



FL·ESPORT

OG87/OG104

Retro Mechanical Keyboard



Concept

This design project aims to modernize the classic keyboard experience while preserving its nostalgic appeal. Inspired by the iconic OG series, the new iteration combines a timeless, retro exterior with state-of-the-art internal technology. Users are invited to enjoy an elevated typing experience, facilitated by wireless connectivity, low-power consumption, and enhanced ergonomic design.

With a focus on **durability and user comfort**, the keyboard incorporates reinforced keycaps that resist wear and tear, reducing the need for replacements and ensuring a long-lasting product. Internally, unnecessary vibrations have been minimized to provide a more stable and comfortable typing feel, protecting wrist health and offering a quieter, more pleasant sound.

The project also **prioritizes convenience** through wireless connectivity, enabling a clutter-free workspace and seamless transitions between devices. Additionally, the low-power consumption feature extends battery life, allowing users to work longer without frequent interruptions for charging.

This project embodies the fusion of tradition and innovation, blending classic design principles with cutting-edge technology. The result is a keyboard that not only looks and feels familiar but also meets the demands of modern users—**balancing aesthetics, functionality, and comfort in one cohesive package.**

WHAT is the product?

This is an updated version of the OG series keyboard that retains its classic retro appearance while offering modern functionality and an improved user experience.

WHY is this product being designed?

This product is being designed to meet the evolving expectations of keyboard users who appreciate vintage aesthetics but also demand modern functionality and improved comfort. The goal is to offer a product that aligns with contemporary needs while preserving the timeless appeal of the original OG series.

WHO is the target user?

The target users include keyboard enthusiasts, office workers, gamers, and people who use keyboards for extended periods and prioritize comfort.

WHERE will the product be used?

This keyboard is primarily intended for office, home, and gaming environments, suitable for daily typing, work, and entertainment.

WHEN will the product be used?

The product is suitable for daily work, study, and leisure, especially in scenarios that involve long periods of keyboard usage.



AGE 28
JOB Gamer / Streamer
STATUS In a Relationship
LOCATION New York, NY

Persona - Gamer

Chris Martin

Performance-Focused Tech Enthusiast Resilient Analytical

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ABOUT

Chris is a dedicated competitive gamer who streams on platforms like Twitch and YouTube. He spends long hours gaming, often playing fast-paced games like first-person shooters, where reaction time and precise keystrokes are crucial.

KNOWN HABITS

- Regular Gaming Sessions: Chris often engages in long, intense gaming sessions, especially during peak streaming hours. He schedules his gameplay around when his audience is most active.
- Gear Upgrades: Chris loves upgrading his gaming setup, staying informed on the latest peripherals to enhance his gaming performance and overall stream quality.

GOALS

- Maintain peak performance during long gaming sessions.
- Use durable gear that can withstand constant, high-intensity use.

FRUSTRATIONS

- Gaming keyboards that wear out too quickly, especially with keycaps that lose their labeling.
- Wired setups that limit his movement or clutter his desk.
- Excessive noise from mechanical keyboards that interfere with his stream audio.
- Wrist discomfort during marathon gaming sessions.

BUYING BEHAVIOR

Chris is willing to spend on high-performance, durable gear that enhances his gaming experience. He often looks to gaming forums, influencer reviews, and Reddit for product recommendations.

- Ensure his setup looks professional and cool on his streams, matching the aesthetics of his gaming brand.
- Minimize distractions caused by poor equipment, such as overly loud keystrokes or laggy wireless performance.

Emily Zhang

Health-Conscious

Calm Under Pressure

Reliable

Organized

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ABOUT

Emily works as an office manager in a large corporate firm. She spends a significant portion of her day managing emails, drafting reports, and coordinating with various teams.

KNOWN HABITS

- **Daily Routine:** Emily has a structured workday, balancing meetings, administrative tasks, and team coordination. She often starts her day with a to-do list.
- **Efficiency-Oriented:** She frequently looks for ways to optimize her workflow, favoring productivity tools that streamline her tasks.

