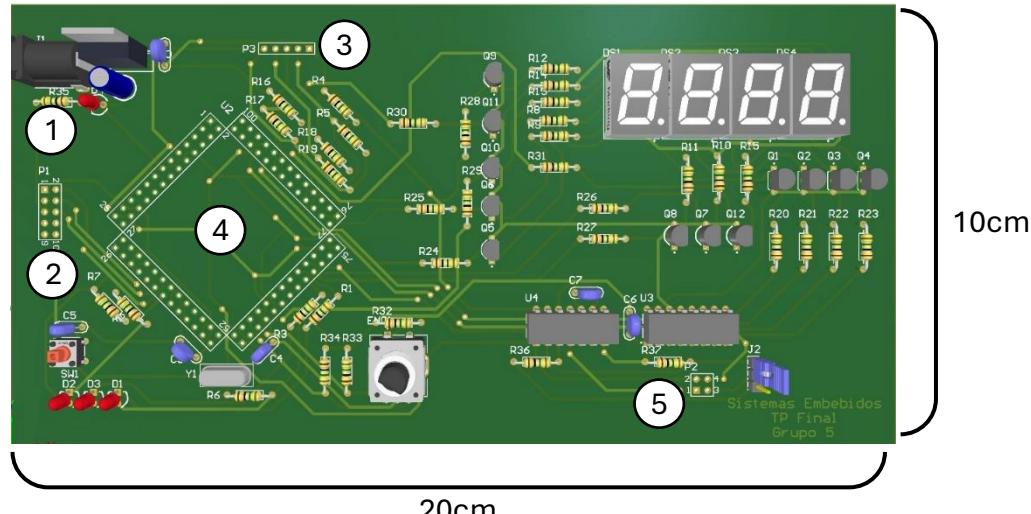


## Contents

Access System standards	3
Access System workflow	5
Access System loops flowchart	6
Main program driver dependencies	7

# Access System Standards

## Dimensions



Relevant connections:

1. 5V 2A voltage pin
2. SWD connector
3. Card reader pins
4. Breakout connector
5. LED Matrix connector

## SWD Pinout

Pin	Name	Description
1	3V3	Voltage source
2	SWDIO	Input/Output
3	GND	Ground
4	SWDCLK	Clock signal
5	GND	Ground
6	SWDTRACE	Trace signal
7	NC	Not connected
8	NC	Not connected
9	NC	Not connected
10	RESET_B	Reset signal (active low)

