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Table

Primary

Secondary

Tertiary

State

1134 Variants

# Create a button component with Figma Variants + Auto Layout

Early this year, I posted an article about create button components using Figma's Auto Layout. Over the past few months, Figma had...



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Early last year, I posted [an article](#) about create button components using Figma's Auto Layout. Over the past few months, [Figma](#) had dramatically improved their

They also introduce its newest feature — Variants, which help you clean up your components.

Today, I'm going to show you how to use these two features to build a robust component that helps you focus on crafting your own product's experience and be more efficient.

## 1. Define properties

Button is one of the most complex components in a design system. It has so many different variants. *Now with dark mode, you need to double the number of components.* It can quickly go over 100 combinations. To define all the properties and their orders, it is critical, and you should have a clear understanding of how you want to structure it before the next step.

In this example, I have the following properties:

## Theme

Light / Dark

## Size

Default / Large / Compact

## Type

Primary / Secondary / Success / Warning / Error / Link

## Shape

Rectangle / Rounded corner / Circle

## Style

Text-only (No Icon) / Icon only / Icon before / Icon after

## State

Enabled / Disabled / Hover / Focus / Selected / Pressed / Activated

List of properties and variants

When all properties listed, I start thinking about organising this component in Figma, so it is manageable and scalable.

My idea is to break it down to multiple tables:

- One button type per table
- Table rows are different button states and sizes
- Table columns are different shapes and styles

then grouping tables based on different themes. Layout similar to 



## Why are themes not included in the table?

From my experiences, Some properties are rarely changed for a single component during the design process. Normally those properties were decided at an earlier stage (i.e. at the beginning of the Project), so excluding them from the table can reduce the table's size.

