.

<(NAME) Project: (Workstream NAME)>

<Title: 3 Layer (Base, Design and Product) BLANK Specification Template>

<Version>.<Revision>.<Errata>

**Modular BLANK Specification**

Effective XXXX, 2024

Author: <Primary>

Author: <Secondary, etc. Delete if unnecessary>

# Version History

Note, refer to the OCP Contribution Versions, Revisions and Errata best practices documentation. Generally speaking, Versions and revisions are made to this document and logged here. Errata is a separate document such that the contribution specification document it refers to was not revised. Ex: Version 1, Errata E1

| **Date** | **Version #** | **Author** | **Description** |
| --- | --- | --- | --- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

# 

# Current Template Version:

3 Layer (Base, Design and Product) Specification BLANK Template V1.2.0

**Table of Contents**

[**Version History 2**](#_5hqof536mr77)

[**Current Template Version: 2**](#_4x8ntvex5qai)

[**1. License 4**](#_y4as1hsu33i)

[Open Web Foundation (OWF) CLA 4](#_oeo8w428bs5y)

[**1. Acknowledgements 5**](#_3yfbtftpm0pp)

[**2. Compliance with OCP Tenets 6**](#_zi3i5v28cisd)

[2.1. Openness 6](#_j6kl13o94r5u)

[2.2. Efficiency 6](#_fj7vgvyr9nfc)

[2.3. Impact 7](#_ulz3hvb2ue1c)

[2.4. Scale 7](#_b5zwsm4bvnuo)

[2.5. Sustainability 7](#_rrf2lq0xcws)

[**3. Scope 8**](#_1270qnky2lr6)

[**4. Overview 8**](#_4gwkk5dvs444)

[**5. Base Specifications 9**](#_8war03ej6o32)

[**5.1. Compliance Delete if not applicable 9**](#_bxd6873vcdcx)

[**5.2. References (recommended) Delete if not applicable 10**](#_fy8siocl3sx)

[**6. Design Specifications 11**](#_v6a73aq1zqtb)

[6.1. Repository Information 11](#_xg9la2e4aorz)

[**6.2. Compliance 11**](#_tf51mmeple2b)

[**6.3. References (recommended) 12**](#_gve9brqljkmk)

[**7. Product Specifications Delete if not applicable 13**](#_8g16s2u7godi)

[7.1. Repository Information Delete if not applicable 13](#_s8y87prlovj1)

[**Please identify OCP GitHub repository information for the Product Specifications. 13**](#_2yyolsmcts3x)

[**7.2. Compliance 13**](#_gj5r4ls6cx7j)

[**7.3. References (recommended) 14**](#_dihad5h0anae)

[**Appendix A - Checklist for Steering Committee (SC) approval of this Specification (to be completed by contributor(s) of this Spec) 15**](#_fu98xdxru854)

[**Appendix B-\_\_ <supplier name> - OCP Supplier Information and Hardware Product Recognition Checklist Delete if not applicable 16**](#_y1ll55eabeef)

# 

# License

THE UPDATED DEFAULT CONTRIBUTOR LICENSE AGREEMENT (CLA) IS [**OWFa 0.9**](https://146a55aca6f00848c565-a7635525d40ac1c70300198708936b4e.ssl.cf1.rackcdn.com/images/ed0befaf86bee2568ad720ff4a9a554d1f4260f7.pdf). PLEASE VERIFY THE CORRECT CLA/FSA IS USED AND EXECUTED FOR THIS CONTRIBUTION.

## Open Web Foundation (OWF) CLA

Contributions to this Specification are made under the terms and conditions set forth in **Modified Open Web Foundation Agreement 0.9 (OWFa 0.9)**. (As of October 16, 2024) (“Contribution License”) by:

**[Contributor Name(s) or Company name(s)]**

Usage of this Specification is governed by the terms and conditions set forth in **Modified OWFa 0.9 Final Specification Agreement (FSA)** (As of October 16, 2024) **(“Specification License”).**

You can review the applicable Specification License(s) referenced above by the contributors to this Specification on the OCP website at <https://www.opencompute.org/contributions/templates-agreements>.

