



# BUTTON

The Button is one of the most commonly used fundamental components of AAVA Play. It is not just a click target. It's the pulse of the interface—alive, intentional, and radiant with purpose.

The

```
<aava-button>
```

component provides a highly customizable clickable element with advanced visual effects including glass morphism, multiple interaction states, and comprehensive theming options. It supports various variants, sizes, icons, and custom styling while maintaining accessibility standards.

## How to use

```
import {  
  AavaButtonComponent  
} from "@aava/play-core";
```

## Interactive Matrix

Explore all button combinations with our interactive playground.

```
<div class="matrix-demo">  
  <div class="demo-header">  
    <!-- Matrix Table -->  
    <div class="matrix-table-container">  
      <!-- Size Headers -->  
      <div id="size-tabs" class="size-tabs">  
        <aava-tabs [tabs]="sizeTabs"
```

```
[activeTabId]="selectedSize"
variant="button"
size="sm"
[showContentPanels]="false"
(tabChange)="onSizeTabChange($event)"
class="size-tabs-container"
></aava-tabs>
</div>
<!-- Matrix Grid -->
<div class="matrix-grid">
<!-- Column Headers -->
<div class="matrix-header">
<div class="mode-header">Mode</div>
<div class="fill-header" *ngFor="let fill of fills">{{ fill }}</div>
</div>
<!-- Matrix Rows -->
<div class="matrix-row" *ngFor="let mode of modes">
<div class="mode-label">{{ mode }}</div>
<div class="button-cell" *ngFor="let fill of fills">
<ng-container
*nglf="getButtonConfig(mode, fill, selectedSize) as config"
>
<aava-button
*nglf="config.available"
```

```
[label]="config.label"
[pill]="config.pill"
[outlined]="config.outlined"
[clear]="config.clear"
[size]="getSizeMapping(selectedSize)"
[iconName]="config.iconName"
[iconPosition]="config.iconPosition || 'left'"
variant="primary"
class="matrix-button"
></aava-button>

<div *ngIf="!config.available" class="unavailable">
  ■ Not Available
</div>
</ng-container>
</div>
</div>
</div>
</div>
</div>
</div>
```

## Basic Usage

Basic button implementation with default settings.

```
<aava-button
  label="Primary"
```

```

variant="primary"

(userClick)="onButtonClick($event)"

[pill]="true"

>

</aava-button>

<aava-button

label="Primary"

variant="primary"

(userClick)="onButtonClick($event)"

>

</aava-button>

```

## Variants

The button component supports 9 semantic variants that control the visual appearance and meaning of the button.

```

<aava-button label="Primary" variant="primary"></aava-button>

<aava-button label="Secondary" variant="secondary"></aava-button>

<aava-button label="Success" variant="success"></aava-button>

<aava-button label="Warning" variant="warning"></aava-button>

<aava-button label="Danger" variant="danger"></aava-button>

<aava-button label="Info" variant="info"></aava-button>

<aava-button label="Tertiary" variant="tertiary"></avaa-button>

```

### ***Available Variants***

- primary- Main call-to-action button (pink/brand color)
- secondary- Outlined style with transparent background
- success- Positive actions (green)

- warning- Cautionary actions (orange)
- danger- Destructive actions (red)
- info- Informational actions (blue)
- tertiary- Text-only action (transparent)

## Sizes

Five size options to fit different layout requirements and visual hierarchies.

```
<aava-button label="Extra Small" variant="primary" size="xs"></aava-button>

<aava-button label="Small" variant="primary" size="sm"></aava-button>

<aava-button label="Medium" variant="primary" size="md"></aava-button>

<aava-button label="Large" variant="primary" size="lg"></aava-button>

<aava-button label="Extra Large" variant="primary" size="xl"></aava-button>
```

### **Available Sizes**

- xs (Extra Small)- Extra compact size for very dense interfaces
- sm (Small)- Compact size for dense interfaces
- md (Medium)- Standard size for most use cases (default)
- lg (Large)- Prominent size for primary actions
- xl (Extra Large)- Extra large size for hero sections and CTAs

