

# Properties

This page lists all of the custom system properties, how are they linked with the theme, and which CSS properties they compute. All other regular CSS properties and selectors are supported too.

## Properties reference table

Note that this table only lists custom properties, all other regular CSS properties and selectors are supported. You can check out the [legend](#) below.

System key(s)	CSS property/properties	System style function	Theme mapping
border	border	<a href="#">border</a>	<code>\${value}px solid</code>
borderBottom	border-bottom	<a href="#">borderBottom</a>	<code>\${value}px solid</code>
borderColor	border-color	<a href="#">borderColor</a>	<a href="#">theme.palette[value]</a>
borderLeft	border-left	<a href="#">borderLeft</a>	<code>\${value}px solid</code>
borderRadius	border-radius	<a href="#">borderRadius</a>	<a href="#">theme.shape.borderRadius</a> <code>* value</code>
borderRight	border-right	<a href="#">borderRight</a>	<code>\${value}px solid</code>
borderTop	border-top	<a href="#">borderTop</a>	<code>\${value}px solid</code>
boxShadow	box-shadow	<a href="#">boxShadow</a>	<code>theme.shadows[value]</code>
displayPrint	display	<a href="#">displayPrint</a>	none
display	display	<a href="#">displayRaw</a>	none
alignContent	align-content	<a href="#">alignContent</a>	none
alignItems	align-items	<a href="#">alignItems</a>	none
alignSelf	align-self	<a href="#">alignSelf</a>	none
flex	flex	<a href="#">flex</a>	none
flexDirection	flex-direction	<a href="#">flexDirection</a>	none
flexGrow	flex-grow	<a href="#">flexGrow</a>	none
flexShrink	flex-shrink	<a href="#">flexShrink</a>	none
flexWrap	flex-wrap	<a href="#">flexWrap</a>	none
justifyContent	justify-content	<a href="#">justifyContent</a>	none
order	order	<a href="#">order</a>	none
gap	gap	<a href="#">gap</a>	<a href="#">theme.spacing(value)</a>
columnGap	column-gap	<a href="#">columnGap</a>	<a href="#">theme.spacing(value)</a>

rowGap	row-gap	<a href="#">rowGap</a>	<a href="#">theme.spacing(value)</a>
gridColumn	grid-column	<a href="#">gridColumn</a>	none
gridRow	grid-row	<a href="#">gridRow</a>	none
gridAutoFlow	grid-auto-flow	<a href="#">gridAutoFlow</a>	none
gridAutoColumns	grid-auto-columns	<a href="#">gridAutoColumns</a>	none
gridAutoRows	grid-auto-rows	<a href="#">gridAutoRows</a>	none
gridTemplateColumns	grid-template-columns	<a href="#">gridTemplateColumns</a>	none
gridTemplateRows	grid-template-rows	<a href="#">gridTemplateRows</a>	none
gridTemplateAreas	grid-template-areas	<a href="#">gridTemplateAreas</a>	none
gridArea	grid-area	<a href="#">gridArea</a>	none
bgcolor	background-color	<a href="#">bgcolor</a>	<a href="#">theme.palette(value)</a>
color	color	<a href="#">color</a>	<a href="#">theme.palette(value)</a>
bottom	bottom	<a href="#">bottom</a>	none
left	left	<a href="#">left</a>	none
position	position	<a href="#">position</a>	none
right	right	<a href="#">right</a>	none
top	top	<a href="#">top</a>	none
zIndex	z-index	<a href="#">zIndex</a>	<a href="#">theme.zIndex(value)</a>
height	height	<a href="#">height</a>	none
maxHeight	max-height	<a href="#">maxHeight</a>	none
maxWidth	max-width	<a href="#">maxWidth</a>	none
minHeight	min-height	<a href="#">minHeight</a>	none
minWidth	min-width	<a href="#">minWidth</a>	none
width	width	<a href="#">width</a>	none
boxSizing	box-sizing	<a href="#">boxSizing</a>	none
m, margin	margin	<a href="#">spacing</a>	<a href="#">theme.spacing(value)</a>
mb, marginBottom	margin-bottom	<a href="#">spacing</a>	<a href="#">theme.spacing(value)</a>
ml, marginLeft	margin-left	<a href="#">spacing</a>	<a href="#">theme.spacing(value)</a>
mr, marginRight	margin-right	<a href="#">spacing</a>	<a href="#">theme.spacing(value)</a>
mt, marginTop	margin-top	<a href="#">spacing</a>	<a href="#">theme.spacing(value)</a>
mx, marginX	margin-left, margin-right	<a href="#">spacing</a>	<a href="#">theme.spacing(value)</a>