​​For actual executed copies of either agreement, please contact OCP directly.

**Notes**:

The above license does not apply to the Appendix or Appendices. The information in the Appendix or Appendices is for reference only and non-normative in nature.

NOTWITHSTANDING THE FOREGOING LICENSES, THIS SPECIFICATION IS PROVIDED BY OCP "AS IS" AND OCP EXPRESSLY DISCLAIMS ANY WARRANTIES (EXPRESS, IMPLIED, OR OTHERWISE), INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY, NON-INFRINGEMENT, FITNESS FOR A PARTICULAR PURPOSE, OR TITLE, RELATED TO THE SPECIFICATION. NOTICE IS HEREBY GIVEN, THAT OTHER RIGHTS NOT GRANTED AS SET FORTH ABOVE, INCLUDING WITHOUT LIMITATION, RIGHTS OF THIRD PARTIES WHO DID NOT EXECUTE THE ABOVE LICENSES, MAY BE IMPLICATED BY THE IMPLEMENTATION OF OR COMPLIANCE WITH THIS SPECIFICATION. OCP IS NOT RESPONSIBLE FOR IDENTIFYING RIGHTS FOR WHICH A LICENSE MAY BE REQUIRED IN ORDER TO IMPLEMENT THIS SPECIFICATION. THE ENTIRE RISK AS TO IMPLEMENTING OR OTHERWISE USING THE SPECIFICATION IS ASSUMED BY YOU. IN NO EVENT WILL OCP BE LIABLE TO YOU FOR ANY MONETARY DAMAGES WITH RESPECT TO ANY CLAIMS RELATED TO, OR ARISING OUT OF YOUR USE OF THIS SPECIFICATION, INCLUDING BUT NOT LIMITED TO ANY LIABILITY FOR LOST PROFITS OR ANY CONSEQUENTIAL, INCIDENTAL, INDIRECT, SPECIAL OR PUNITIVE DAMAGES OF ANY CHARACTER FROM ANY CAUSES OF ACTION OF ANY KIND WITH RESPECT TO THIS SPECIFICATION, WHETHER BASED ON BREACH OF CONTRACT, TORT (INCLUDING NEGLIGENCE), OR OTHERWISE, AND EVEN IF OCP HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

# Acknowledgements

The Contributors of this Specification would like to acknowledge the following for their feedback:

List all companies or individuals who may have assisted you with the specification by providing feedback and suggestions but did not provide any IP.

| DELETE THIS BLOCK BEFORE SUBMITTING |
| --- |
| INSTRUCTIONS FOR THE FOLLOWING SECTIONS:   * The following sections, 2-5 are required for contribution. * Replace the section text (keep titles) * Please describe how this Specification complies to the following OCP tenets. Compliance is required for at least four of the five tenets (Sustainability is a required tenet). The ideals behind open sourcing stipulate that everyone benefits when we share and work together. Any open source project is designed to promote sharing of design elements with peers and to help them understand and adopt those contributions. There is no purpose in sharing if all parties aren't aligned with that philosophy. The OCP Incubation Committee will look beyond the contribution for evidence that the contributor is aligned with this philosophy. The contributor actions, past and present, are evidence of alignment and conviction to all the tenets. |

# Compliance with OCP Tenets

A full explanation of the OCP core tenets can be seen [here](https://146a55aca6f00848c565-a7635525d40ac1c70300198708936b4e.ssl.cf1.rackcdn.com/images/bf648bb75091907147e76846cad590f402660d2e.pdf).

## Openness

The measure of openness is the ability of a third party to build, modify, or personalize the device or platform from the contribution. OCP strives to achieve completely open platforms, inclusive of all programmable devices, firmware, software, and all mechanical and electrical design elements, including ancillary, external components or tools such as software utilities necessary to modify or use design contributions. Barriers to achieving this goal should be constantly addressed and actions taken to remove anything that prevents an open platform. Openness can also be demonstrated through collaboration and willingness to share, seek feedback, and accept changes to design and specification contributions under consideration. Ensure this contribution can be extended and enhanced by others.