## Hover Effects

Dynamic hover effects that enhance user interaction feedback.

```
<aava-button

label="Torch (Recommended)"

variant="primary"

hoverEffect="torch"

[pill]="true"
```

```
>

</aava-button>

<aava-button

label="Glow Effect"

variant="warning"

hoverEffect="glow"

[pill]="true"

>

</aava-button>

<aava-button

label="Tint Effect"

variant="success"

hoverEffect="tint"

[pill]="true"

>

</aava-button>

<aava-button

label="Scale Effect"

variant="danger"

hoverEffect="scale"

[pill]="true"

>

</aava-button>
```

### ***Available Hover Effects***

- torch- Internal semicircular sunrise effect (default)

- glow- Outer glow with elevation
- tint- Color overlay with brightness increase
- scale- Scale transformation with elevation

## Pressed Effects

Visual feedback for button press interactions with various animation styles.

```
<aava-button

label="Ripple (Recommended)"

variant="primary"

pressedEffect="ripple"

[pill]="true"

>

</aava-button>

<aava-button

label="Inset Effect"

variant="warning"

pressedEffect="inset"

[pill]="true"

>

</aava-button>
```

### ***Available Pressed Effects***

- ripple- Multi-layered ripple animation (default)
- inset- Inset shadow effect

## Icons

Comprehensive icon support with flexible positioning and customization options.

```
<aava-button  
label="Left Icon"  
iconName="star"  
iconPosition="left"  
variant="primary"  
iconColor="#fff"  
>  
</aava-button>  
  
<aava-button  
label="Right Icon"  
iconName="star"  
iconPosition="right"  
variant="primary"  
iconColor="#fff"  
>  
</aava-button>  
  
<aava-button  
iconName="star"  
iconPosition="icon-only"  
variant="primary"  
iconColor="#fff"  
>  
</aava-button>
```

## ***Icon Properties***

- iconName- Lucide icon name
- iconPosition- Position relative to text:left,right,icon-only
- iconColor- Custom icon color (defaults to currentColor)
- iconSize- Icon size in pixels (default: 20)

## States

Interactive states for different user scenarios and feedback.

```
<aava-button label="Default State" variant="primary" size="md" [pill]="true">
</aava-button>

<aava-button
  label="Processing State"
  variant="primary"
  [processing]="true"
  size="md"
  [pill]="true"
  iconName="loader"
  iconColor="white"
  iconPosition="left"
>
</aava-button>

<aava-button
  label="Disabled State"
  variant="primary"
  [disabled]="true"
  size="md"
>
```

```
[pill]="true"

>

</aava-button>
```

## **Available States**

- default- Programmatically active state
- processing- Loading/async operation state with pulse animation
- disabled- Non-interactive state

## **Shapes & Styles**

Shape modifiers and style variants for different design requirements.

```
<aava-button

label="Primary"

variant="primary"

[pill]="true"

[customStyles]="{ 'max-width': '100px' }"

></aava-button>

<aava-button

label="Secondary"

variant="secondary"

[pill]="true"

[customStyles]="{ 'max-width': '100px' }"

></aava-button>

<aava-button

label="Primary"

variant="primary"
```

```
[customStyles]={"max-width": "100px"}  
></aava-button>  
  
<aava-button  
label="Secondary"  
variant="secondary"  
[customStyles]={"max-width": "100px"}  
></aava-button>
```

### **Available Shapes**

- default- Standard rectangular with border radius
- pill- Fully rounded corners (50px border radius)

### **Style Variants**

- outlined- Transparent background with colored border
- clear- Transparent background with no border, uses variant text colors
- customStyles- Allows to apply inline CSS styles directly to the component.

This property accepts a key-value pair object where the key is the CSS property name and the value is the corresponding CSS value.

## **Events**

The button component emits events for user interactions.

```
<aava-button  
label="Click Handler"  
variant="primary"  
(userClick)="onButtonClick()"  
[customStyles]={"max-width": "200px"}  
[pill]="true"  
>
```

```
</aava-button>
```

## **Available Events**

- userClick- Emitted on button click or keyboard activation (Enter/Space)

## **Accessibility**

The button component follows WAI-ARIA accessibility guidelines:

- Proper keyboard navigation (Enter and Space key support)
- ARIA attributes for screen readers (aria-disabled,aria-pressed)
- Focus management with visible focus indicators
- Semantic button element usage

## **API Reference**

### ***Inputs***

[TABLE]

