

# LCD QC51

V2.4

**Floor and cabin display**



Last modification 19/12/2019

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# 1. PRODUCT INFO

Movilift **LCD QC51** board is a floor and cabin display to show floor number, direction Up/Down and services messages. Further this board has interface for UP/DOWN buttons and lights like a **CHM2S** board. The display **LCD QC51** works with Movilift CANBUS system. Connection is made by 4 wires (2 data + 2 power supply).

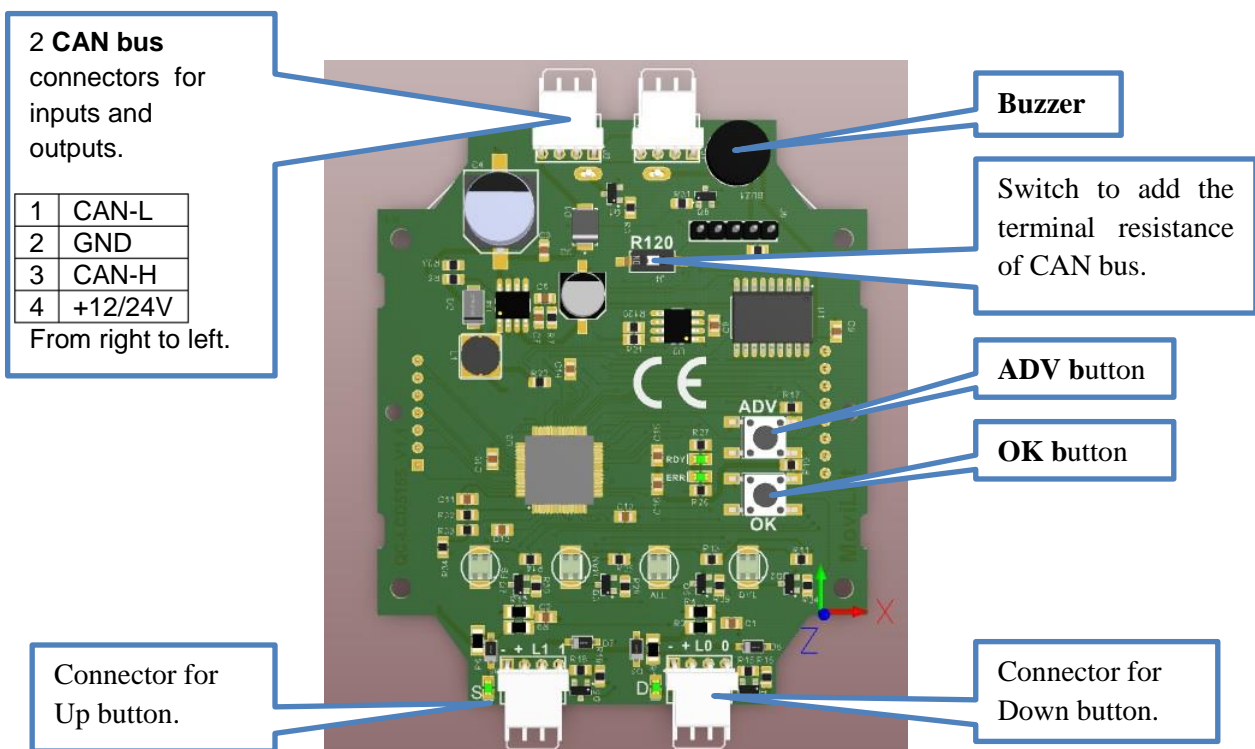
The display has overload signal, inspection signal, Alarm signal and Out of Service signal.

Number of floors is from **-9** to **31**, total 41 floors.


*This manual is for 2.3 firmware version.*

## 1.1 CONNECTORS


This is the backview of the board.