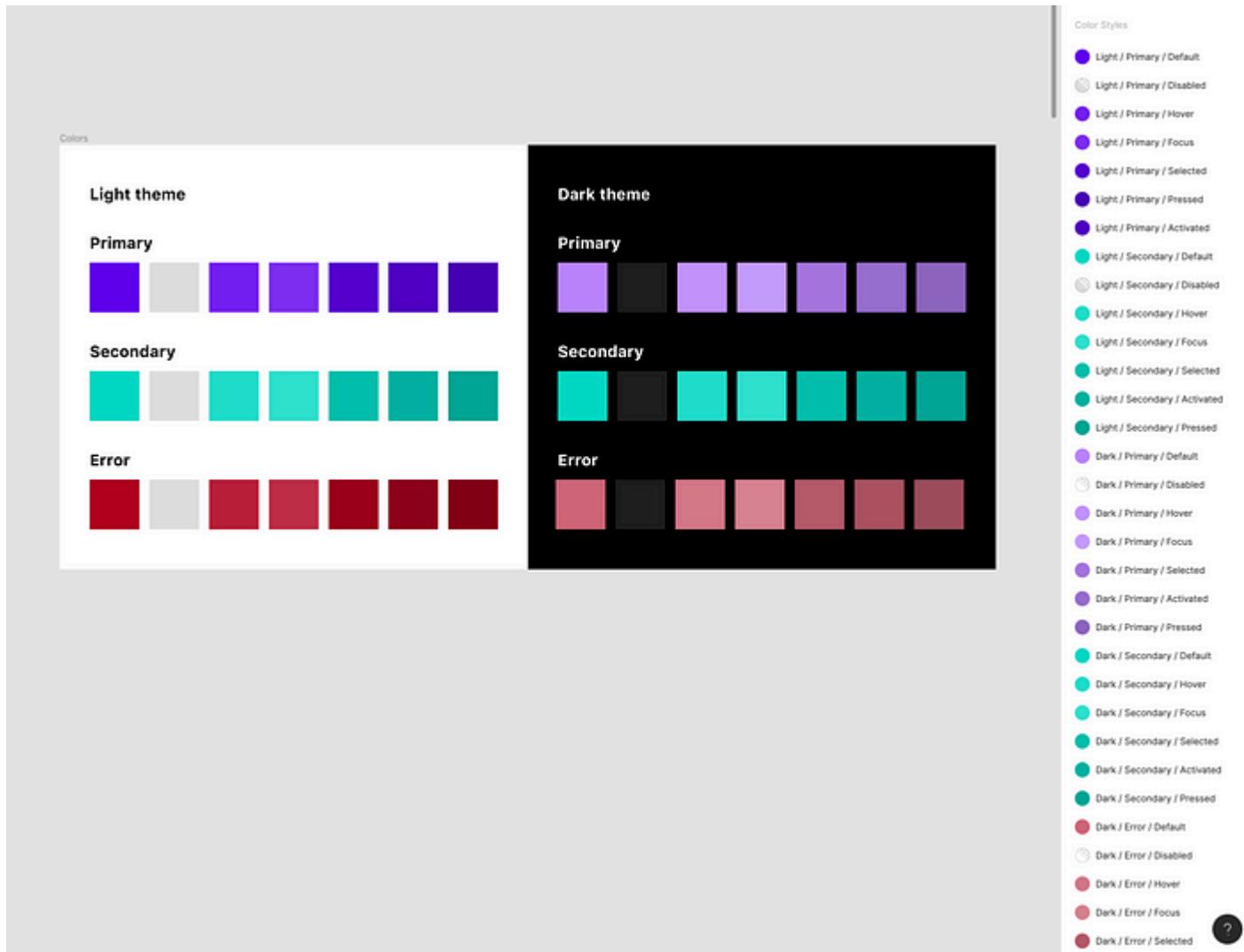
## 2. Setup the table

After all the properties defined, then start with a new frame, build the tables, and fill all properties to the table row and column headers.

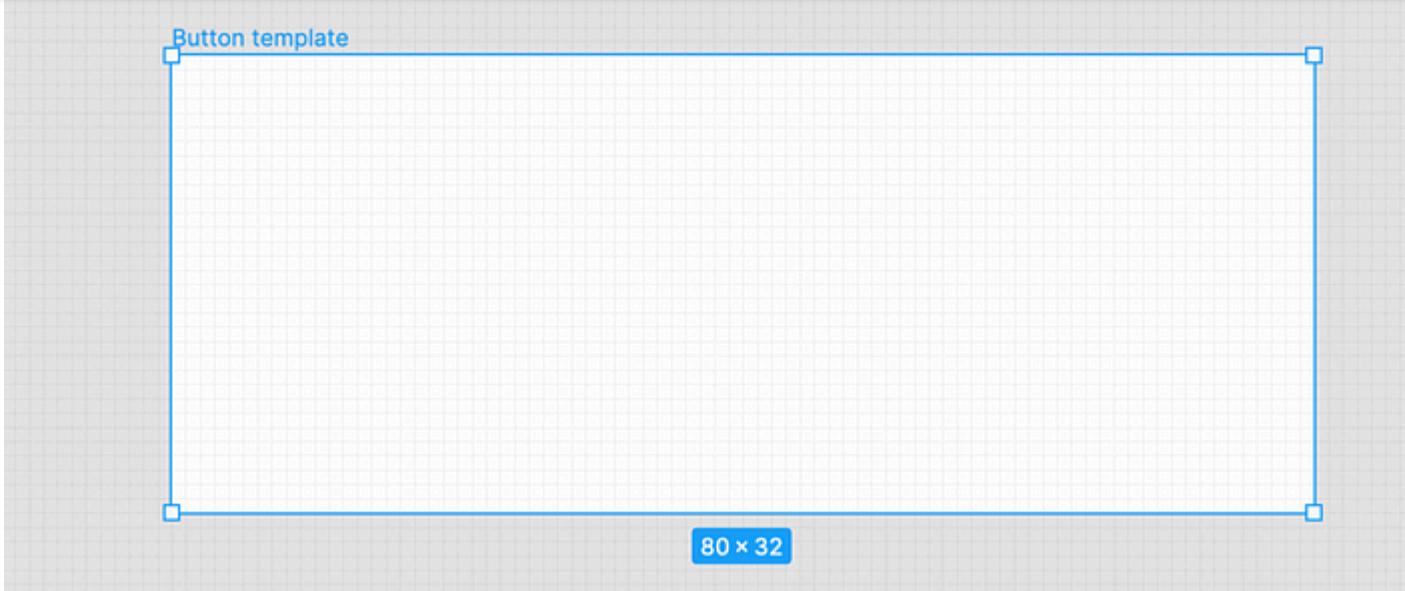
### 3. Create the component, finally!

Finally, we can start filling the empty cells with the variants 😊.

But first, make sure we have all the colours ready.



