**Case and Plate design:**

**Plate**

Gasket prom: [Poron Gasket 2mm - 3mm- Miếng đệm bàn phím cơ. Gasket Poron. | Shopee Việt Nam](https://shopee.vn/Poron-Gasket-2mm-3mm-Mi%E1%BA%BFng-%C4%91%E1%BB%87m-b%C3%A0n-ph%C3%ADm-c%C6%A1.-Gasket-Poron.-i.529457694.21561007385?sp_atk=1825dec2-f6c9-4c45-a052-50cd9ea90a81&xptdk=1825dec2-f6c9-4c45-a052-50cd9ea90a81)

Design Plate and Cases: [How to Design Mechanical Keyboard Plates and Cases - YouTube](https://www.youtube.com/watch?v=7azQkSu0m_U&t=170s)

Desgin Plate and Cases Fusion 360: [65% Keyboard Case Design - YouTube](https://www.youtube.com/watch?v=4P0zfLLblOw)

Keychron Keycap Size:



Keyboard and Switch holes: ([video link](https://www.google.com/url?sa=i&url=https%3A%2F%2Fthegamingsetup.com%2Fgaming-keyboard%2Fbuying-guides%2Fkeyboard-sizes&psig=AOvVaw0h1dSxUxdwYwg5NvSOT6T9&ust=1671822527323000&source=images&cd=vfe&ved=0CBAQjhxqFwoTCIikp7D2jfwCFQAAAAAdAAAAABAE))



Keyboard layout editor: [Keyboard Layout Editor (keyboard-layout-editor.com)](http://www.keyboard-layout-editor.com/)

Plate and Case Builder: [Plate HYPERLINK "http://builder.swillkb.com/"& HYPERLINK "http://builder.swillkb.com/" Case Builder - swillkb](http://builder.swillkb.com/)

Json Code for the current builed: (1)

[{a:7},"ESC",{x:0.25},"F1","F2","F3","F4",{x:0.25},"F5","F6","F7","F8",{x:0.25},"F9","F10","F11","F12",{x:0.25},"DEL"],

[{y:0.5,a:4},"~\n\n\n\n\n\n\n\n\n`","!\n\n\n\n\n\n\n\n\n1","@\n\n\n\n\n\n\n\n\n2","#\n\n\n\n\n\n\n\n\n3","$\n\n\n\n\n\n\n\n\n4","%\n\n\n\n\n\n\n\n\n5","^\n\n\n\n\n\n\n\n\n6","&\n\n\n\n\n\n\n\n\n7","\*\n\n\n\n\n\n\n\n\n8","(\n\n\n\n\n\n\n\n\n9",")\n\n\n\n\n\n\n\n\n0","\_\n\n\n\n\n\n\n\n\n-","+\n\n\n\n\n\n\n\n\n=",{a:7,w:2},"BACKSPACE",{x:0.5},"11"],

[{w:1.5},"TAB","Q","W","E","R","T","Y","U","I","O","P",{a:4},"{\n\n\n\n\n\n\n\n\n[","}\n\n\n\n\n\n\n\n\n]",{w:1.5},"|\n\n\n\n\n\n\n\n\n\\",{x:0.5,a:7},"22"],

[{w:1.75},"CAPS\_LOCK","A","S","D","F","G","H","J","K","L",{a:4},":\n\n\n\n\n\n\n\n\n;","\"\n\n\n\n\n\n\n\n\n'",{a:7,w:2.25},"ENTER",{x:0.5},"33"],

[{w:2.25},"SHIFT","Z","X","C","V","B","N","M",{a:4},"<\n\n\n\n\n\n\n\n\n,",">\n\n\n\n\n\n\n\n\n.","?\n\n\n\n\n\n\n\n\n/",{a:7,w:1.75},"SHIFT",{x:1.5},"44"],

[{y:-0.75,x:14.25},"UP"],

[{y:-0.25,w:1.25},"CTRL",{w:1.25},"WIN",{w:1.25},"ALT",{w:6.25},"","ALT","FN","CTRL"],

[{y:-0.75,x:13.25},"LEFT","DOWN","RIGHT"]

Build (1):



**Pcb Design and Modules:**

**QMK wireless:**

Video: [[QMK] Bluetooth True Wireless Split Ergonomic Keyboard Test-1 - YouTube](https://www.youtube.com/watch?v=wOW2UQZ-kfk)

Github: [Danh mục: Bàn phím QMK tự chế | ZiTe Benwuzhi (ziteh.github.io)](https://ziteh.github.io/categories/%E8%87%AA%E8%A3%BDQMK%E9%8D%B5%E7%9B%A4/)

Pin layout of nrf51822: [Mạch thu phát BLE Bluetooth 4.0 SoC nRF51822 chân cắm – Hshop.vn](https://hshop.vn/products/mach-thu-phat-ble-bluetooth-4-0-soc-nrf51822-chan-cam)

QMK bluetooth: [Bluetooth (qmk.fm)](https://docs.qmk.fm/)