GOALS

- Maintain a clean and organized workspace.
- Use reliable office equipment that supports her in multitasking efficiently.

FRUSTRATIONS

- Keyboards that wear out quickly or show visible signs of use, such as faded keycaps.
- Wired connections that limit mobility and clutter her desk.
- Keyboards that cause discomfort or wrist pain after long periods of typing.
- Loud keystrokes that disrupt the office environment.

BUYING BEHAVIOR

Emily tends to purchase mid-to-high range office equipment that offers both functionality and aesthetics. She often reads product reviews on platforms like Amazon or consults with colleagues before making a purchase.

- Minimize hand and wrist strain during extended periods of typing.
- Ensure her office setup is professional yet stylish.

AGE 35
JOB Corporate Office Manager
STATUS Married
LOCATION Shanghai, China

Alex Johnson

Tech-Savvy

Detail-Oriented

Creative

Mindful

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ABOUT

Alex is a seasoned graphic designer working from home and occasionally freelancing for various tech startups. He is highly particular about his work environment, often curating his workspace for both aesthetics and functionality.

KNOWN HABITS

- **Frequent Creative Exploration:** Alex often experiments with new design tools and techniques. He spends time on platforms like Behance or Dribbble for inspiration and to keep up with design trends.
- **Music for Focus:** He listens to instrumental music while working to boost creativity and maintain focus during long design sessions.

GOALS

- **Maintain a clean, clutter-free desk space** with modern tools.
- **Use products that reflect his personal style and aesthetic preferences.**

FRUSTRATIONS

- Dislikes cables cluttering his desk.
- Experiences discomfort in his hands and wrists after extended typing sessions.
- Finds that many modern keyboards lack the classic, timeless design that he appreciates.
- Has been disappointed by keyboards that show wear and tear too quickly, especially on keycaps.

BUYING BEHAVIOR

Alex is willing to invest in premium products that offer both style and functionality. He frequently reads reviews on platforms like Reddit and Amazon before making a purchase and values recommendations from other professionals in his field.

- **Reduce strain on his wrists and hands** during long work hours.
- **Ensure his work tools are durable and reliable**, minimizing the need for frequent replacements.



