

Digital Web Design System

Created for the onsemi Global Corporate Website

PROJECT OVERVIEW

Goals, Pain Points, Research, Solutions, Accessibility, and Final Design

PROJECT OVERVIEW

Building a foundation and a single source for future digital designs for the onsemi corporate website, online tools, and applications **reduced content creation time by 30%** for the web team and **includes 40+ WCAG accessibility compliant components.**

Role: Lead UX Designer and Project Manager

Team: 3 Designers, 4 Project Managers, 3 Developers

Initiative

- Company rebrand in 2021 from ON Semiconductor to onsemi
- Standardize company rebrand and design for all related web content
- Scope includes the onsemi global corporate website with more than 15,000 pages in three languages

Goals

- Create a comprehensive, component-based digital design system for www.onsemi.com
- Unify brand, UI and accessibility standards across every corporate web touchpoint
- Create a living design system that is updated every quarter to include new components and updates made to existing components

Pain Points

- Fonts, components, and color usage inconsistencies across the website
 - High manual effort for updates on localized and multi-language pages
 - Accessibility compliance issues, including low color contrast, missing semantic elements, and keyboard navigation traps
-

PROJECT RESEARCH & DISCOVERY

→ Research Process

- Audited 12 public enterprise design systems
- Extracted essential information structure: principles, foundations, components, patterns, resources
- Studied best-in-class B2B web and documentation flows relevant to semiconductor customers
- Conducted moderated interviews with web team members and key stakeholders to capture pain points and feature needs
- Collected findings and developed requirements, gap analysis, and phased roadmap

→ Insights & Benchmarking

- Unified design, code and content standards drive brand consistency at scale
- Token-based, responsive components allow for flexible theming and rapid iteration
- Built-in accessibility and WCAG 2.1 AA compliance is mandatory
- Comprehensive guidelines & usage examples boost usability for developers and designers
- Governance models keep the system sustainable (versioning and contributor permissions)

PROJECT SOLUTIONS & OUTCOMES

→ Solutions & Implementation

- Standardized fonts, color palette, and reusable component library for web & native apps
- Clear contributor and review guidelines for internal and external teams
- Automated accessibility checks integrated into Continuous Integration (CI)/Continuous Deployment and Delivery (CD) pipeline (WCAG 2.1 AA)
- Conducted moderated interviews with web team members and key stakeholders to capture pain points and feature needs
- Provide clear documentation and governance to scale adoption across teams

→ Accessibility Testing & Outcomes

- Adobe Color Accessibility Checker validated contrast for palette combinations
- Automated audits with Lighthouse, Axe, and WAVE (94 % pass rate)
- Manual keyboard-only navigation and screen-reader tests (NVDA, VoiceOver)
- Fixed focus order, added skip links and descriptive ARIA labels

Each section of the final design system is comprised of essential design elements. Templates for pages in each area of the website allow designers and developers to quickly create mockups for new pages and content. This library of styling guidelines, components and templates promotes design consistency and allows for global changes to be implemented with minimal effort.

Digital Style Guide

- A digital style guide to illustrate all basic design elements that are part of other components and design elements
 - Basic design elements in the style guide include: Core Values, Bootstrap CSS, Borders, Spacing, Typography, and Color Palette
-

Components

- The design system is created with reusable components that are throughout different sections of the website
 - Essential components commonly reused for different types of content on the website includes: Accordion, Button & Dropdown, Carousel, Cards, Figures, Hero Image, Inputs, Modals, Navigation, Tables, and Tabs
 - Design system components and page templates have been created with accessibility features included, reducing repetitive testing and overlooked issues
-

Living System

- Updates and new content will be added to the design system with versioning to maintain the most current design guidelines that includes website content, and linked web applications and tools
-

PROJECT DESIGN LINKS



[Design Style Guide](#)

[Components and Design Elements](#)