### J1 e J2 CONNECTION

 <p>Green Brown White Yellow</p>	Yellow : L
	White : GND
	Brown : H
	Green: VCC (12/24V)

## S and D CONNECTORS LIKE CALL BUTTONS

	- = (GND)
	+ = Bright gem positive pole
	L0= Bright gem negative pole
	0= Input call

## S CONNECTOR LIKE BRIGHT GEM

	+ = Bright Gem positive pole
	L1 = Bright gem negative pole

## 2. TECHNICAL DETAILS

LCD DIMENSIONS.	51 x 55 mm.
DISPLAY FONT	Two alphanumeric font by 16 segments.
FONT COLOR	White segments on blue background.
SYMBOLS	Overload, Maintenance, Alarm activated, Out of Service
POWER SUPPLY	12-24 VDC $\pm$ 10%
CURRENT (without buttons)	40mA typical – 80mA max.
COMMUNICATION	Serial CAN Bus Movilift
PROGRAMMATION	The board is programmed by ADV and OK buttons.
WORKING TEMPERATURE	From -15°C to +50°C

## 3. PARAMETERS

Display has a programming menu:

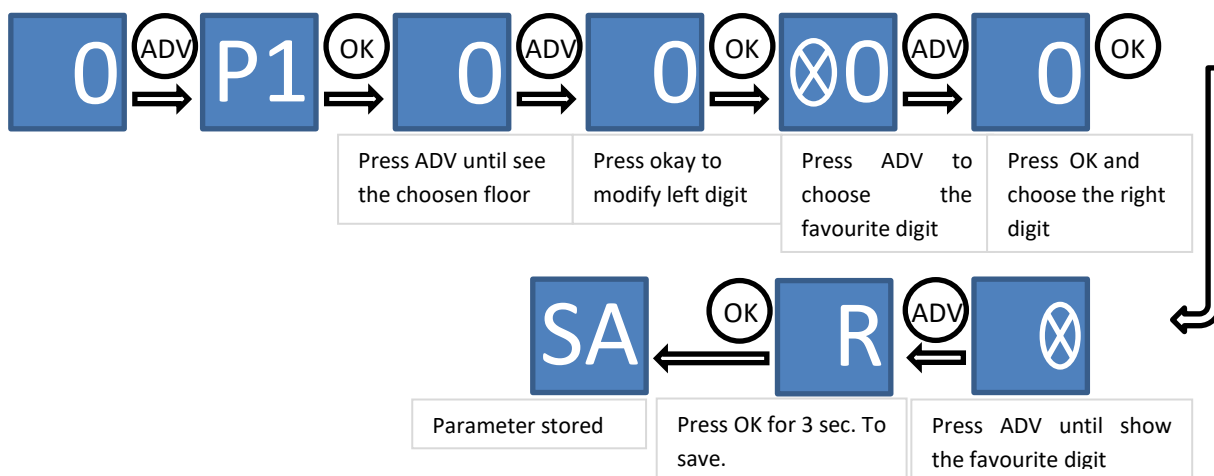
<b>ADV BUTTON</b>	<ul style="list-style-type: none"> <li>• Enter in the programming menu.</li> <li>• It can change the parameters.</li> </ul>
<b>OK BUTTON</b>	<ul style="list-style-type: none"> <li>• It can enter in the parameters.</li> <li>• It confirms the value of parameters.</li> </ul>

The value will be saved when the written “SA” will be shown on display. Without action, after 10 seconds, the display return to main screen.

Parameters	Meaning	Min	Max	Default
P1	Edit floor symbol	ASCII language		Floor number
P2	Auto Power-Off (in minutes)	00	99	5
P3	Buzzer volume	0	9	0
P4	Enter the floor	-9	30	Current floor
P5	Cancel the floor	-9	31	Current floor
P6	Demo mode	0	1	0
P7	Enable call	0	1	1
P8	Setted floor	0	31	0
P9	Floor Offset	-9	30	0
PA	Brightness	1	9	5
PB	Diagnostic data	See parameter PB		
PC	Private			
PD	Brightness in auto power-off	0	9	1
PE	Other reports	0	63	1

### 3.1 Parameter P1: Floor symbol

It allows to choose which pair of characters will be shown on display for the currently floor. Enter in the parameter and choose first the left digit, then choose the right digit.



### 3.2 Parameter P2: Auto-PowerOff

It allows to choose after how much time the display will work in stand-by. In stand-by mode you can choose the lighting of display setting the parameter PD. The display will turn on when the board receive a new information or the Up/Down button will be pressed.

The time is expressed in **minutes**.

**Nota:** if is selected the value “0”, the litghing will be always on.

### 3.3 Parameter P3: Volume

The display has a buzzer that generate a tri-tonal sound when the lift arrives at the floor with the up arrows and a bi-tonal sound when the lift arrives at the floor with the down arrows or when is showed an overload warning. The value “0” means mute buzzer (no sounds), the value “9” means the highest volume.