AGE 32
 JOB Graphic Designer
 STATUS Married
 LOCATION Charlotte, NC

amazon

Taobao



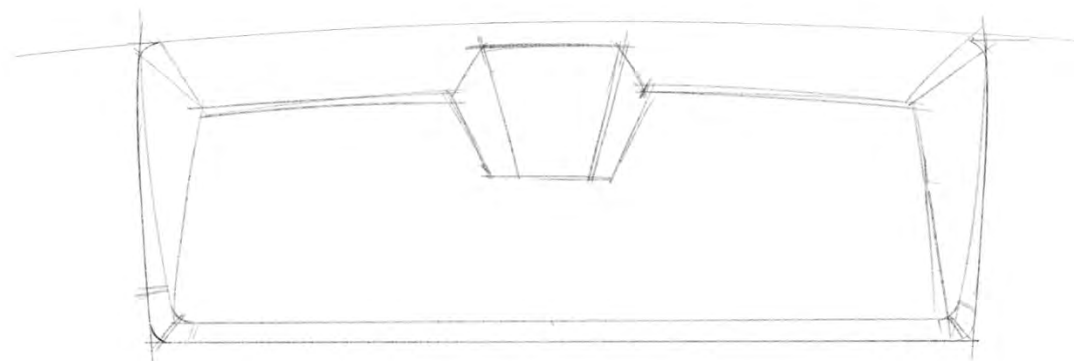
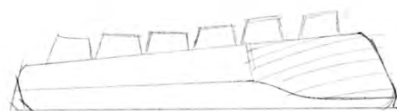
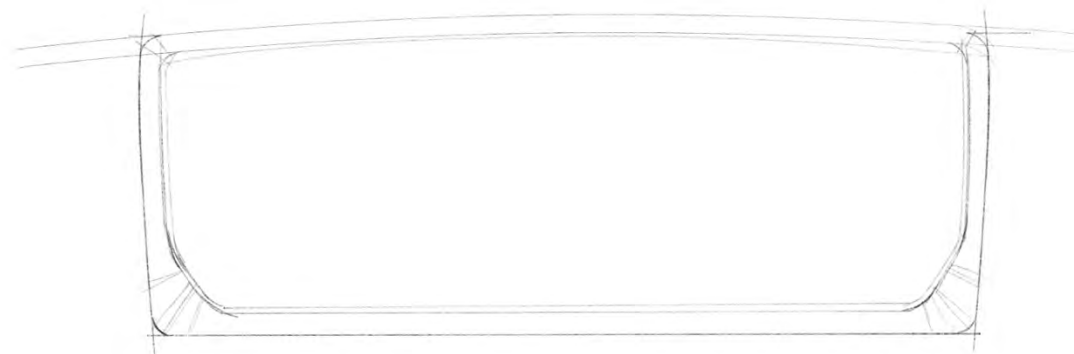
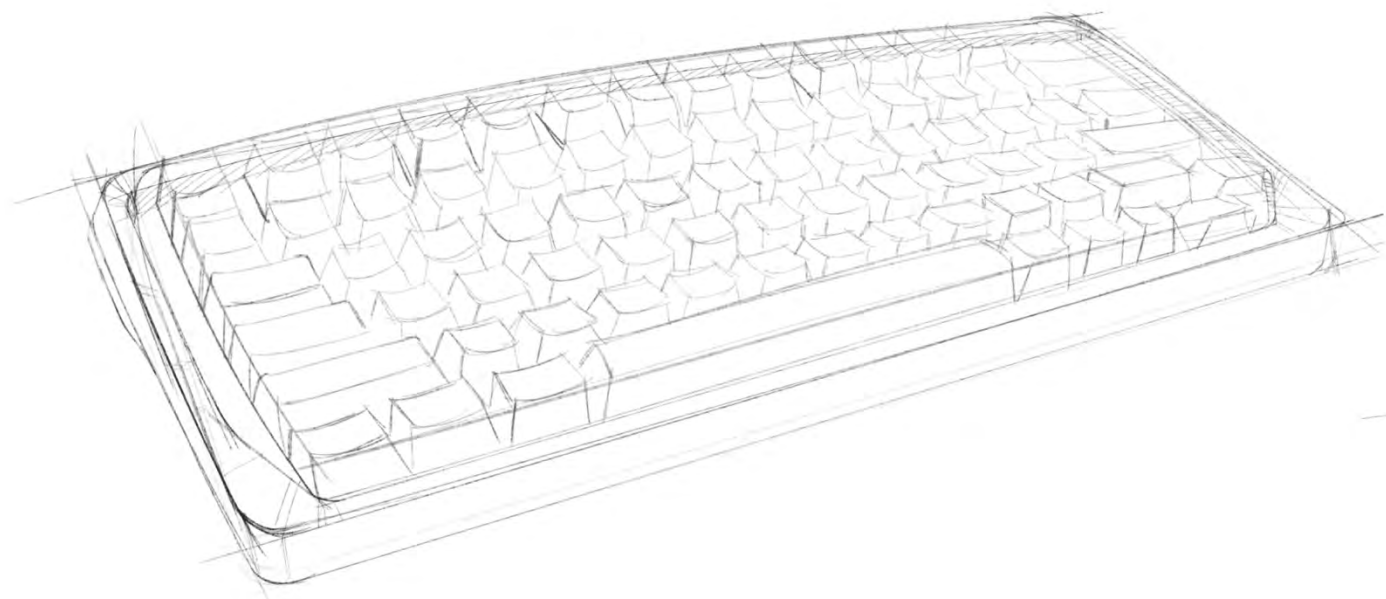
reddit