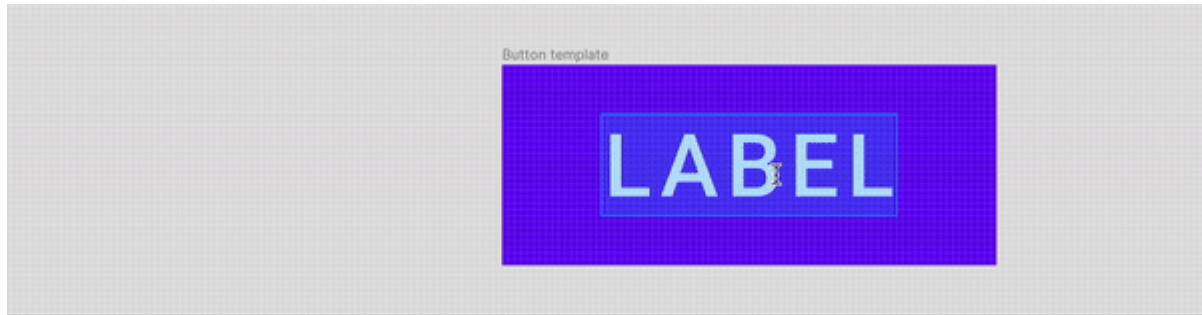
Then, start with an empty frame, let's name it "Button template".



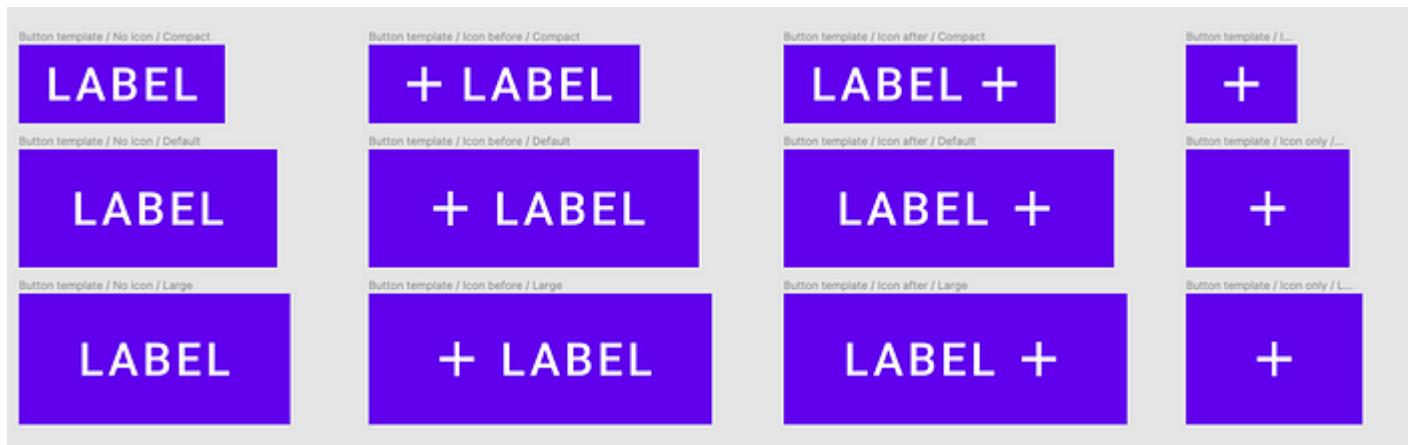
Next, add the placeholder label, and use Figma's auto-layout to maintain the button's padding.

Example of the button label's text style

Then we can start applying some colours to it:



Looks good! Let's duplicate it and make a few more templates for different sizes and button type.



Templates of different button types and sizes

	Compact	LABEL	+ LABEL	LABEL +	+
Disabled	Compact	LABEL	+ LABEL	LABEL +	+
	Default	LABEL	+ LABEL	LABEL +	+
	Large	LABEL	+ LABEL	LABEL +	+

- Light / Secondary / Unset
- Light / Secondary / Hover
- Light / Secondary / Pressed
- Light / Secondary / Selected
- Light / Secondary / Activated
- Light / Secondary / Pressed
- Dark / Primary / Default
- Dark / Primary / Disabled
- Dark / Primary / Hover
- Dark / Primary / Pressed
- Dark / Primary / Selected
- Dark / Primary / Activated
- Dark / Primary / Pressed

After copy and fill all variants into the table, we can then change the variants' colours to match the state.

After a few times, all variants for the different states of the Rectangle style is now finished.