If **P7** parameter is activated, pushing one of calling button another tone come out at max volume possible. It is possible to choose which sounds you want to activate by parameter **PE**.

### 3.4 Parameter P4: Insert floor

It allows to insert a floor in progressive order. For example if there is a mezzanine floor between ground floor and first floor.

New floor is added before floor showed blinking and it is initialized by chars **\*\*\***. Then it can be modified by **P1** parameter.

For example, to add a floor between 7 and 8, select 8 with ADV and press OK for 2 seconds. Wait 10 seconds to comeback to main screen.

### 3.5 Parameter P5: Delete floor

This parameter (also called LANDING JUMP) makes the opposite function of parameter **P4**; it allows to delete one floor from progressive numeration of stops; it isn't necessary to program again other floors.

Select the floor to delete and press **OK** button for 2 seconds.

### 3.6 Parameter P6: Demo mode

In Demo mode the arrows and 4 signals light on, all digit showed sequently (range 1 sec).

To activate this function set this parameter to value **1**.

To remove DEMO mode is necessary to change again the value to **0**.

### 3.7 Parameter P7: Enabling Call butto

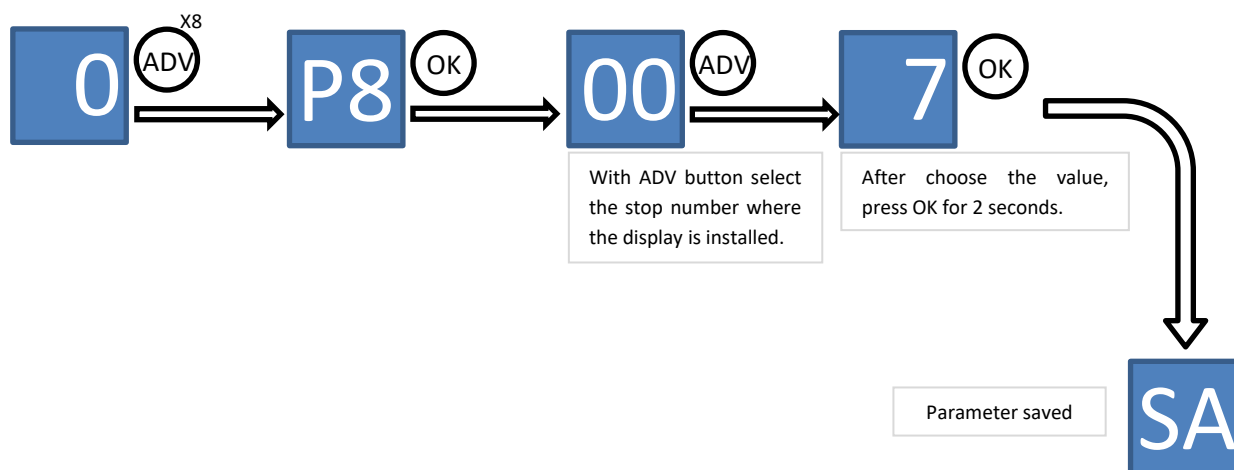
If the Call buttons are enabled, the display can send and receive the messages to the main board by CAN BUS. The floor associated is the floor indicated in the **P8** parameter. (If the button is pressed, the buzzer will switch on).

<b>0</b>	Buttons disabled
<b>1</b>	Buttons enabled

### 3.8 Parameter P8: Floor planned

If the parameter P7 is 1 or 2, P8 will set the stop number where the display is installed.

The number is associated with the call buttons. The value of lower floor is always 0, the last stop is 31, overall 32 stops.



### 3.9 Parameter P9: Floor Offset

If parameter **PE** contains the value **Enabling GONG only at the floor planned** this value must be the same of offset parameter H2 on BRx00.

### 3.10 Parameter PA: Brightness

It allows to choose the brightness of the display backlight. Lower values involves the reduction of power consumptions and longer duration of display. The values goes from 1 to 9.

### 3.11 Parameter PB: Diagnostic data

The parameter PB allows to check the diagnostic data stored on the board.

After last data or after 10 sec. without actions, the board come back to main screen.

To reset the data press **OK** button for **1 sec.**

The data are:

Meaning	Min	Max	Stored in memory
Total number of power on	00	99	YES
Amount of watch-dog	00	99	YES
Amount of CAN BUS activity	0: no error	1: at least one error	NO
CAN BUS reception in last 24 hours	0: no error	1: at least one error	NO

The highest value is 99, higher values aren't stored.