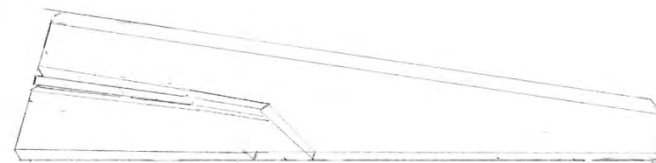
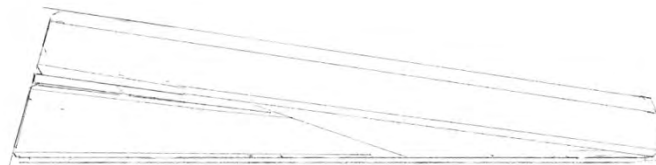
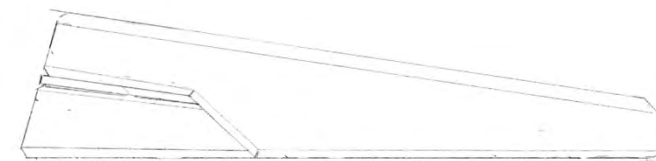
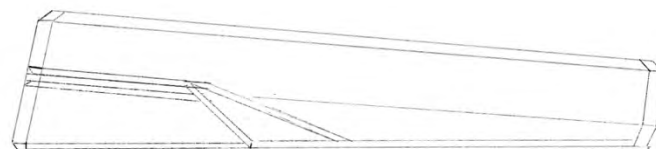
MECH KEYS



HOW does the product address user needs?

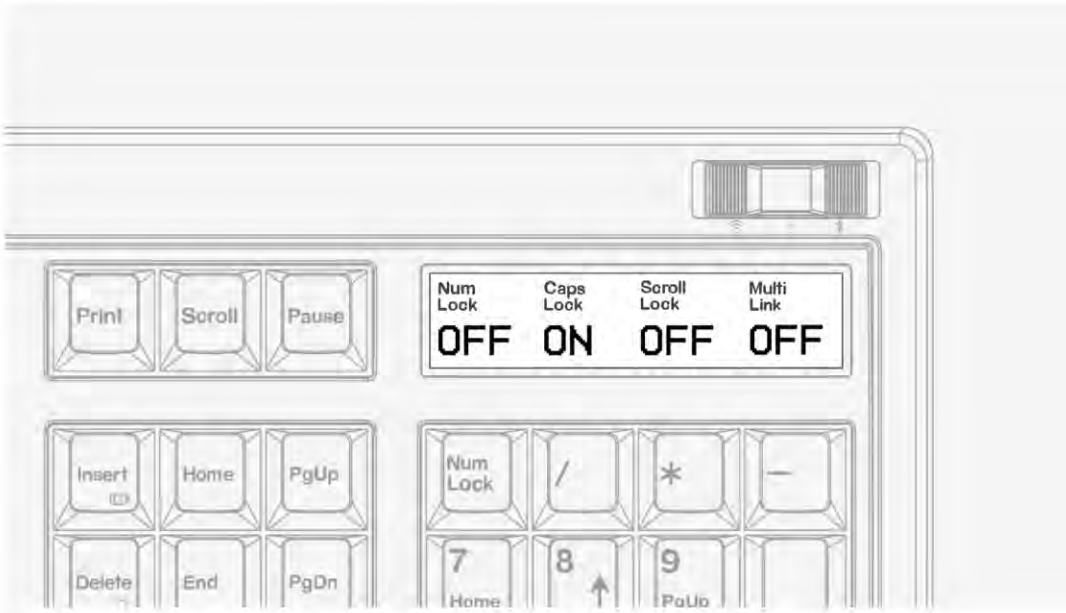
This product is designed based on thorough user research conducted across platforms like Amazon, Taobao, Reddit, and others. Through this research, we gathered feedback on the OG series, which highlighted key user expectations: a more classic and retro appearance, improved durability to resist wear and tear, wireless functionality to reduce cable clutter, enhanced typing feel and sound quality, and better ergonomics to reduce hand fatigue. This feedback directly informed the development of the updated OG series, ensuring it meets the specific needs and desires of its user base.