Property | Type | Default | Description

label | string | " | Button text content

variant | ButtonVariant | 'default' | Visual variant: | 'default' | , | 'primary' | , | 'secondary' | , | 'success' | , | 'warning' | , | 'danger' | , | 'info'

size | ButtonSize | 'md' | Button size: | 'xs' | , | 'sm' | , | 'md' | , | 'lg' | , | 'xl'

state | ButtonState | 'default' | Interaction state: | 'default' | , | 'hover' | , | 'active' | , | 'disabled' | , | 'processing' | , | 'focus'

hoverEffect | ButtonHoverEffect | 'torch' | Hover effect: | 'torch' | , | 'glow' | , | 'tint' | , | 'scale' | , | 'none'

pressedEffect | ButtonPressedEffect | 'ripple' | Pressed effect: | 'ripple' | , | 'inset' | , | 'solid' | , | 'none'

processingEffect | ButtonProcessingEffect | 'pulse' | Processing effect: | 'pulse' | , | 'none'

focusEffect | ButtonFocusEffect | 'border' | Focus effect: | 'border' | , | 'none'

disabledEffect | ButtonDisabledEffect | 'dim' | Disabled effect: | 'dim' | , | 'none'

disabled | boolean | false | Whether button is disabled

processing | boolean | false | Whether button is in processing state

pill | boolean | false | Whether to use pill shape

outlined | boolean | false | Whether to use outlined style variant

clear | boolean | false | Whether to use clear style variant (transparent, no border)

width | string | " | Custom width value

height | string | " | Custom height value

gradient | string | undefined | Legacy | – use | customStyles | instead

background | string | undefined | Legacy | – use | customStyles | instead

color | string | undefined | Legacy | – use | customStyles | instead

dropdown | boolean | false | Legacy | – use separate dropdown component

glassVariant | ButtonGlassVariant | 'glass-10' | Default recommended glass intensity

customStyles | Record<string, string> | {} | CSS custom properties override

iconName | string | " | Lucide icon name

iconColor | string | " | Custom icon color

iconSize | number | 20 | Icon size in pixels

iconPosition | 'left' | 'right' | 'only' | 'left' | Icon position relative to text

[/TABLE]

## **Outputs**

[TABLE]

Event | Type | Description

userClick | EventEmitter<Event> | Emitted when button is clicked or activated via keyboard

[/TABLE]

## **Design Tokens & Theming**

AAVA Play buttons use semantic design tokens for all surfaces, spacing, radius, and motion. While global tokens define the visual language of the system, buttons expose a set of

scoped override tokens

that allow you to fine-tune appearance without breaking consistency.

Use these

only when necessary

—for instance, to adjust a button's vertical padding inside a dense UI or to sharpen the radius for compact layouts.

### ***Available Design Tokens for Button***

[TABLE]

Token | Purpose | Default Value

--button-size-xsm-padding | Padding for extra small size buttons | Theme-based

--button-size-sm-padding | Padding for small size buttons | Theme-based

--button-size-md-padding | Padding for medium size buttons | Theme-based

--button-size-lg-padding | Padding for large size buttons | Theme-based

--button-size-xlg-padding | Padding for extra large size buttons | Theme-based

--button-size-xsm-height | Height for extra small size buttons | Theme-based

--button-size-sm-height | Height for small size buttons | Theme-based

--button-size-md-height | Height for medium size buttons | Theme-based

--button-size-lg-height | Height for large size buttons | Theme-based

--button-size-xlg-height | Height for extra large size buttons | Theme-based

--button-border-radius | Border radius for default shape | Theme-based

[/TABLE]

[TABLE]

Token | Purpose | Default Value

--button-font-weight | Font weight for button text | Theme-based

--button-transition | Default transition animation | Theme-based

[/TABLE]

[TABLE]

Token | Purpose | Default Value

--button-icon-margin | Margin around icons | Theme-based

[/TABLE]

### ***Token Override Example***

You can define overrides in your theme configuration or component styles:

```
/* Custom button theming */
```

```
.my-compact-buttons
```

```
{
```

```
--button-size-md-padding
```

```
:
```

```
8
```

```
px
```

```
16
```

```
px
```

```
;
```

```
--button-border-radius
```

```
:
```

```
4
```

```
px
```

```
;
```

```
--button-transition
```

```
:
```

```
100
```

```
ms  
ease  
;  
}
```

This would make buttons more compact, sharper, and snappier—ideal for dense interfaces or admin tools.