Project Name:

Brief history:

*Note to author of this specification, the history is a small narrative of how the effort came to be, Example; the team started with the discussion of solving the problem of additional security required for datacenter hardware in the weekly project meetings. Add some supporting details like contributors, etc… Not too much, just an explanation of the history and process demonstrating openness.*

## Efficiency

Continuous improvement has been a fundamental value of the industry. New contributions (and updates to existing contributions) shall be more efficient than existing or prior generation contributions. Efficiency can be measured in many ways - OpEx and CapEx reduction, performance, modularity, capacity, power or water consumption, raw materials, utilization, size or floorspace are some examples. The goal is to express efficiency with clear metrics, valued by end-users, when the contribution is proposed.

## Impact

OCP contributions should have a transformative impact on the industry. This impact can come from introducing new technology, time-to-market advantage of technology, and/or enabling technology through supply chains that deliver to many customers in many regions of the world. New technologies are impactful when such technology is enabled through a global supply channel. One example is the NIC 3.0 specification which achieved global impact by having over 12 companies author, adopt, and supply products that conformed to the specification. Another example is emerging and open security features that establish and verify trust of a product

## Scale

OCP contributions should be designed such that end products may be easily implemented and/or deployed, irrespective of quantity, with minimal intervention. Ensure all necessary tools, such as supporting documentation, etc., are included in the final contribution.

## Sustainability

OCP contributions must be sustainable. Submissions should maximize transparency of

environmental impacts of the contribution, with the aspiration of improvement over time.

Other focuses:

* Conscientious use of our natural resources (land, air, power, water and materials)
* Fostering positive societal impacts
* Minimizing Environmental Harm

Practically this can be realized in a base specification as high level design requirements, or architectural decisions, or design for circularity, as a few examples, that reflect this intent. For a Design Specification it might be refined and expanded as practical choices such as in materials, component families, power saving features, circularity features, materials by weight, operational data, etc, and in Product Specifications as specific components, power saving modes, circularity processes, sustainability types of labeling and others. These are merely examples.

# Scope

| DELETE THIS BLOCK BEFORE SUBMITTING |
| --- |
| INSTRUCTIONS FOR THE FOLLOWING SECTIONS:   * The following (Sections 5-8 are required to document features and functions of the contributed system, subsystem, platform, card, component or other unit as appropriate- and are broken out into layers. * The layout of the sections has some boilerplate and random examples. These are illustrative only. Please rearrange, add, delete, and change as necessary to describe the contribution. * Be sure to complete only the incremental requirements for each subsequent layer. (ex: Assume Base Specification and include only changes in the Product Specifications, etc…) * Please use the OCP Terminology Guidelines for Inclusion and Openness. * No NDA (Non-disclosure Agreement) or confidential material is to be included in this document, including charts and included materials. This will be an OPEN document. |

# 

# Overview

Describe your contribution and the modularity of this spec within the framework of modular specification process (this might be the openness tenet too) Include the problems it addresses. Explain its utility within the Open Compute Project ecosystem.

# 

# Base Specifications

# Compliance Delete if not applicable

*This* ***mandatory*** *section is also applicable to create the checklist for the consumers of the specification to adhere to in order for them to declare it complies to the requirements. This applies to any implementations (OCP Marketplace or not) that declare compliance with this specification.*

*(Example Compliance Table Follows)*

| ***ITEM*** | ***REQUIREMENT*** | ***REFERENCE*** | ***MANDATORY*** |
| --- | --- | --- | --- |
| *1* | *If scalable HPM depth >372.5mm (from origin), additional Zone 2 KOZs shall be*  *implemented.* | *10.3.2 (multiple items)* | *Y* |
| *2* | *Optional: The device shall only clear the Timestamp Origin field to 000b in the Timestamp (Feature*  *Identifier 0Eh) on a main power cycle or NVM Subsystem Reset (e.g., NSSR). The device*  *shall not clear the Timestamp Origin field on a power cycle of only AUX power.* | *NVMe-OPT-4* | *N* |
| *3* | *Any supplier seeking OCP recognition for a hardware product based on this specification*  *shall be 100% compliant* | *4* | *Y* |