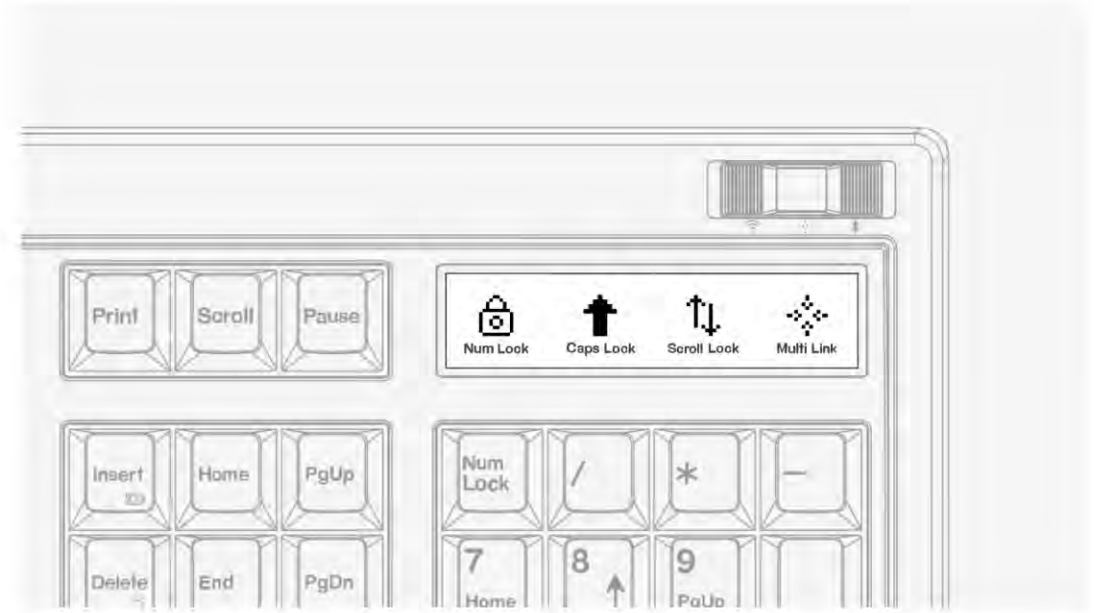


Potential solutions



1. Retro Display

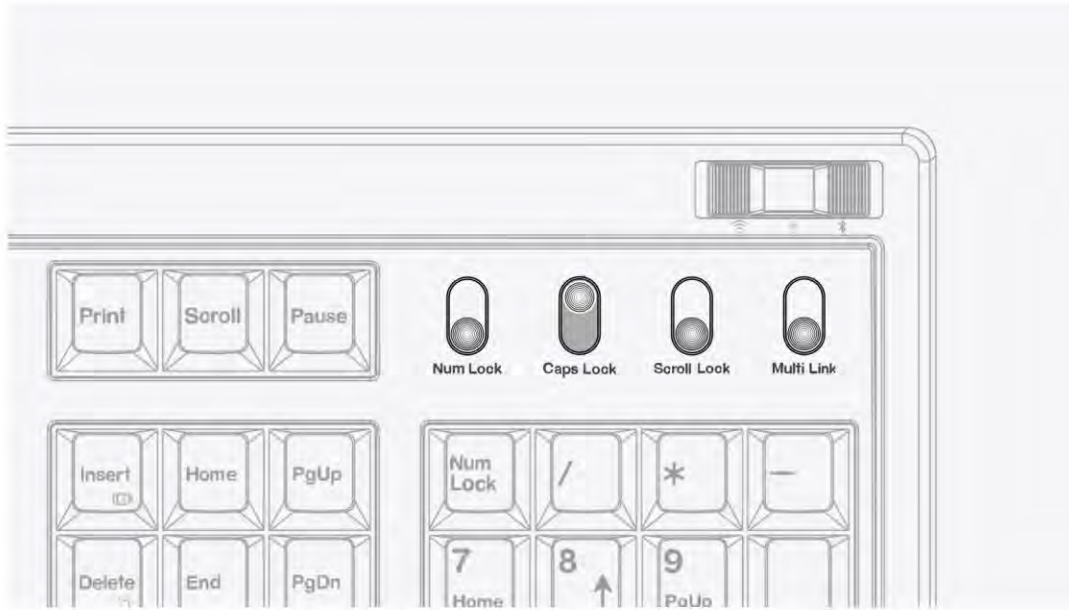
Integrate a small digital screen that shows "Caps ON" or "Caps OFF" in a pixelated font style.