my, marginY	margin-top, margin-bottom	<a href="#">spacing</a>	<a href="#">theme.spacing(value)</a>
marginInline	margin-inline	<a href="#">spacing</a>	<a href="#">theme.spacing(value)</a>
marginInlineStart	margin-inline-start	<a href="#">spacing</a>	<a href="#">theme.spacing(value)</a>
marginInlineEnd	margin-inline-end	<a href="#">spacing</a>	<a href="#">theme.spacing(value)</a>
marginBlock	margin-block	<a href="#">spacing</a>	<a href="#">theme.spacing(value)</a>
marginBlockStart	margin-block-start	<a href="#">spacing</a>	<a href="#">theme.spacing(value)</a>
marginBlockEnd	margin-block-end	<a href="#">spacing</a>	<a href="#">theme.spacing(value)</a>
p, padding	padding	<a href="#">spacing</a>	<a href="#">theme.spacing(value)</a>
pb, paddingBottom	padding-bottom	<a href="#">spacing</a>	<a href="#">theme.spacing(value)</a>
pl, paddingLeft	padding-left	<a href="#">spacing</a>	<a href="#">theme.spacing(value)</a>
pr, paddingRight	padding-right	<a href="#">spacing</a>	<a href="#">theme.spacing(value)</a>
pt, paddingTop	padding-top	<a href="#">spacing</a>	<a href="#">theme.spacing(value)</a>
px, paddingX	padding-left, padding-right	<a href="#">spacing</a>	<a href="#">theme.spacing(value)</a>
py, paddingY	padding-top, padding-bottom	<a href="#">spacing</a>	<a href="#">theme.spacing(value)</a>
paddingInline	padding-inline	<a href="#">spacing</a>	<a href="#">theme.spacing(value)</a>
paddingInlineStart	padding-inline-start	<a href="#">spacing</a>	<a href="#">theme.spacing(value)</a>
paddingInlineEnd	padding-inline-end	<a href="#">spacing</a>	<a href="#">theme.spacing(value)</a>
paddingBlock	padding-block	<a href="#">spacing</a>	<a href="#">theme.spacing(value)</a>
paddingBlockStart	padding-block-start	<a href="#">spacing</a>	<a href="#">theme.spacing(value)</a>
paddingBlockEnd	padding-block-end	<a href="#">spacing</a>	<a href="#">theme.spacing(value)</a>
typography	font-family, font-weight, font-size, line-height, letter-spacing, text- transform	<a href="#">typography</a>	<a href="#">theme.typography[value]</a>
fontFamily	font-family	<a href="#">fontFamily</a>	<a href="#">theme.typography[value]</a>
fontSize	font-size	<a href="#">fontSize</a>	<a href="#">theme.typography[value]</a>
fontStyle	font-style	<a href="#">fontStyle</a>	<a href="#">theme.typography[value]</a>
fontWeight	font-weight	<a href="#">fontWeight</a>	<a href="#">theme.typography[value]</a>
letterSpacing	letter-spacing	<a href="#">letterSpacing</a>	<a href="#">theme.typography[value]</a>
lineHeight	line-height	<a href="#">lineHeight</a>	<a href="#">theme.typography[value]</a>
textAlign	text-align	<a href="#">textAlign</a>	none

## Legend

Let's take one row from [the table above](#), for example:

System key(s)	CSS property/properties	System style function	Theme mapping
mb, marginBottom	margin-bottom	<a href="#">spacing</a>	<a href="#">theme.spacing(value)</a>

and detail each column:

- **System keys.** The column lists the key(s) by which you can use this property with the `sx` prop (or as a system function).

```
<Button sx={{ mb: 3 }}>
// or
<Box mb={3}>
// or
<Box marginBottom={3}>
```

- **CSS properties.** The column describes which CSS property will be generated when this system property is used.

```
.my-class {
  margin-bottom: Xpx;
}
```

- **System style function.** The column lists the function which generates the properties shown in the other columns, as a reference in case you want to add this functionality to your custom components. The functions can be imported from `@mui/system`. You can see an example of using the style functions on the [advanced page](#). The content links to the documentation page where this properties are described; in this example, the [spacing](#) page.
- **Theme mapping.** Lastly, the column tells you how this property is wired with the theme – with this example, whatever value you provide will be used as input to the `theme.spacing` helper.

Let's take a look at an example:

```
<Button sx={{ mb: 3 }} />

// is equivalent to
<Button sx={{ marginBottom: theme => theme.spacing(3) }} />
```

As the default theme spacing is 8px, this will result in the following CSS class:

```
.my-class {
  margin-bottom: 24px;
}
```