These tokens are opt-in overrides. If not set, the button will inherit global styles via the design system tokens.

## Best Practices

### ***Design Guidelines***

- Use semantic variants- Choose variants that match the action's intent (primary for main actions, danger for destructive actions)
- Default variant- Use `defaultvariant` for standard buttons; `primary` for main CTAs
- Size selection- Use `medium` as the default size; `extra small`/`extra large` for extreme cases only
- Effects system- Default effects work well together; customize only when needed
- Icon usage- Use `icon-only` for compact interfaces, `left/right` for labeled actions
- Consistent sizing- Match button sizes to surrounding elements and visual hierarchy

### ***Accessibility***

- Always provide meaningful labels- Even for icon-only buttons, use proper ARIA labels
- Keyboard navigation- Ensure all interactive elements are keyboard accessible
- Focus indicators- Maintain clear focus states for navigation
- Screen reader support- Use semantic HTML and proper ARIA attributes
- Color contrast- Ensure sufficient contrast for all variants and states

### ***Performance***

- Avoid excessive custom styling- Use built-in variants when possible

- Debounce rapid clicks- Prevent accidental multiple submissions
- Optimize icon loading- Use icon systems efficiently
- Consider bundle size- Import only needed effects and variants



# TEXTBOX

The

```
<aava-textbox>
```

component provides a highly sophisticated text input element with glass morphism effects, advanced content projection system, multiple processing animations, and comprehensive Angular forms integration. It supports semantic variants, validation states, and extensive customization options.

## How to use

```
import {  
  AavaTextboxComponent  
}  
from "@aava/play-core"  
;
```

## Basic Usage

Simple textbox implementation with label, placeholder, and two-way data binding.

```
<aava-textbox  
  label="Basic Input"  
  placeholder="Enter text here"  
  (change)="onTextboxChange($event)"></aava-textbox>
```

## Variants

The textbox component supports 6 semantic variants that control visual appearance and focus colors.

```
<aava-textbox  
  label="Default Variant"
```

```
placeholder="Default variant..."  
variant="default"  
(change)="onTextboxChange($event)"  
></aava-textbox>  
  
<aava-textbox  
label="Primary Variant"  
placeholder="Primary variant..."  
variant="primary"  
(change)="onTextboxChange($event)"  
></aava-textbox>  
  
<aava-textbox  
label="Success Variant"  
placeholder="Success variant..."  
variant="success"  
(change)="onTextboxChange($event)"  
></aava-textbox>  
  
<aava-textbox  
label="Error Variant"  
placeholder="Error variant..."  
variant="error"  
(change)="onTextboxChange($event)"  
></aava-textbox>  
  
<aava-textbox  
label="Warning Variant"  
placeholder="Warning variant..."
```

```
variant="warning"

(change)="onTextboxChange($event)"

></aava-textbox>

<aava-textbox

label="Info Variant"

placeholder="Info variant..."'

variant="info"

(change)="onTextboxChange($event)"

></aava-textbox>
```

### ***Available Variants***

- default- Standard neutral appearance with brand primary focus
- primary- Primary variant with enhanced brand focus color
- success- Positive states and confirmations (green)
- error- Error states and validation failures (red)
- warning- Warning states and cautions (orange/yellow)
- info- Informational states and tips (blue)

### **Sizes**

Five size options to accommodate different interface densities and layout requirements.

```
<aava-textbox

label="Extra Small"

placeholder="Extra Small..."'

size="xs"

></aava-textbox>

<aava-textbox label="Small" placeholder="Small..." size="sm"></aava-textbox>
```

```
<aava-textbox label="Medium" placeholder="Medium..." size="md"></aava-textbox>

<aava-textbox label="Large" placeholder="Large..." size="lg"></aava-textbox>

<aava-textbox
  label="Extra Large"
  placeholder="Extra Large..."
  size="xl"
></aava-textbox>
```

## **Available Sizes**

- xs (Extra Small)- Extra small size for very compact interfaces
- sm (Small)- Small size for dense interfaces
- md (Medium)- Medium size for most use cases (default)
- lg (Large)- Large size for prominent inputs
- xl (Extra Large)- Extra large size for emphasis and accessibility