2. Pixel Icons

Incorporate a tiny pixel-style icon that changes in the top right corner of the keyboard when the Caps Lock is on.

Potential solutions



3. Physical Toggles

Users can physically engage a switch to turn the Caps Lock on or off. And receive mechanical switch sound as feedback.



4. Classic Indicator Light

Add a small LED light near the "Caps Lock" key. When Caps Lock active, it could glow with a warm vintage tone.



EXPLORATION

Keyboard Driver



01



Wireless Solution

The wireless solution integrated into the keyboard leverages cutting-edge technologies to ensure reliable, fast, and efficient wireless connectivity. This feature enhances the user's overall experience by providing freedom of movement, decluttering workspaces, and maintaining seamless performance.



NXP Wireless Solution

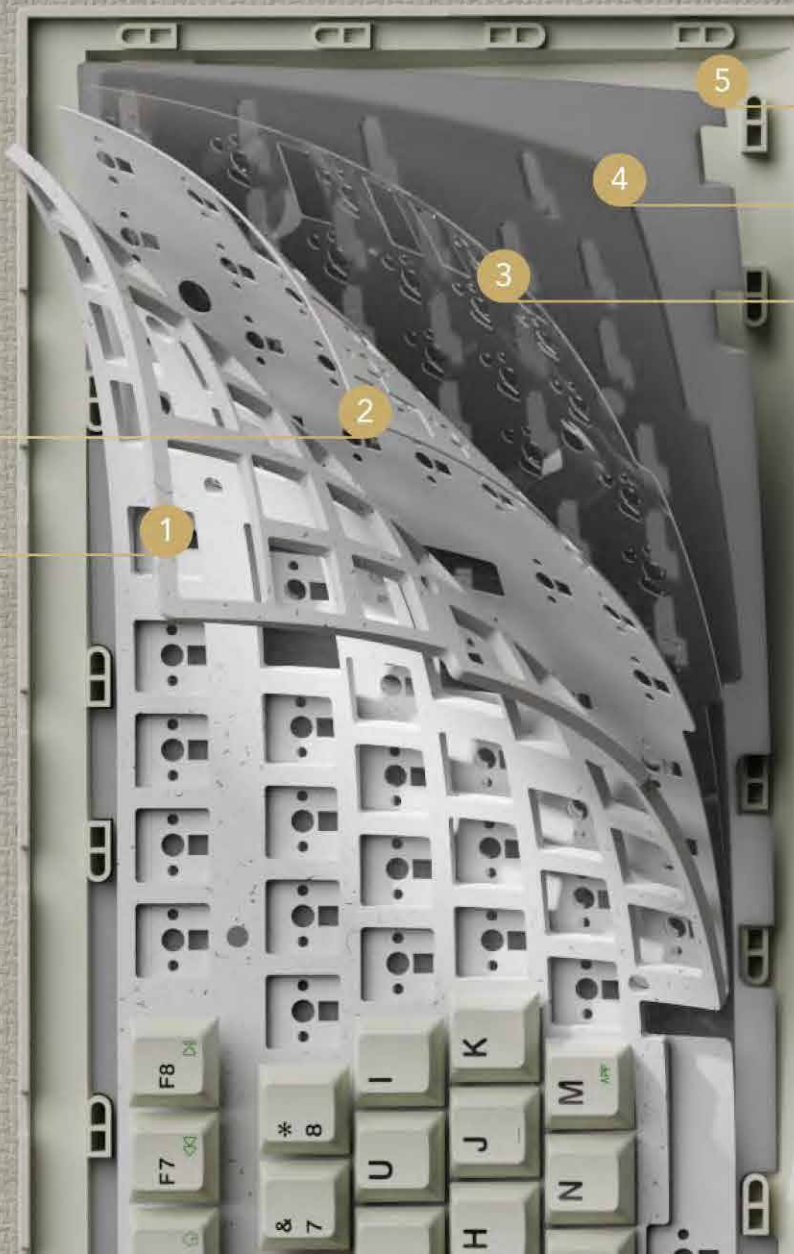
The NXP wireless solution is a highly efficient and advanced system designed to provide seamless wireless connectivity while maximizing battery life. this solution is specifically engineered for low-power devices like wireless keyboards, ensuring optimal performance without compromising energy efficiency.