*All Products seeking OCP Accepted™ Product Recognition shall have source code and binary*

*blobs submitted for BMC, if applicable.*

*The BMC management source code shall be uploaded at:*

[*https://github.com/opencomputeproject/Hardware-Management/[vendor\_name]/[product\_name*](https://github.com/opencomputeproject/Hardware-Management/%5Bvendor_name%5D/%5Bproduct_name)*]*

# References (recommended) Delete if not applicable

[1] “Title”, publication year, publication journal/conference/standard, volume, pages, link to publication if available.

# 

# Design Specifications

Reminder to authors, this section refines the previous section, so it’s unnecessary to strictly repeat the previous sections, only add what modifies and refines the previous. This section is for the Design Specifications. If a Base Specification provides general requirements and design goals, the Design Specifications has detail that further defines what specific role this contribution plays, and enough detailed design information such as high level board layouts, enumerations, etc that enables end users to utilize this part of the specifications to begin the journey to realize this design.

## Repository Information

*It is highly recommended that OCP projects participate in a collaborative development process. OCP has GitHub resources available, with access control if/as needed, for this development process. This is increasingly important at the Design Specification stage to enable future collaboration on potential improvements and revisions.*

*Please identify OCP GitHub repository information for the Design Specifications.*

# Compliance

*This* ***mandatory*** *section is also applicable to create the checklist for the consumers of the specification to adhere to in order for them to declare it complies to the requirements. This applies to any implementations (OCP Marketplace or not) that declare compliance with this specification.*

*(Example Compliance Table Follows)*

| ***ITEM*** | ***REQUIREMENT*** | ***REFERENCE*** | ***MANDATORY*** |
| --- | --- | --- | --- |
| *1* | *If scalable HPM depth >372.5mm (from origin), additional Zone 2 KOZs shall be*  *implemented.* | *10.3.2 (multiple items)* | *Y* |
| *2* | *Optional: The device shall only clear the Timestamp Origin field to 000b in the Timestamp (Feature*  *Identifier 0Eh) on a main power cycle or NVM Subsystem Reset (e.g., NSSR). The device*  *shall not clear the Timestamp Origin field on a power cycle of only AUX power.* | *NVMe-OPT-4* | *N* |
| *3* | *Any supplier seeking OCP recognition for a hardware product based on this specification*  *shall be 100% compliant* | *4* | *Y* |

# References (recommended)

[1] “Title”, publication year, publication journal/conference/standard, volume, pages, link to publication if available.

# 

# Product Specifications Delete if not applicable

Reminder to authors, this section refines the previous sections, so it’s unnecessary to strictly repeat the previous sections, only add what modifies the previous. This section, the Product Specifications, requires further detail such as but not limited to bills of materials with component part numbers, supporting gerber/design, software, tools and any other files required to be able to produce the contribution.

## Repository Information Delete if not applicable

*It is highly recommended that OCP projects participate in a collaborative development process. OCP has GitHub resources available, with access control if/as needed, for this development process. This is essential at the Product Specification stage to keep important design information readily accessible and to enable future collaboration on potential improvements and revisions.*

# *Please identify OCP GitHub repository information for the Product Specifications.*

# Compliance

*This* ***mandatory*** *section is also applicable to create the checklist for the consumers of the specification to adhere to in order for them to declare it complies to the requirements. This applies to any implementations (OCP Marketplace or not) that declare compliance with this specification.*

*For a product specification, this declaration should refer to the base/design specifications, can include blanket statements if complies, and absolutely needs to list exceptions.*