## **Icons & Affixes**

Advanced content projection system supporting icons, prefixes, and suffixes through Angular's content projection.

```
<aava-textbox label="Amount" placeholder="0.00" type="number" (on)>

<span slot="prefix">$</span>

<span slot="suffix">USD</span>

</aava-textbox>

<aava-textbox
  label="Password"
  [type]="showPassword ? 'text' : 'password'"
  placeholder="Enter password"
>
```

```

<aava-icon
slot="icon-end"
[iconName]="showPassword ? 'eye' : 'eye-off'"
(click)="togglePasswordVisibility()"

></aava-icon>

</aava-textbox>

<aava-textbox

label="With Icon Separator (Start)"

placeholder="Search..."

[iconSeparator]="true"

>

<aava-icon slot="icon-start" iconName="search"></aava-icon>

</aava-textbox>

<aava-textbox

label="With Icon Separator (End)"

placeholder="Clear..."

[iconSeparator]="true"

>

<aava-icon slot="icon-end" iconName="x"></aava-icon>

</aava-textbox>

```

### **Content Projection Slots**

- icon-start- Icons at the beginning of the input
- icon-end- Icons at the end of the input
- prefix- Text or elements before the input text
- suffix- Text or elements after the input text

## Input Masking

Advanced input masking system powered by ngx-mask for formatted input patterns like phone numbers, dates, currency, and credit cards.

```
<!-- Phone Number Masking -->

<aava-textbox

label="Phone Number"

placeholder="(123) 456-7890"

[mask]="maskPhone"

>

</aava-textbox>

<!-- Currency Masking -->

<aava-textbox

label="Currency"

placeholder="0.00"

[mask]="maskCurrency"

[maskThousandSeparator]="thousand"

[maskDecimalMarker]="decimal"

>

<span slot="prefix">$</span>

</aava-textbox>

<!-- Date Masking -->

<aava-textbox label="Date" placeholder="MM/DD/YYYY" [mask]="maskDate">

</aava-textbox>

<!-- Custom Pattern Masking -->
```

```
<aava-textbox

label="Custom Pattern (AA-0000)"

placeholder="AB-1234"

[mask]="customMask"

[maskPatterns]="customPatterns"

>

</aava-textbox>

<aava-textbox

label="Phone Number (with Built-in Dropdown)"

[placeholder]="currentCountryPlaceholder"

[(ngModel)]="countryPhoneValue"

[mask]="currentCountryMask" [

prefixDropdown]="true"

[prefixDropdownOptions]="countryOptions"

[selectedPrefixOption]="selectedCountry"

(prefixDropdownSelect)="onCountrySelect($event)"

>

</aava-textbox>

<aava-textbox

label="Phone Number (with Custom Slot Dropdown)"

[placeholder]="slotCurrentPlaceholder"

[(ngModel)]="slotCountryPhoneValue"

[mask]="slotCurrentMask"

(clickOutSide)="closeSlotDropdown()"

>
```

```
<!-- Custom dropdown projected into prefix slot -->

<div slot="prefix" class="custom-country-dropdown">

  <div class="dropdown-trigger" (click)="toggleSlotDropdown()" tabindex="0" role="button"
    [attr.aria-expanded]="slotIsDropdownOpen">

    <span class="country-label">{{ slotSelectedCountry.label }}</span>

    <svg class="chevron-icon" [class.open]="slotIsDropdownOpen" width="16" height="16" viewBox="0 0
      24 24">

      fill="none" stroke="currentColor">

      <polyline points="6 9 12 15 18 9"></polyline>

    </svg>

  </div>

</div>

<div slot="dropdown" class="custom-country-dropdown">

  <div class="dropdown-menu" *ngIf="slotIsDropdownOpen" role="listbox" tabindex="-1">

    <div *ngFor="let option of countryOptions" class="dropdown-item"
      [class.selected]="option.value === slotSelectedCountryCode"
      (click)="selectSlotCountry(option); $event.stopPropagation()" (keydown.enter)=
        selectSlotCountry(option); $event.stopPropagation()

      " (keydown.space)="

      selectSlotCountry(option); $event.stopPropagation()

      " tabindex="0" role="option" [attr.aria-selected]="option.value === slotSelectedCountryCode">

        {{ option.label }}

      </div>

    </div>

  </div>
```

```
</aava-textbox>
```