### 3.12 Parameter PC: RESERVED

Monitoring of error register made by CAN BUS Tx and Rx.

### 3.13 Parameter PD: Brightness during screensaver.

It allows to choose the brightness of screensaver after the time setted in the parameter **P2**. Lower values involves the reduction of power consumptions and longer duration of display.

### 3.14 Parametro PE: Other reports

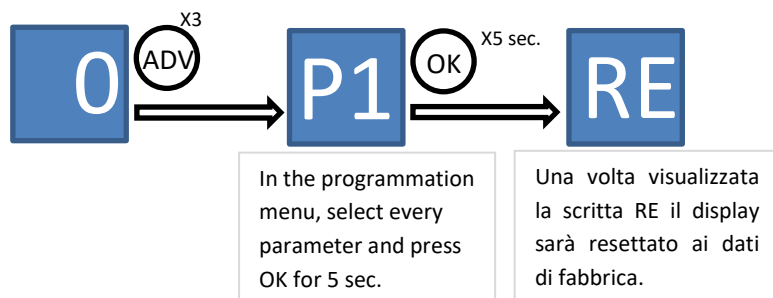
It allows to choose which sound signals reports are enabled during functioning. The value will be the sum of each parameters. If display is used on floor, the value will be 0 or 1. If the display is used in cabin the value will be 62.

Meaning	Value
Enabling GONG only at the planned floor	1
Enabling GONG for every floor	2
Enabling GONG for OVERLOAD	4
Enabling BIP GONG and 'X' for access control	8
Enabling GONG during Changing floor	16
Enabling GONG with Oper Door	32

## 4. FACTORY RESET

To load Factory Default parameters hold OK for 5 sec on parameter P1.

The display will show "RE" to indicate Factory Default made.



## 5. DIAGNOSTICS

After Power ON the display will show firmware version (two digits).

Then all display segments and symbols will be ON. Buzzer will make short tone.

The display has two LEDs signed with **RDY** (green) and **ERR** (red) to support the user during programming and diagnostic.

When the display doesn't receive information, it will show "- -".

There are two red LED near the call connectors. They will power on when the own button will be pressed.

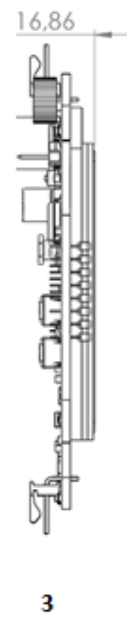
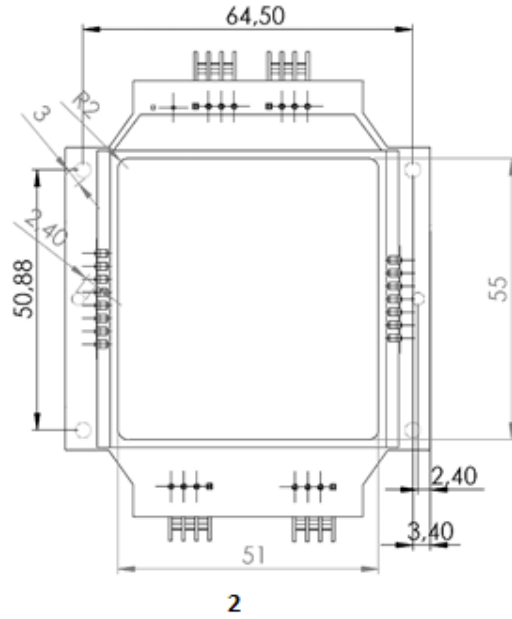
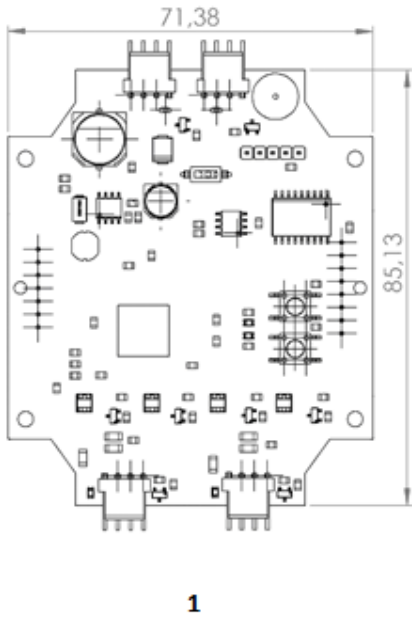
### LED RDY

Short blink one time in a second	The board hasn't error
Long blink one time in a second	The board is in Demo mode or in programming mode, so it isn't able to communicate with CAN BUS.

