Specification Status

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Overview

The RISC-V specification process is governed by the Ratification Policy and more concisely articulated in the Specification Lifecycle and Milestone Definitions presentation. To help Task Group Chairs, Vice-chairs, and specification authors navigate this process, the RISC-V Lifecycle Guide has a whole section on "Specification Lifecycle" with an introductory section describing the process and subsections for each milestone that include step-by-step descriptions of the process.

This page serves as the starting point for understanding the status of specifications currently being developed by RISC-V. This status is best represented as progress toward the key Specification Milestones (Plan, Freeze, and Ratification-ready) which are obtained sequentially. Specific status for the relevant status columns is detailed in the Status Key section below. The chairs and vice-chairs of Task Groups, specification authors, and Horizontal and ISA Committee chairs and vice-chairs jointly own ensuring their specifications are listed below and reflect accurate status.

In-process specifications are grouped below into two tables based on whether they impact the RISC-V ISA (In-process ISA Specifications) or not (In-process Non-ISA Specifications). Items should have links to their respective specification repo (blocked URL), Ratification Plan (blocked URL) if not a Fast-track item, and an Acceptance Criteria Status checklist (blocked URL).

Status of active votes by TSC and Committee Chairs can be found on the RISC-V Vote Status wiki page.

**Completed** specifications are tracked at the bottom of the page.

This dashboard does NOT intend to show detailed status (that's available in the status checklist for the specification, blocked URL), but rather the general status in the journey to ratification.

**NOTE:** This page is managed by the RISC-V staff with assistance from each specification owner. To get updates to this page or for questions, contact help@riscv.org.

In-process ISA Specification Status

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<th>Task group approved by TSC date or Fast Track approved by AR date</th>
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# In-process Non-ISA Specification Status

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<th>Ratification Milestone next step ***</th>
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<td>Platform Runtime Services</td>
<td>Q2’23</td>
<td>Q3’23</td>
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<td>Architectural Test SIG</td>
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<td>Boot &amp; Runtime Services (BRS, formerly OS-A SEE)</td>
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<td>Privileged Software HC (Aaron Dubbin)</td>
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<td>Q3’23</td>
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<td>25 Dec 2019</td>
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<td>complete</td>
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Unified Discovery (Config) | 31 May 2022 | Plan Complete | Privileged Software HC (Ima Flores-Mendoza) | Unified Discovery | Q3'22 | complete | 29 Aug 2023
---|---|---|---|---|---|---|---
RAS Error Record Interface (RERI) (Specification Managed via Jira) | 20 Sep 2023 | Plan Approved | Soc Infrastructure HC (Greg Favor, Vedvyas Shanbhogue) | RERI (RAS Error Record Interface) | | | 
Capacity and Bandwidth Controller QoS Register Interface (CBQRI) | 06 Oct 2022 | Stable | Soc Infrastructure HC (Eric Shiu, Ambika Krishnamoorthy) | Capacity and Bandwidth Controller QoS Register Interface | Q2'22 | Q3'23 | 02'23 | complete | acceptance criteria complete | start | 29 Dec 2023

Status Key

The following steps and associated next sequential steps for the milestones listed in the tables above may be parallelized at times, but are most simply thought of as a sequential set. All previous steps are done. For more details on each step, see the RISC-V Lifecycle Guide section on "Specification Lifecycle" and its specific subsections for each milestone, including step-by-step descriptions.

The usable Milestone next Steps are as follows:

* Plan Milestone next Steps:
  1. build plan
  2. review by chairs
  3. complete (nothing else to do)

** Freeze Milestone next step:

  1. start
  2. spec development - stable
  3. AR approval (ISA/SW AR)
  4. acceptance criteria complete (including waivers, or approval)
  5. committee chair approval
  6. freeze
  7. complete (nothing else to do)

*** Ratification Milestone next step (don’t start until freeze is complete):

  1. start
  2. send out for public review
  3. public review complete
  4. acceptance criteria complete
  5. committee chair approval
  6. TSC approval
  7. BOD approval
  8. ratified
  9. complete (nothing else to do)

++ ISA AR State (owner)

  1. Development (not ready for AR) (TG/IC)
  2. Queued (AR)
  3. Reviewing (AR)
  4. Reworking (if necessary as a result of the review after complete goes back to the queue) (TG/IC)
  5. Approved (AR)

NOTE: Some Milestone next steps may be marked as "N/A" for "Not Applicable" with an explanation after a trailing ".". For example, "N/A - Grandfathered" means that the step was skipped due to the fact that the process changed after the step would have been completed and it has been "Grandfathered" in (meaning accepted as N/A) as acceptable.

**** Specification State values:

  1. New
## Previously Ratified Specifications

### 2023

**ISA Specifications**

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### Total Store Ordering

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### Non-ISA Specifications

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### 2022

#### ISA Specifications

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<th>Priv / Unpriv</th>
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<th>Plan Milestone Target Date</th>
<th>Freeze Milestone Target Date</th>
<th>Ratification Milestone Target Date</th>
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<th>Freeze Milestone next step</th>
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### Multiply without Divide

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<th>Unpriv HC (Allen Baum)</th>
<th>Q1'22</th>
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### Wait on Reservation Set

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### Non-ISA Specifications

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### 2021

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<th>Public Review</th>
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<td>Zhrx</td>
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<td>Half Width FP</td>
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<td>U</td>
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