8x Foamed IXPE Switch Pad

Sandwich Cotton

5-Layer Sound Dampening

5-layer sound dampening is an advanced design feature incorporated into the keyboard to reduce noise and enhance the overall typing experience. This design consists of multiple layers of specialized materials strategically placed within the keyboard to absorb and diffuse sound, resulting in quieter keystrokes and a more refined acoustic profile.



Switch Back Pad **16**

Individually Slotted PCB

Custom Reinforced PET Acoustic Mat

A close-up, high-angle photograph of a mechanical keyboard. The keyboard is light grey or off-white. The keycaps are a mix of teal and white. The switches are visible, showing a teal-colored stem and a white base. The keyboard is resting on a textured, grey surface. The lighting is soft, highlighting the details of the keycaps and switches.

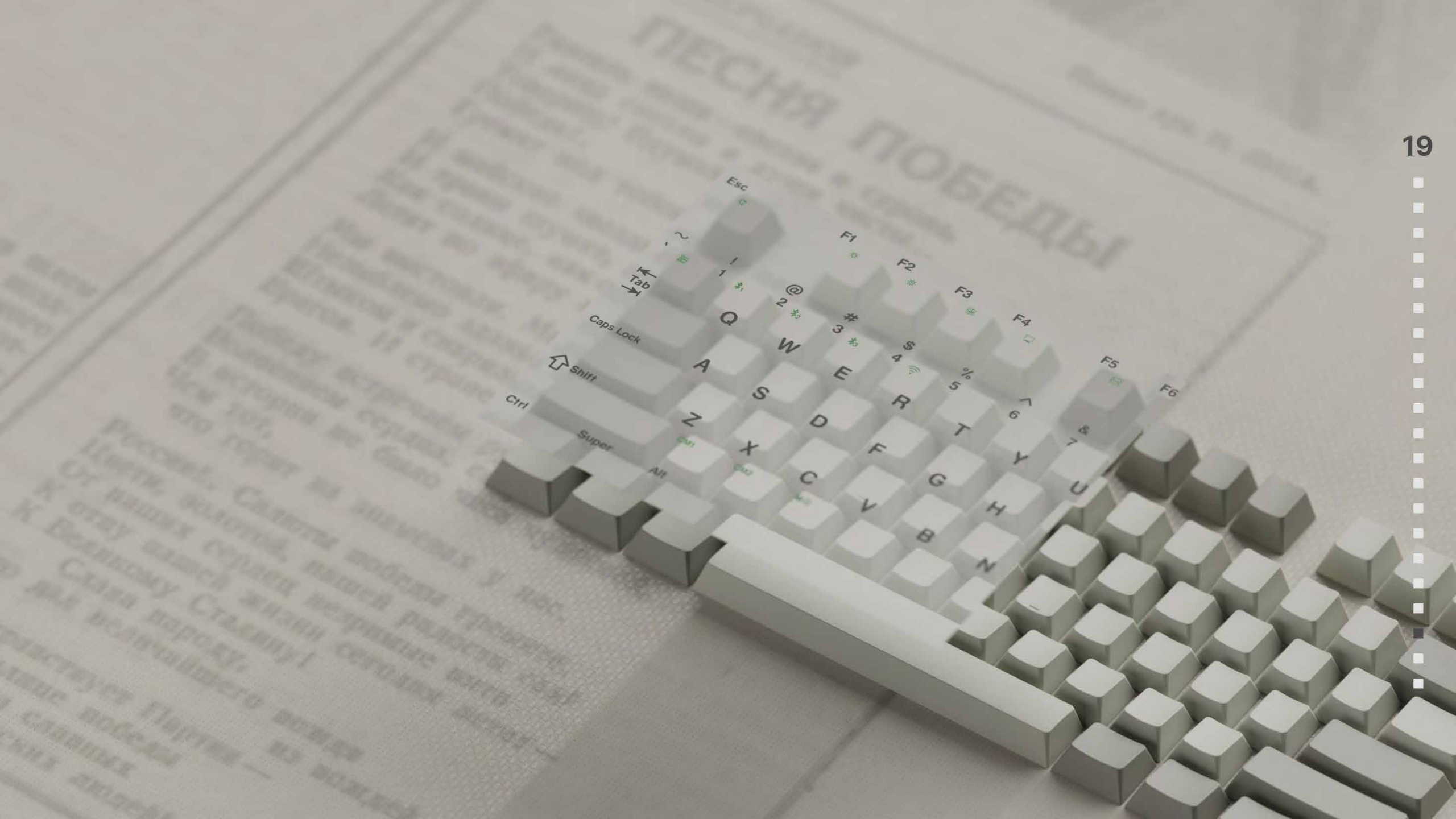
Hot-Swappable

Hot-swappable is the ability to add or remove components, such as mechanical switches, while the keyboard is powered on and functioning, without the need to solder or power off the device. This feature is particularly common in mechanical keyboards and allows users to easily customize their typing experience by changing switches based on their preferences.

PBT Dye-Sublimated Keycaps