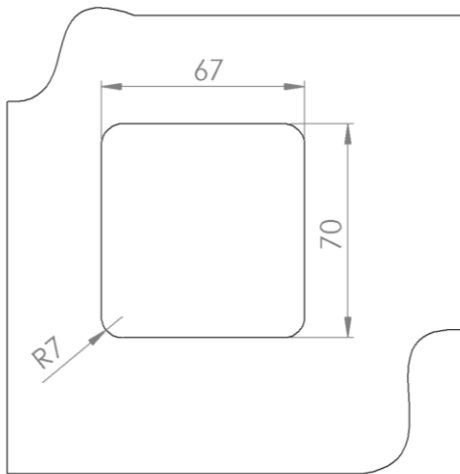
### LED ERR

LED off	No error
1 blink and one second off	No CAN BUS communication of floor number for more than 5 seconds.
2 blink and one second off	No CAN BUS communication of floor number for more than 5 seconds.
3 blink and one second off	CAN BUS message error
4 blink and one second off	No reception of msg ACK from motherboard.
5 blink and one second off	Error of reading EEPROM parameter.
6 blink and one second off	Error to writing of parameters or diagnostic data in EEPROM

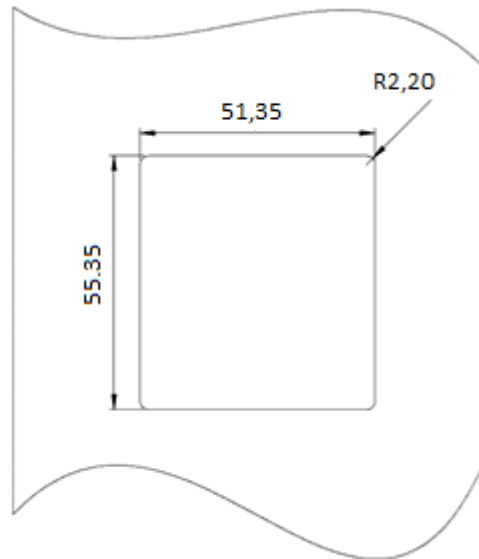
## 6. DIMENSIONS



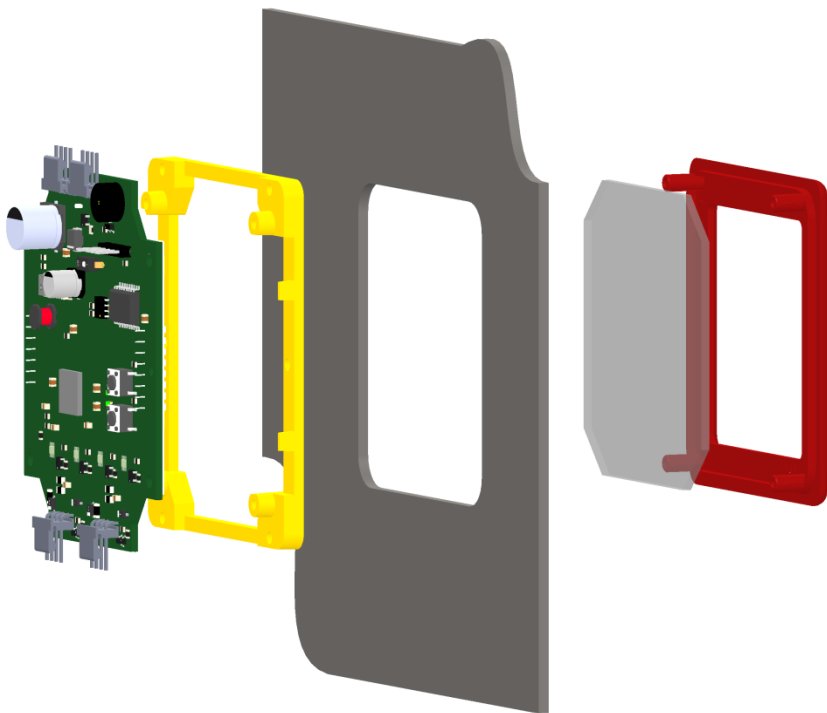
**Break-in for frame assembly**



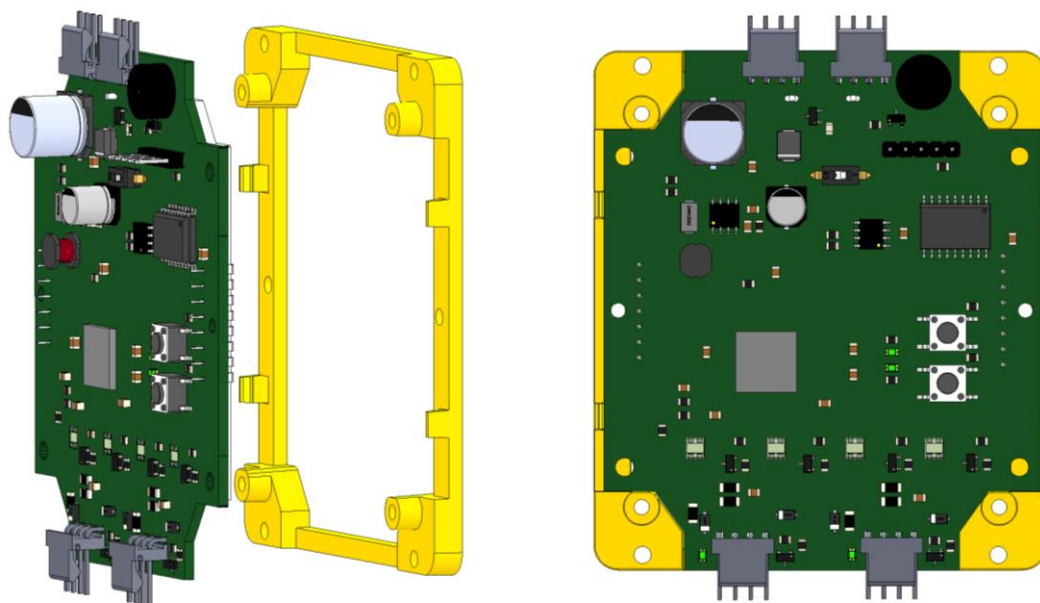
**Break-in for flat assembly**



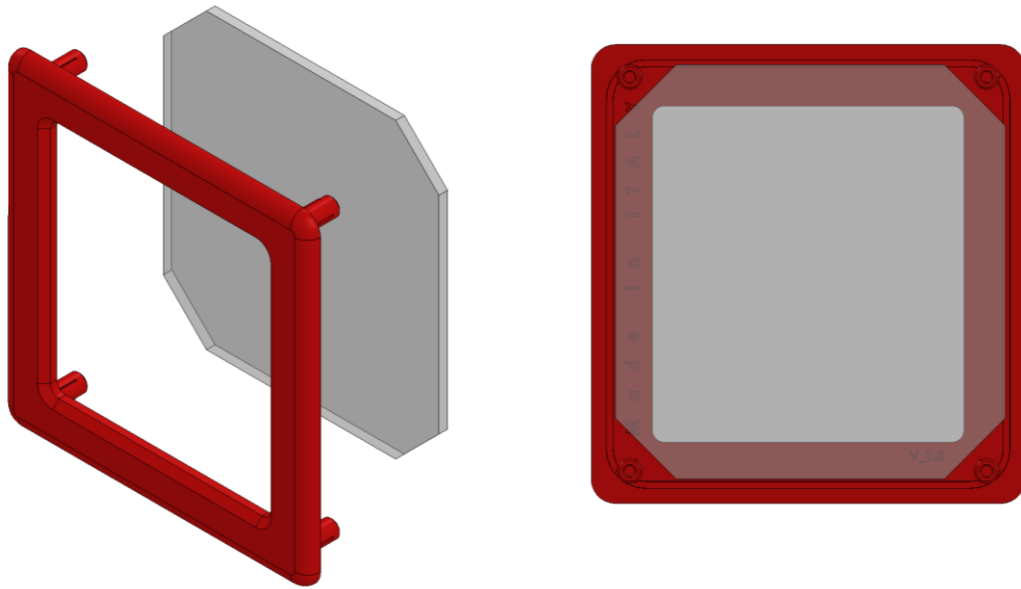
## Example of assembly



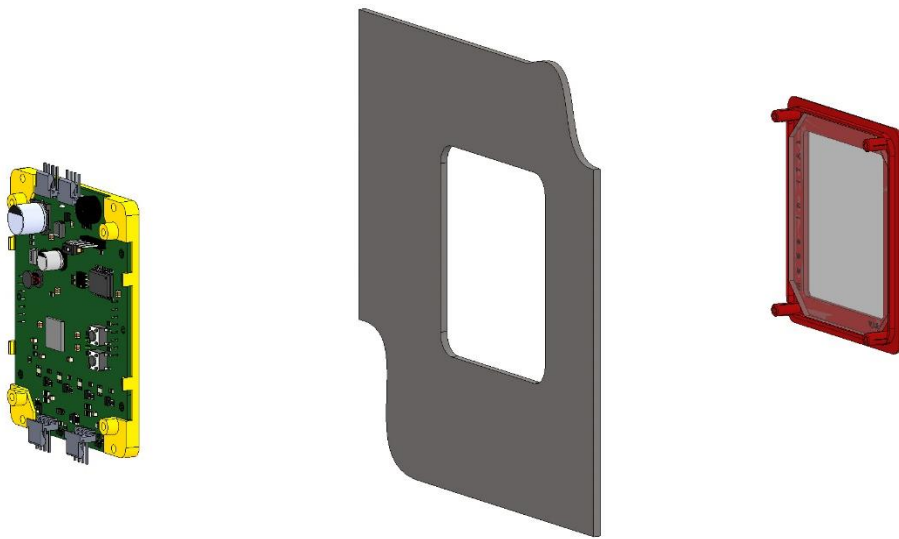
1. Assembly the PCB on the support:



2. Put the screen protector on the frame:



3. Put the frame on the PCB