		Rectangle			
Primary		No icon	Icon before	Icon after	Icon only
Enabled	Compact	LABEL	+ LABEL	LABEL +	+
	Default	LABEL	+ LABEL	LABEL +	+
	Large	LABEL	+ LABEL	LABEL +	+
Disabled	Compact	LABEL	+ LABEL	LABEL +	+
	Default	LABEL	+ LABEL	LABEL +	+
	Large	LABEL	+ LABEL	LABEL +	+
Hover	Compact	LABEL	+ LABEL	LABEL +	+
	Default	LABEL	+ LABEL	LABEL +	+
	Large	LABEL	+ LABEL	LABEL +	+
Focus	Compact	LABEL	+ LABEL	LABEL +	+
	Default	LABEL	+ LABEL	LABEL +	+
	Large	LABEL	+ LABEL	LABEL +	+
Selected	Compact	LABEL	+ LABEL	LABEL +	+
	Default	LABEL	+ LABEL	LABEL +	+
	Large	LABEL	+ LABEL	LABEL +	+
	Compact	LABEL	+ LABEL	LABEL +	+

	Large	LABEL	+ LABEL	LABEL +	+
	Compact	LABEL	+ LABEL	LABEL +	+
Activated	Default	LABEL	+ LABEL	LABEL +	+
	Large	LABEL	+ LABEL	LABEL +	+

Now we can finally create components for our button. Before converting the frame to a component, make sure the layer's name has all the variants separated by "/".

### Light / Default / Primary / Rectangle / No icon / Enabled



Next, use the [Batch Create Component](#) plug in to create all components at once.

The screenshot shows the Figma application interface with the following details:

- Menu Bar:** File, Edit, View, Object, Vector, Text, Arrange, Plugins, Window, Help.
- Toolbar:** Standard Figma tools like selection, move, rotate, text, and shape creation.
- Sidebar:**
  - States:** A list of states including "Enabled", "Default", "Large", "Compact", "Disabled", and "Normal".
  - Variant:** A list of variants for each state, such as "Button / Light / Primary / Rectangle / Icon only / Large".
- Plugins:** A dropdown menu showing "Batch Create Component" which is currently selected.
- Grid:** A large grid of components organized by state and variant. The grid includes columns for "No icon", "Icon before", "Icon after", and "Icon only". Each cell contains a small icon representing the combination of state and variant.

	Primary	Secondary	Tertiary	Quaternary
Enabled	LABEL	+ LABEL	LABEL +	+
Default	LABEL	+ LABEL	LABEL +	+
Large	LABEL	+ LABEL	LABEL +	+

**Wait. What?! 😱**

Once we combined as variants, Figma moves all components to a new frame, which break our table.

My work around is carefully overlaying the variant on top of the table.

Remember, lock the table frame when you do that. Otherwise, the variants will go into the table's frame!

Rectangle			
Primary		Secondary	
		No icon	Icon before
Enabled	Compact	LABEL	+ LABEL
	Default	LABEL	+ LABEL
	Large	LABEL	+ LABEL
Disabled	Compact	LABEL	+ LABEL
	Default	LABEL	+ LABEL

## 4. Name the variant's properties and values

Before we create more variants for different styles, let's make sure the properties and values are correct.

From this:

# Freedium

fact	LABEL	+ LABEL	LABEL +	+	Light
ilt	LABEL	+ LABEL	LABEL +	+	Property 2
:	LABEL	+ LABEL	LABEL +	+	Primary
fact	LABEL	+ LABEL	LABEL +	+	Property 3
ilt	LABEL	+ LABEL	LABEL +	+	Rectangle
:	LABEL	+ LABEL	LABEL +	+	Property 4
fact	LABEL	+ LABEL	LABEL +	+	Icon after
ilt	LABEL	+ LABEL	LABEL +	+	Icon before
:	LABEL	+ LABEL	LABEL +	+	Icon only
fact	LABEL	+ LABEL	LABEL +	+	No icon
ilt	LABEL	+ LABEL	LABEL +	+	Property 5
:	LABEL	+ LABEL	LABEL +	+	Compact
fact	LABEL	+ LABEL	LABEL +	+	Default
ilt	LABEL	+ LABEL	LABEL +	+	Large
:	LABEL	+ LABEL	LABEL +	+	Property 6
fact	LABEL	+ LABEL	LABEL +	+	Activated
ilt	LABEL	+ LABEL	LABEL +	+	Disabled
:	LABEL	+ LABEL	LABEL +	+	Enabled
fact	LABEL	+ LABEL	LABEL +	+	Focus
ilt	LABEL	+ LABEL	LABEL +	+	Hover
:	LABEL	+ LABEL	LABEL +	+	Pressed
fact	LABEL	+ LABEL	LABEL +	+	Selected