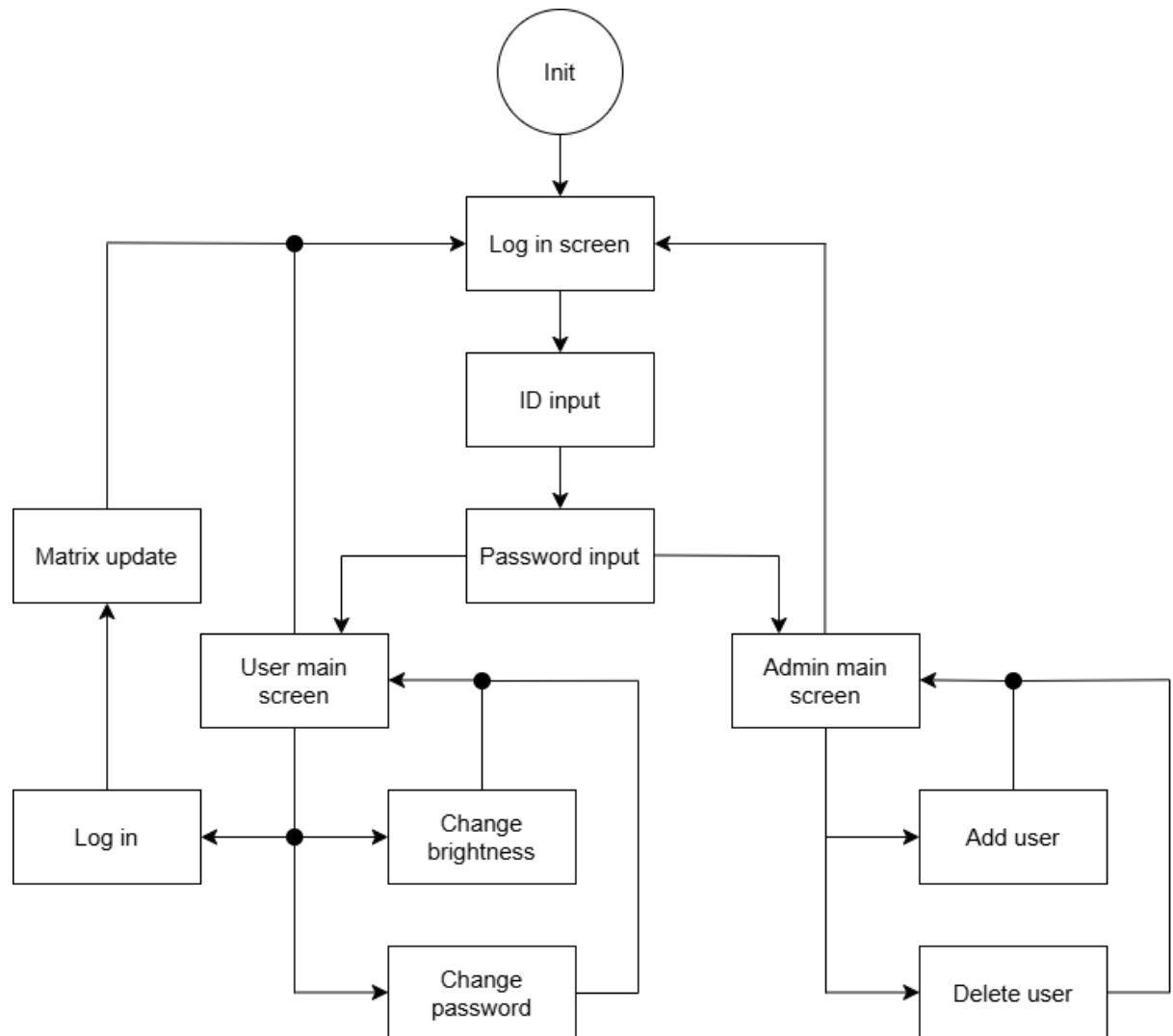
## Card Reader Pinout

Pin	Name	Description
1	5V	Voltage source
2	ENABLE	Descending flank when data enters. Turns on CLK and DATA
3	CLK	Read on HIGH the DATA pin
4	DATA	Contains the card number information
5	GND	Ground

## LED Matrix Pinout

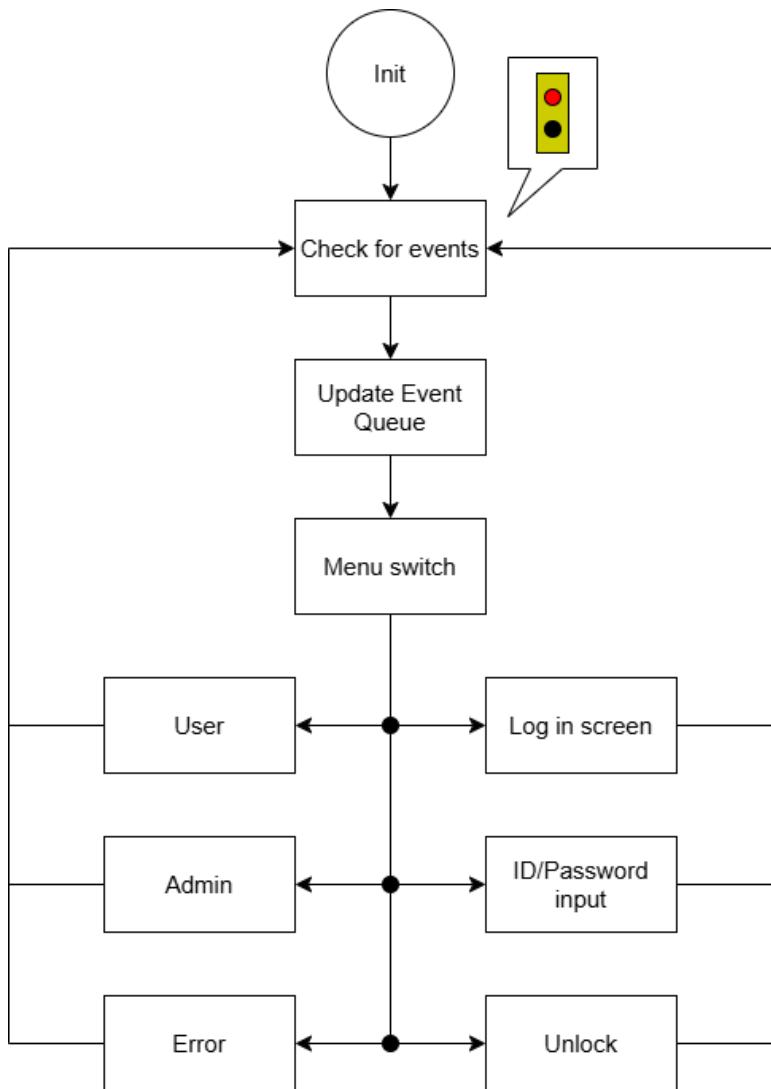
Pin	Name	Description
1	5V	Voltage source
2	Data_M	Data output to set the matrix
3	GND	Ground
4	GND	Ground

# Access System Workflow

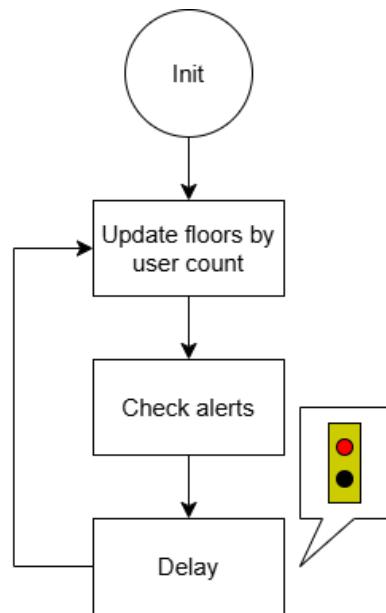


# Access System Loops Flowchart

## App Loop



## Matrix Loop



# Main program driver dependencies

