Responsiveness

# Responsive Tokens Documentation

**Status:** ✅ Updated for current token architecture

## Introduction

**About this document:** This document helps developers understand which tokens to use for media queries, along with the viewport strategy, token structure, and themes in Figma and Tokens Studio.

**Scope:** Tokenized Design System only. Pre Design System releases like Oblique R13 are not affected.

**Viewport Strategy:** The tokenized system currently supports two viewports: desktop and mobile.

## Primitive Responsive Tokens

### `ob.g.breakpoints.\*`

A full set of primitive breakpoint tokens is defined in `src/lib/themes/global/themes-scoped/static.json`:

* `ob.g.breakpoints.0` - 0px (base for smallest viewports)
* `ob.g.breakpoints.640` - 640px (small viewports)
* `ob.g.breakpoints.768` - 768px (medium viewports - desktop threshold)
* `ob.g.breakpoints.1024` - 1024px (large viewports)
* `ob.g.breakpoints.1280` - 1280px (extra large viewports)
* `ob.g.breakpoints.1536` - 1536px (ultra-wide viewports)

**Note:** These are primitive tokens. Use the semantic tokens below for actual development.

## Global Responsive Tokens

### `ob.g.breakpoint`

The primary token for media queries, defined in `src/lib/themes/global/responsiveness/`:

| Theme | Token | References | Resolved Value | Description |

|-------|-------|------------|----------------|-------------|

| Desktop | `ob.g.breakpoint` | `{ob.g.breakpoints.768}` | `768px` | Applies when viewport is 768px and larger |

| Mobile | `ob.g.breakpoint` | `{ob.g.breakpoints.0}` | `0px` | No media query needed; applies to all viewports |

### `ob.g.viewport`

Used primarily as a variable in Figma. Enables component variants to respond to the active viewport:

* \*\*Desktop theme:\*\* `"desktop"`
* \*\*Mobile theme:\*\* `"mobile"`

**Usage example:**

* Figma component "button/container"
* Component variant: `viewport=mobile, buttons-order=primary-first, buttons=3, size=md, has-primary=true`
* Effect: Enforces vertical stacking and full-width layout for buttons on mobile viewport only

### `ob.g.scale.mult-responsive`

Responsive scaling multiplier that adjusts based on viewport:

* \*\*Desktop theme:\*\* `4` (standard scale)
* \*\*Mobile theme:\*\* `5` (1.25x larger for better touch accessibility)

## Token File Structure

The responsive tokens are organized in the following files:

src/lib/themes/global/

├── themes-scoped/

│ └── static.json # Contains ob.g.breakpoints.\* primitives

└── responsiveness/

├── desktop.json # Desktop-specific responsive tokens

└── mobile.json # Mobile-specific responsive tokens

## Usage Guidelines

### For Developers

1. \*\*Use `ob.g.breakpoint` for media queries\*\* - This token automatically resolves to the correct breakpoint value based on the active theme
2. \*\*Use `ob.g.viewport` for conditional logic\*\* - When you need to check the current viewport in code or Figma components
3. \*\*Use `ob.g.scale.mult-responsive` for responsive scaling\*\* - When sizing elements that need to scale differently on mobile vs desktop

### For Figma Designers

1. \*\*Use `ob.g.viewport` in component variants\*\* - Set up component variants that respond to the viewport token
2. \*\*Reference breakpoint tokens\*\* - Use the primitive breakpoint tokens when defining custom breakpoints in prototypes

## Current Device Landscape

For reference, here's how common devices map to our viewport strategy:

| Device | Screen Width (px) | Classification |

|--------|-------------------|----------------|

| iPhone SE (1st/2nd Gen) | 320 / 375 | Mobile |

| iPhone 13/14/15 | 390 | Mobile |

| Google Pixel 7 | 412 | Mobile |

| Samsung Galaxy S22 | 360 | Mobile |

| iPad (9.7", portrait) | 768 | Desktop (at threshold) |

| iPad Pro 11" (portrait) | 834 | Desktop |

| iPad Pro 12.9" (portrait) | 1024 | Desktop |

| MacBook Air/Pro | ≥1280 | Desktop |

| Common desktop monitor | ≥1440 | Desktop |

## Industry Standards Comparison

| Design System | Mobile Max | Desktop Min |

|---------------|------------|-------------|

| Bootstrap | 767px | 768px |

| Tailwind CSS | 639px | 640px |

| Material Design | 599px | 600px+ (Tablet), 840px (Desktop) |

| Apple HIG | ~767px | ~768px |

| IBM Carbon | 672px | 1056px |

| **Oblique** | **767px** | **768px** |

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**Related Documentation:** [Themes Scoped](../CONTEXT\_NOTES.md#themes-scoped-consolidation)