## **Masking Features**

- Pattern-Based Input: Define custom input patterns using mask syntax
- Real-time Formatting: Automatic formatting as users type
- Special Character Handling: Control how special characters are processed
- Prefix/Suffix Support: Add currency symbols, units, or other prefixes/suffixes
- Validation Integration: Works seamlessly with existing validation system
- Accessibility: Maintains proper ARIA attributes and keyboard navigation

## **Common Mask Patterns**

- Phone Numbers:(000) 000-0000for US format
- Dates:00/00/0000for MM/DD/YYYY format
- Currency:separator.2with thousand separators and decimal places
- Credit Cards:0000 0000 0000 0000for card number format
- Custom Patterns: Define your own patterns using0,9,A,Splaceholders

## **States & Validation**

Comprehensive validation system with error messages, helper text, and various input states.

```
<aava-textbox
```

```
label="Comments"
```

```
placeholder="Share your thoughts..."
```

```
helper="Please provide detailed feedback to help us improve our service."
```

```
(change)="onTextboxChange($event)"
```

```
></aava-textbox>
```

```
<aava-textbox
```

```
label="Email"
```

```

placeholder="Enter your email..." 

error="Please enter a valid email address." 

(change)="onTextboxChange($event)" 

></aava-textbox> 

<aava-textbox 

label="Required Field" 

placeholder="This field is required..." 

[required]="true" 

(change)="onTextboxChange($event)" 

></aava-textbox>

```

### ***Available States***

- Normal- Default input state
- Focused- Active input with enhanced border and shadow
- Disabled- Non-interactive state with dimmed appearance
- Readonly- Display-only state with modified styling
- Error- Validation error state with red styling and error message
- Required- Indicates mandatory fields with asterisk

### ***Validation Features***

Error Handling:

- Error messages- Display validation errors with icon
- ARIA compliance- Properaria-invalidandaria-describedbyattributes
- Visual feedback- Error variant styling with red colors
- Icon integration- Alert icons automatically shown with errors

Helper Text:

- Guidance messages- Helpful instructions below input

- Icon support- Info icons automatically shown with helper text
- Conditional display- Helper text hidden when errors are present
- Accessibility- Proper ARIA relationships

Required Fields:

- Visual indicators- Asterisk (\*) displayed for required fields
- Label integration- Required indicator integrated with label
- Form validation- Works with Angular form validation

## Processing Effects

Advanced processing states with multiple animation options for loading and async operations.

```
<aava-textbox

[(ngModel)]="processingValue"
label="Processing State"
placeholder="Processing..."
[processing]="true"
(change)="onProcessingChange($event)"

></aava-textbox>

<aava-textbox

[(ngModel)]="shimmerValue"
label="Shimmer Effect"
placeholder="Validating..."
[processing]="true"
processingEffect="shimmer"
(change)="onShimmerChange($event)"

></aava-textbox>
```

```
<aava-textbox  
[(ngModel)]="gradientValue"  
label="Gradient Border"  
placeholder="Submitting..."  
[processing]="true"  
[processingGradientBorder]="true"  
(change)="onGradientChange($event)"  
></aava-textbox>
```

### ***Available Processing Effects***

- border-pulse- Pulsing border animation (default)
- shimmer- Text shimmer effect within input
- gradient-border- Animated multi-color border gradient

## **Effects System**

Modern effects system following Text Input Specifications for consistent visual behavior and accessibility.

### ***Hover Effects***

- tint- Subtle color tinting on hover (recommended)
- glow- Enhanced glow effect on hover (for interactive elements)

### ***Processing States***

- Default Processing- Border pulse animation with customizable colors
- Shimmer Effect- Text shimmer animation as alternative to border pulse
- Gradient Border- Animated multi-color gradient border for processing state
- Custom Colors- Configurable gradient colors for brand consistency

### ***Accessibility Features***

- High Contrast Support- Effects respect high contrast mode settings

- Reduced Motion- Animations respect user's motion preferences
- Focus Indicators- Clear focus states maintained with all effects
- Screen Reader Support- Proper ARIA attributes for all interactive states

## API Reference

### *Inputs*

[TABLE]

