Pelicase 1150 / 1200 /1300 Mechanical keyboard

Infos:

Current way of doing it isn't the best: it uses https://kbfirmware.com/ which is a bit outdated and not the most practical but does the job.

I will use QMK (https://config.qmk.fm) later but I first need to learn how to create a 5x11 layout with the correct pining.

Firmware file is uploaded to the board using https://github.com/qmk/qmk_toolbox

Firmware file creation

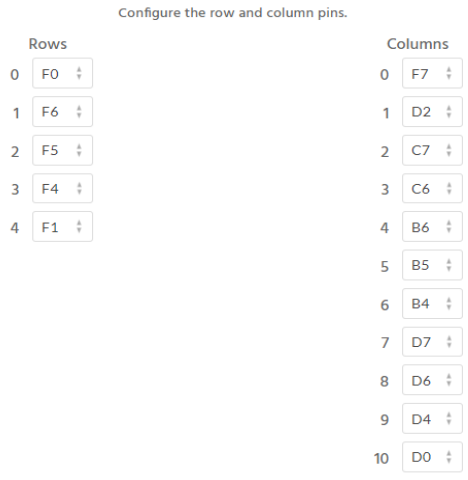
So go to https://kbfirmware.com/

Paste the following layout:
(this can be edited before import, it's a pretty straight forward layout but doesn't contains layers, special functions, etc)

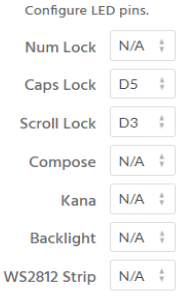
[{a:7},"Esc","1","2","3","4","5","6","7","8","9","0"],
["Tab","Q","W","E","R","T","Z","U","I","O","P"],
["Caps","A","S","D","F","G","H","J","K","L","Back Space"],
["Shift","Y","X","C","V","B","N","M",{a:5},";\n,",":\n.",{a:7},"Return"],
["Ctrl","Alt","Super","⇓",{w:2},"","⇑","←","↓","↑","→"]

Wiring tab should be set to:

Rows 5
Columns 11
Diode direction Col to row



Got to Pins tab:
Controller is a 32u4
Configure as follow ---------->



Next keymap tab is where everything happens.

You can select a key and remap it by pressing the new one on your keyboard.
If you select a key and click again on it on the bottom under “Configure the selected key” you’ll have access to all the special functions including the layer change, etc.
Take some time to read the linked QMK docs at the bottom.

Macros and Quantum tabs should be left as they are. Unless you know what you’re doing.

Settings let you export a JSON file of the layout which can then be formatted to be copy/paste as in the first step for later modifications.
Don’t mind the soft reset warning, the pcb as a hard wired reset one.

Last step is Compile tab where you can download the .hex file which is the compiled code that will be uploaded on the atmega 32u4

Firmware upload

Install and Run the QMK toolbox software (install drivers too !)

- Drag or select your previously downloaded hex file
- Select the correct MCU (still 32u4)
- Plug the board to the computer while pressing the reset button, then release it.
- A yellow line should appear regarding an Atmel DFU device connected. If not, try another cable (I had some issue with some longer ones)
- Then clear EEPROM and Flash (or use “Auto-flash” feature)
- After everything is completed, unplug and replug the keyboard
- You can then use the key tester under the tools tab to check if every switch is working properly.