*(Example Compliance Table Follows)*

| ***ITEM*** | ***REQUIREMENT*** | ***REFERENCE*** | ***COMPLIES*** |
| --- | --- | --- | --- |
| *1* | *If scalable HPM depth >372.5mm (from origin), additional Zone 2 KOZs shall be*  *implemented.* | *10.3.2 (multiple items)* | *Y* |
| *2* | *Optional: The device shall only clear the Timestamp Origin field to 000b in the Timestamp (Feature*  *Identifier 0Eh) on a main power cycle or NVM Subsystem Reset (e.g., NSSR). The device*  *shall not clear the Timestamp Origin field on a power cycle of only AUX power.* | *NVMe-OPT-4* | *N* |
| *3* | *Any supplier seeking OCP recognition for a hardware product based on this specification*  *shall be 100% compliant* | *4* | *Y* |

*All Products seeking OCP Accepted™ Product Recognition shall have source code and binary*

*blobs submitted for BMC, if applicable.*

*The BMC management source code shall be uploaded at:*

*https://github.com/opencomputeproject/Hardware-Management/[vendor\_name]/[product\_name]*

# References (recommended)

[1] “Title”, publication year, publication journal/conference/standard, volume, pages, link to publication if available.

# Appendix A - Checklist for Steering Committee (SC) approval of this Specification (to be completed by contributor(s) of this Spec)

Complete all the checklist items in the table with links to the section where it is described in this spec or an external document .

| **Item** | **Status or Details** | **Link to detailed explanation** |
| --- | --- | --- |
| Is this contribution entered into the OCP Contribution Portal? | Yes or No | If no, please state the reason. |
| Was it approved in the OCP Contribution Portal? | Yes or No | If no, please state the reason. |
| Is there a Supplier(s) that is building a product based on this Spec? (Supplier must be an OCP Solution Provider) | Yes or No | List Supplier Name(s) |
| Will Supplier(s) have the product available for GENERAL AVAILABILITY within 120 days? | Yes or No | If more time is required, please state the timeline and reason for extension request.  Please have each Supplier fill out Appendix B. |

# 

# Appendix B-\_\_ <supplier name> - OCP Supplier Information and Hardware Product Recognition Checklist Delete if not applicable

(to be provided by each supplier seeking OCP recognition for a Hardware Product based on this specification)

Company:

Contact Info:

Product Name:

Product SKU#:

Link to Product Landing Page:

The following is needed for OCP hardware product recognition:

**For OCP Inspired™**

* All Suppliers must be an OCP Member. All corporate membership levels are eligible.
* Declare product is 100% compliant with specification
* Complete the [OCP Inspired™ Product Recognition Checklist](https://docs.google.com/spreadsheets/d/1p7g_bPWzgXDDTkxbOEOkLrbvfKmqVWspKOi7J20yJcE/copy?resourcekey=0-UWRTqqnBa3i6BcSNTDJfmA#gid=963873675), which includes hardware management conformance checks and security profile.

**For OCP Accepted™**

* All Suppliers must be an OCP Member. All corporate membership levels are eligible.
* Complete the [OCP Accepted™ Product Recognition Checklist](https://docs.google.com/spreadsheets/d/1SNqQYCta4CVsZsZcRRVR5A779YyCHxA2gLSINlFtnTs/copy#gid=963873675), which includes hardware management conformance checks, security profile and open system firmware conformance checks.
* Submit a design package meeting [OCP Hardware Design Guideline Contribution Checklist](https://docs.google.com/document/u/0/d/1SdLlXxn_jz__t8I33ATraYvHDYX3go3w_rR4LJ1PNTE/edit) (if not already submitted by the contributor). If already submitted, declare the product is 100% compliant with the design package.
* Submit a firmware package including a firmware image, build scripts, documentation, test results and a tool that verifies modifications
* Submit the BMC source code, if applicable to product type

Please complete the OCP Inspired™ Product Recognition Submission Checklist or OCP Accepted™ Product Recognition Checklist and the following table.

| **Item** | **Details** | **Links** |
| --- | --- | --- |
| Which product recognition? | OCP Accepted™ or OCP Inspired™ | Provide link for the appropriate Product Checklist |
| If OCP Accepted™, who provided the Design Package? |  | Link to OCP Contribution Database |
| Where can a potential adopter purchase the product? |  | Link to OCP Marketplace |