Property | Type | Default | Description

label | string | "" | Visible label text above input

placeholder | string | "" | Placeholder text shown when empty

variant | TextboxVariant | 'default' | Visual variant: | 'default' | , | 'primary' | , | 'success' | , | 'error' | , | 'warning' | , | 'info'

size | TextboxSize | 'md' | Input size: | 'xs' | , | 'sm' | , | 'md' | , | 'lg' | , | 'xl'

disabled | boolean | false | Whether input is disabled

readonly | boolean | false | Whether input is read-only

error | string | "" | Error message to display

helper | string | "" | Helper text to display

required | boolean | false | Whether input is required

fullWidth | boolean | false | Whether input takes full container width

type | string | 'text' | HTML input type

maxlength | number | "" | Maximum character length

minlength | number | "" | Minimum character length

autocomplete | string | "" | HTML autocomplete attribute

id | string | "" | Custom element ID

name | string | "" | HTML name attribute

icon | string | "" | Icon name to display

iconPosition | 'start' | 'end' | 'start' | Position of the icon relative to input  
 iconSeparator | boolean | false | Whether to show separator between icon and input  
 iconSpacing | 'compact' | 'normal' | 'relaxed' | 'normal' | Icon spacing variant  
 inputKind | 'text' | 'phone' | 'currency' | 'password' | 'text' | Type of input for specialized behavior  
 inputKindLabel | string | "" | Label for specialized input types (e.g., country code)  
 phone | boolean | false | Enable phone input functionality  
 labelPosition | 'start' | 'end' | 'start' | Position of country prefix label for phone inputs  
 [/TABLE]

## ***Masking Properties***

[TABLE]

Property	Type	Default	Description
mask	string	null	Input mask pattern (e.g., "(000) 000-0000" for phone)
maskPrefix	string	"	Prefix to add before masked value (e.g., "\$" for currency)
maskSuffix	string	"	Suffix to add after masked value (e.g., "%" for percentage)
maskDropSpecialCharacters	boolean	string[]	true   Whether to drop special characters from value
maskShowMaskTyped	boolean	false	Show mask characters as user types
maskThousandSeparator	string	"	Thousands separator character (e.g., "," for numbers)
maskDecimalMarker	'.'	'.'	Decimal marker character
maskPatterns	Record<string, object>	{}	Custom mask patterns for special characters
maskValidation	boolean	false	Enable mask validation
maskAllowNegativeNumbers	boolean	false	Allow negative numbers in numeric masks
maskLeadZeroDateTime	boolean	false	Show leading zeros in date/time masks

[/TABLE]

## ***Effects System Properties***

[TABLE]

Property	Type	Description
hoverEffect	'tint'   'glow'	"   Hover effect: Tint (recommended) or Glow
pressedEffect	'solid'	'solid'   Pressed effect: Solid (recommended and only allowed)
processing	boolean	false   Processing state - triggers border pulse by default
processingEffect	'shimmer'	"   Alternative processing effect: Text shimmer animation
processingGradientBorder	boolean	false   Show animated gradient border for processing state
processingGradientColors	string[]	[ '#e91e63', '#fee140', '#ff9800', '#047857', '#ff9800', '#fee140', '#e91e63' ]   Colors for processing gradient border
decorativeEffect	'glowBox'   'borderFlow'   'attention'   'wave'	"   Ambient decorative effects for future use
disabledState	'grey'	'grey'   Disabled state appearance: Grey (recommended and only allowed)
customStyles	Record<string, string>	"   CSS custom properties override for advanced theming
[/TABLE]		

## **Outputs**

[TABLE]

Event	Type	Description
iconStartClick	EventEmitter<Event>	Emitted when the start icon is clicked
iconEndClick	EventEmitter<Event>	Emitted when the end icon is clicked
clickOutSide	EventEmitter<boolean>	Emitted when a click occurs outside the input
change	EventEmitter<Event>	Emitted when the input value changes
blur	EventEmitter<Event>	Emitted when the input loses focus
focus	EventEmitter<Event>	Emitted when the input gains focus
input	EventEmitter<Event>	Emitted on every input event
prefixSelect	EventEmitter<{ label: string; value: string; }>	Emitted when a prefix option is selected
suffixSelect	EventEmitter<{ label: string; value: string; }>	Emitted when a suffix option is selected

[/TABLE]

## ***Properties***

[TABLE]

Property | Type | Description

value | string | Current input value

isFocused | boolean | Whether input currently has focus

hasError | boolean | Whether input has error state

hasHelper | boolean | Whether input has helper text

[/TABLE]

## ***Methods***

[TABLE]