- IT** *Gentile cliente, La ringraziamo per aver acquistato i nostri prodotti. Prima dell'installazione e dell'utilizzo La preghiamo di leggere attentamente questo manuale.*
- EN** *Dear customer, Thank you for purchasing our products. Before installation and use, please read this manual carefully.*
- FR** *Cher client, merci d'avoir acheté nos produits. Avant l'installation et l'utilisation, veuillez lire attentivement ce manuel.*
- ES** *Estimado cliente, Gracias por adquirir nuestros productos. Antes de la instalación y el uso, lea este manual detenidamente.*
- PT** *Prezado cliente, Obrigado por adquirir nossos produtos. Antes da instalação e uso, leia este manual cuidadosamente.*
- DE** *Sehr geehrter Kunde, vielen Dank für den Kauf unserer Produkte. Lesen Sie dieses Handbuch vor der Installation und Verwendung sorgfältig durch.*
- CS** *Vážený zákazníku, děkujeme vám za zakoupení našich produktů. Před instalací a použitím si prosím pečlivě přečtěte tento návod.*
- SK** *Vážený zákazník, ďakujeme vám za zakúpenie našich výrobkov. Pred inštaláciou a použitím si pozorne prečítajte tento návod.*
- RU** *Уважаемый покупатель! Благодарим вас за покупку нашей продукции. Перед установкой и использованием внимательно прочтите это руководство.*
- RO** *Stimate client, Vă mulțumim că ați cumpărat produsele noastre. Înainte de instalare și utilizare, vă rugăm să citiți cu atenție acest manual.*
- HU** *Kedves vásárló, köszönjük, hogy megvásárolta termékeinket. Telepítés és használat előtt olvassa el figyelmesen ezt a kézikönyvet.*
- NL** *Beste klant, Bedankt voor het aanschaffen van onze producten. Lees deze handleiding aandachtig voor installatie en gebruik.*
- PL** *Szanowny Kliencie, dziękujemy za zakup naszych produktów. Przed przystąpieniem do instalacji i użytkowania należy uważnie przeczytać niniejszą instrukcję.*
- AR** *بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ، وَاللَّهُ سَيُجْزِيهِمْ بِمَا كَانُوا يَعْمَلُونَ. نَحْنُ نَشْكُرُكَ يَا رَبِّ، وَاللَّهُ سَيُجْزِيهِمْ بِمَا كَانُوا يَعْمَلُونَ.*