

Interface Design Document (IDD)

Development Team

2024-06-26

Interface Design Document (IDD)

1. Scope

1.1 Identification

IDD-001: Document Identification - The document **shall** be identified by the following information: - **Document Name:** [Document Name] - **Document Identifier:** [IDD-001] - **Version:** 1.0 - **Classification:** [Unclassified/Classified Level]

1.2 Document Overview

IDD-002: Document Purpose - The document **shall** describe the design of system interfaces - The document **shall** define interface specifications and protocols - The document **shall** specify interface implementation details

2. Referenced Documents

IDD-003: Referenced Standards - MIL-STD-498: Software Development and Documentation - [Other applicable standards]

3. Interface Overview

IDD-004: System Description - The document **shall** provide an overview of system interfaces - The document **shall** describe interface architecture and design - The document **shall** specify interface types and classifications

4. Interface Specifications

4.1 User Interfaces

IDD-005: User Interface Design - The document **shall** describe user interface design principles - The document **shall** specify UI components and layouts - The document **shall** define user interaction patterns

4.2 Hardware Interfaces

IDD-006: Hardware Interface Design - The document **shall** describe hardware interface specifications - The document **shall** specify communication protocols - The document **shall** define interface timing and electrical characteristics

4.3 Software Interfaces

IDD-007: Software Interface Design - The document **shall** describe software interface specifications - The document **shall** define API contracts and data formats - The document **shall** specify interface versioning and compatibility

4.4 Communications Interfaces

IDD-008: Communications Interface Design - The document **shall** describe communications interface specifications - The document **shall** define network protocols and data formats - The document **shall** specify security and authentication requirements

5. Interface Implementation

IDD-009: Implementation Details - The document **shall** describe interface implementation approach - The document **shall** specify development tools and frameworks - The document **shall** define testing and validation procedures

6. Interface Testing

IDD-010: Testing Requirements - The document **shall** describe interface testing strategies - The document **shall** specify test cases and validation criteria - The document **shall** define performance and reliability requirements

7. Notes

- **IDD**: Interface Design Document
- **API**: Application Programming Interface
- **UI**: User Interface