Method | Parameters | Return Type | Description

setValue() | value: string | void | Set input value programmatically

writeValue() | value: string | void | Set input value (ControlValueAccessor)

registerOnChange() | fn: (value: string) => void | void | Register change callback

registerOnTouched() | fn: () => void | void | Register touched callback

setDisabledState() | isEnabled: boolean | void | Set disabled state

[/TABLE]

## ***Content Projection Slots***

[TABLE]

Slot | Description

icon-start | Icons displayed at the start of the input

icon-end | Icons displayed at the end of the input

prefix | Content displayed before the input text

suffix | Content displayed after the input text

[/TABLE]

## **CSS Custom Properties**

[TABLE]

Property | Description

--textbox-glass-default-background | Background color with glass effect

--textbox-glass-default-blur | Backdrop blur amount for glass effect

--textbox-glass-default-border | Border color for default state

--textbox-glass-default-shadow | Box shadow for glass effect

--textbox-border-radius | Border radius of the input container

--textbox-transition | Transition animation duration

--textbox-input-font | Font properties for input text

--textbox-input-color | Text color for input

--textbox-input-padding | Padding inside the input

--textbox-input-min-height | Minimum height of the input

--textbox-label-font | Font properties for label

--textbox-label-color | Text color for label

--textbox-label-weight | Font weight for label

--textbox-placeholder-color | Color for placeholder text

--textbox-error-color | Color for error messages and state

--textbox-helper-color | Color for helper text

--textbox-icon-color | Color for icons in normal state

--textbox-icon-focus-color | Color for icons when focused

--textbox-variant-default | Colors for default variant

--textbox-variant-primary | Colors for primary variant

--textbox-variant-success | Colors for success variant  
--textbox-variant-error | Colors for error variant  
--textbox-variant-warning | Colors for warning variant  
--textbox-variant-info | Colors for info variant  
--textbox-size-xs-padding | Padding for extra small size  
--textbox-size-sm-padding | Padding for small size  
--textbox-size-md-padding | Padding for medium size  
--textbox-size-lg-padding | Padding for large size  
--textbox-size-xl-padding | Padding for extra large size  
--textbox-size-xs-height | Height for extra small size  
--textbox-size-sm-height | Height for small size  
--textbox-size-md-height | Height for medium size  
--textbox-size-lg-height | Height for large size  
--textbox-size-xl-height | Height for extra large size

[/TABLE]

## Best Practices

### ***Design Guidelines***

- Choose appropriate variants- Use semantic variants that match the context
- Provide clear labels- Always include descriptive labels for accessibility
- Use helper text wisely- Provide guidance without cluttering the interface
- Handle errors gracefully- Show clear, actionable error messages
- Optimize for touch- Ensure adequate touch targets for mobile users
- Consider glass intensity- Use glass-10 for most cases, glass-50 for emphasis
- Select appropriate sizes- Use xs for very compact layouts, xl for emphasis and accessibility

- Implement masking thoughtfully- Choose mask patterns that match user expectations and data format
- Balance effects and performance- Use effects system for enhanced UX while maintaining performance

## ***Accessibility***

- Proper labeling- Label elements correctly associated with inputs
- ARIA attributes- Use aria-invalid, aria-describedby, aria-required
- Error announcement- Error messages announced to screen readers
- Keyboard navigation- Full keyboard support for all interactions
- Focus management- Visible focus indicators and proper focus order
- Icon accessibility- Icons properly labeled and keyboard accessible

## ***Performance***

- Validate appropriately- Use client and server validation together
- Debounce input events- For real-time validation and API calls
- Optimize re-renders- Use OnPush change detection strategy
- Efficient icon handling- Load icons efficiently and cache appropriately

## ***Form Integration***

- Test with forms- Ensure proper integration with your form handling
- Handle validation- Implement comprehensive validation strategies
- Consider reset behavior- Define clear reset and initial state behavior
- Support reactive forms- Proper ControlValueAccessor implementation

## ***Masking Best Practices***

- Choose intuitive patterns- Use mask patterns that users expect (e.g., phone formats)
- Handle edge cases- Consider what happens when users paste or clear masked input
- Provide clear examples- Use placeholders that show the expected format
- Test accessibility- Ensure screen readers can properly announce masked input

- Consider internationalization- Use appropriate separators and formats for different locales
- Balance flexibility- Allow users to edit parts of masked input without losing context