Before rename

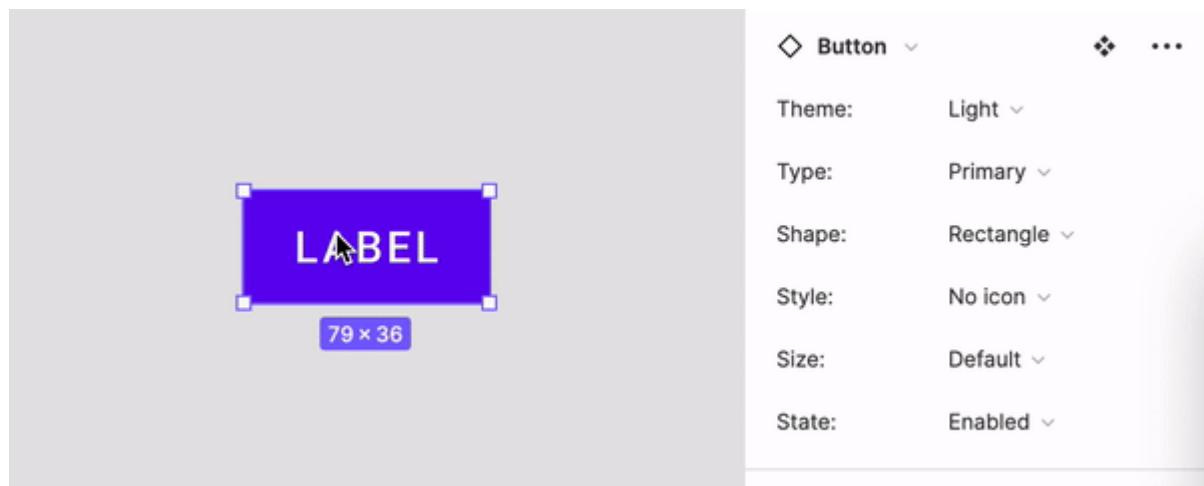
To this:

# Freedium

Compact	LABEL	+ LABEL	LABEL +	+	Theme
Default	LABEL	+ LABEL	LABEL +	+	Light
Large	LABEL	+ LABEL	LABEL +	+	Type
Compact	LABEL	+ LABEL	LABEL +	+	Primary
Default	LABEL	+ LABEL	LABEL +	+	Shape
Large	LABEL	+ LABEL	LABEL +	+	Rectangle
Compact	LABEL	+ LABEL	LABEL +	+	Style
Default	LABEL	+ LABEL	LABEL +	+	Icon after
Large	LABEL	+ LABEL	LABEL +	+	Icon before
Compact	LABEL	+ LABEL	LABEL +	+	Icon only
Default	LABEL	+ LABEL	LABEL +	+	No icon
Large	LABEL	+ LABEL	LABEL +	+	Size
Compact	LABEL	+ LABEL	LABEL +	+	Compact
Default	LABEL	+ LABEL	LABEL +	+	Default
Large	LABEL	+ LABEL	LABEL +	+	Large

After rename

Let's test it out, looks great!



Next is to create more components for different shapes and types. Select all components and click the "+" on the right button corner. Figma then duplicates all selected components and what we need to do is rename the value of the property.

# Freedium

- Light, Primary, Rectangle, Icon before, Default, Selected
- Light, Primary, Rectangle, Icon before, Compact, Selected
- Light, Primary, Rectangle, Icon before, Large, Focus
- Light, Primary, Rectangle, Icon before, Default, Focus
- Light, Primary, Rectangle, Icon before, Compact, Focus
- Light, Primary, Rectangle, Icon before, Large, Hover
- Light, Primary, Rectangle, Icon before, Default, Hover
- Light, Primary, Rectangle, Icon before, Compact, Hover
- Light, Primary, Rectangle, Icon before, Large, Disabled
- Light, Primary, Rectangle, Icon before, Default, Disabled
- Light, Primary, Rectangle, Icon before, Compact, Disabled
- Light, Primary, Rectangle, Icon before, Large, Enabled
- Light, Primary, Rectangle, Icon before, Default, Enabled
- Light, Primary, Rectangle, Icon before, Compact, Enabled
- Light, Primary, Rectangle, No icon, Large, Activated
- Light, Primary, Rectangle, No icon, Default, Activated
- Light, Primary, Rectangle, No icon, Compact, Activated
- Light, Primary, Rectangle, No icon, Large, Pressed
- Light, Primary, Rectangle, No icon, Default, Pressed
- Light, Primary, Rectangle, No icon, Compact, Pressed
- Light, Primary, Rectangle, No icon, Large, Selected
- Light, Primary, Rectangle, No icon, Default, Selected
- Light, Primary, Rectangle, No icon, Compact, Selected
- Light, Primary, Rectangle, No icon, Large, Focus
- Light, Primary, Rectangle, No icon, Default, Focus
- Light, Primary, Rectangle, No icon, Compact, Focus
- Light, Primary, Rectangle, No icon, Large, Hover