PBT dye-sublimated keycaps are highly durable and resistant to wear, making them an ideal choice for long-term use. The PBT material prevents the keycaps from developing the shiny or greasy appearance common with ABS keycaps, while also being heat-resistant and maintaining their shape under heavy use. The dye-sublimation printing process embeds the legends into the keycap, ensuring that they won't fade over time, even with frequent typing. These keycaps also feature a textured surface for enhanced grip and thicker construction for a solid feel and improved sound, offering a premium and long-lasting typing experience.



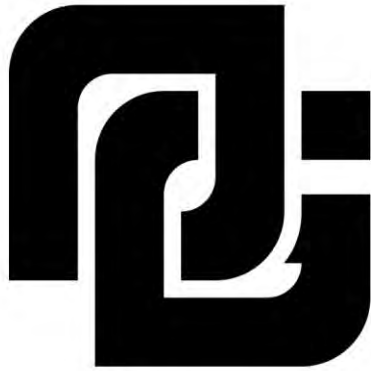




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Original Logo

For the redesign of the OG logo, we embraced the retro nature of the series by drawing inspiration from old school logos, particularly those from prestigious universities with long histories. These designs often carry a sense of tradition and timelessness, which we aimed to reflect in the new logo. To symbolize the connection between the past and the present, we incorporated a chain motif into the design, representing a strong and continuous link between classic aesthetics and modern innovation. This blend of old-world charm and contemporary relevance gives the logo a meaningful presence, aligning perfectly with the retro yet advanced character of the product.



Chain Reference



University Logo Reference





Thank You