

ARXOS Architecture Overview

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Prepared by: ARXOS Team

1. Introduction

- **Purpose:** Describe the goal and scope of this document.
- **Audience:** Intended readers (e.g., developers, students, integrators).
- **Scope & Limitations:** Boundaries of what is covered here and what is referenced elsewhere.

2. Overview

- Brief description of the ARXOS context relevant to this document.
- Relation to other ARXOS documents (cross-references where needed).

3. Core Content

(Structure depends on the document - e.g., for Environment Setup, list steps; for API Manual, describe function groups, etc.)

- Section A — [Topic-specific explanation]
- Section B — [Details, examples, figures if needed]
- Section C — [Additional notes, use cases, or warnings]

4. Examples / Use Cases

- Step-by-step walkthroughs.
- Illustrative screenshots or diagrams (if applicable).
- Sample code snippets (if relevant).

5. Best Practices / Recommendations

- Practical tips for efficient use of ARXOS.
- Common pitfalls and how to avoid them.

6. References

1. [arx_package_structure.pdf](#) — Explains repository layout, directories, and files
2. [arx_env_setup.pdf](#) — Development Environment Setup: toolchains, IDEs, simulators
3. [arx_build_config.pdf](#) — Building and Configuring ARXOS
4. [arx_api_manual.pdf](#) — ARXOS API Manual
5. [arx_hal_guide.pdf](#) — Hardware Abstraction Layer (HAL) Guide
6. [arx_porting_guide.pdf](#) — Porting ARXOS
7. [arx_debugging_guide.pdf](#) — Debugging ARXOS
8. [arx_coding_standards.pdf](#) — ARXOS Coding Standards

7. Revision History

Version	Date	Author	Description
v1.0	30/10/2025	ARX Team	Initial draft

About ARX

ARX is a real-time operating system developed and licensed by ARX Labs Pvt. Ltd.

It has been designed, developed, and tested by a team including alumni of the National Institute of Technology Karnataka (NITK).

Among existing RTOS solutions, ARX introduces advanced technology to address critical firmware development challenges on real-time platforms.

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