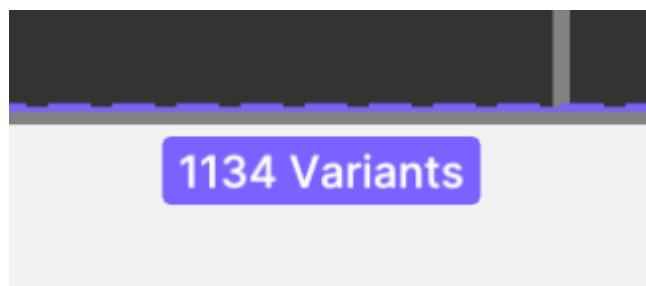
Very quickly we should be able to get the full set of variants for the "Primary" type.

Primary		No icon	Icon before	Icon after	Icon only	No icon	Icon before	Icon after	Icon only	Icon only
		No icon	Icon before	Icon after	Icon only	No icon	Icon before	Icon after	Icon only	Icon only
Enabled	Compact	LABEL	+ LABEL	LABEL +	+	LABEL	+ LABEL	LABEL +	+	+
	Default	LABEL	+ LABEL	LABEL +	+	LABEL	+ LABEL	LABEL +	+	+
	Large	LABEL	+ LABEL	LABEL +	+	LABEL	+ LABEL	LABEL +	+	+
Disabled	Compact	LABEL	+ LABEL	LABEL +	+	LABEL	+ LABEL	LABEL +	+	+
	Default	LABEL	+ LABEL	LABEL +	+	LABEL	+ LABEL	LABEL +	+	+
	Large	LABEL	+ LABEL	LABEL +	+	LABEL	+ LABEL	LABEL +	+	+
Hover	Compact	LABEL	+ LABEL	LABEL +	+	LABEL	+ LABEL	LABEL +	+	+
	Default	LABEL	+ LABEL	LABEL +	+	LABEL	+ LABEL	LABEL +	+	+
	Large	LABEL	+ LABEL	LABEL +	+	LABEL	+ LABEL	LABEL +	+	+
Focus	Compact	LABEL	+ LABEL	LABEL +	+	LABEL	+ LABEL	LABEL +	+	+
	Default	LABEL	+ LABEL	LABEL +	+	LABEL	+ LABEL	LABEL +	+	+
	Large	LABEL	+ LABEL	LABEL +	+	LABEL	+ LABEL	LABEL +	+	+
Selected	Compact	LABEL	+ LABEL	LABEL +	+	LABEL	+ LABEL	LABEL +	+	+
	Default	LABEL	+ LABEL	LABEL +	+	LABEL	+ LABEL	LABEL +	+	+
	Large	LABEL	+ LABEL	LABEL +	+	LABEL	+ LABEL	LABEL +	+	+
Pressed	Compact	LABEL	+ LABEL	LABEL +	+	LABEL	+ LABEL	LABEL +	+	+
	Default	LABEL	+ LABEL	LABEL +	+	LABEL	+ LABEL	LABEL +	+	+
	Large	LABEL	+ LABEL	LABEL +	+	LABEL	+ LABEL	LABEL +	+	+
Activated	Compact	LABEL	+ LABEL	LABEL +	+	LABEL	+ LABEL	LABEL +	+	+
	Default	LABEL	+ LABEL	LABEL +	+	LABEL	+ LABEL	LABEL +	+	+
	Large	LABEL	+ LABEL	LABEL +	+	LABEL	+ LABEL	LABEL +	+	+

After a few more copy & paste, we should be able to get all variants done!

# Freedium

And yep we just created a component with 1134 variants in total. 😅



Feel free to grab my [Figma file](#) and try it out.

Thanks for reading!



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#figma #variant #ux #prototyping #ui