

**EFFECTIVE JULY 7th, 2021**

All Suppliers seeking OCP Product Recognition are required to fill out this form.

1) Name this file as follows: YEAR Supplier Name PRODUCT (INSP or ACPT) Year, Supplier name, Product Name or Model, OCP Inspired or OCP Accepted.

2) Fill out the sheet depending on which Product Recognition you are seeking. See table below.

3) Fill out Appendix B of the Base Spec on which the product is based. Add this link to this spreadsheet in the table.

4) Complete the requirements for OCP Product Recognition: OCP Solution Provider Agreement, OCP Certification Mark Agreement, Copyright License Agreements, etc (links available [here](#))

5) Contact OCP with any questions

**For OCP Inspired™ All Products Notes**

Supplier Details

X

Open System Firmware

Security (No Badge Level)

X

Needed for main board or any cards. For Additional Security Badges (Bronze/Silver/Gold), member can fill out the detailed Security Profile Requirements for that level.

Hardware Management

X

BMC

**For OCP Accepted™ All Products Notes**

Supplier Details

X

Open System Firmware

X

Initialization Firmware

Security (No Badge Level)

X

Needed for main board or any cards. For Additional Security Badges (Bronze/Silver/Gold), member can fill out the detailed Security Profile Requirements for that level.

Hardware Management

X

BMC

X

Source Code + Binary Blobs





**Open System Firmware Requirements Checklist (v1.2)**

This form will help self-assess compliance for Open System Firmware. Note these requirements only apply to the main application processor on server platforms. Please contact the OSF Leadership Team to see if your Product qualifies.

**Items that are marked below as Required are a MUST in order to qualify for OCP-Approved™ product recognition.**

**Reference Document:**

[Open System Firmware Checklist](#)

**Instructions:**

- Upload artifacts listed in section 1.2 to OCP's GitHub: <https://github.com/opencomputingproject/OpenSystemFirmware>  
Instructions on using GitHub can be found here: <https://docs.github.com/en/github/managing-files-in-a-repository>  
**Note, these artifacts are made public as soon as they are uploaded.**
- Complete the form below.

Required?	Answer	Notes
<b>1. Review Package</b>		
<b>1.1. Required Supporting documentation</b>		
a. Name of the platform under review	Yes	
b. Short description of the host firmware and its technical features	Yes	See Appendix B of the OSF checklist for what constitutes a "technical feature".
c. Emails to contact during the review process	Yes	
d. PROVIDE URL for submission on OCP's GitHub	Yes	Artifacts must be submitted to <a href="https://github.com/opencomputingproject/OpenSystemFirmware">https://github.com/opencomputingproject/OpenSystemFirmware</a>
e. List of other URLs for any source code dependencies	Optional	For example, a link to <a href="https://github.com/jeffreywzhang">https://github.com/jeffreywzhang</a>
<b>1.2. Required Artifacts</b>		
a. Firmware image	Yes	Firmware image: A binary file which, when written directly to the firmware medium (typically a MBR, FLASH, but other mediums are valid), will boot the machine.
b. Description of the firmware ownership model	Yes	As described in section-3
c. Top-level build script	Yes	As described in section-4
d. Documentation	Yes	As described in section-5
e. Test results	Yes	As described in section-6
f. Tool for user modification	Yes	As described in section-9
<b>2. Licensing and Redistribution</b>		
<b>2.1. The entirety of the review package and artifacts are:</b>		
a. redistributable.	Yes	Redistributable: A software component (in source or binary form) with a license permitting redistribution from anyone to anyone by any means without an NDA, payment or royalties.
b. publicly available for download, and	Yes	
c. submitted during the review process under a license that allows OCP to host on the marketplace.	Yes	
<b>2.2. All source code published as part of the review process must meet the definition of open-source.</b>		
Yes		Open-source: Source code which is redistributable under an OSI-compatible license as defined by <a href="https://opensource.org/licenses">https://opensource.org/licenses</a> and is publicly available for download.
<b>2.3. OSF is open-source by default. Closed-source items are allowed given an approved and reasonable exception reason such as "containing silicon IP". Each closed-source item must be redistributable, included in the submission and reasonably granular. It is strongly encouraged, but not required, that every severable firmware component (e.g. a UEFI driver) be so documented.</b>		
Optional		Open-source: Source code which is redistributable under an OSI-compatible license as defined by <a href="https://opensource.org/licenses">https://opensource.org/licenses</a> and is publicly available for download.
<b>3. Ownership and Reusability</b>		
<b>3.1. Owners must have the ability to:</b>		
a. Update the firmware on the machine.	Yes	
b. If firmware needs to be signed?	Yes	
b.i. Choose their own firmware signing key and change it as needed over time OR obtain the necessary signing keys through a transfer of ownership process.	Yes	
b.i.1. Note that, in particular, a requirement to choose immutable keys in advance and provide to, e.g. a chipset vendor or ODM makes a system noncompliant.	Yes	The number '1' is considered by end-users to be too low; it was chosen based on chipset vendor guidance concerning the bits of current chipsets. OCP reserves the right, in later versions of this spec, to increase the number. The most desirable value would be infinity, as in, e.g., Chromebooks
c. Change owners at least 8 times.	Yes	
d. Transfer ownership to a non-predetermined owner.	Yes	
<b>4. Build System</b>		
<b>4.1. Build and update utilities must be:</b>		
a. open-source, or	Yes	Open-source: Source code which is redistributable under an OSI-compatible license as defined by <a href="https://opensource.org/licenses">https://opensource.org/licenses</a> and is publicly available for download.
b. a redistributable binary which must run natively under at least Linux or Windows.	Yes	Redistributable: A software component (in source or binary form) with a license permitting redistribution from anyone to anyone by any means without an NDA, payment or royalties.
<b>4.3. The top level build script shall be the only script needed to be run to fetch all source code, binary blobs needed, and to build an entire host firmware image.</b>		
a. The top level build script may invoke other scripts and utilities to carry out its main function.	Yes	
b. It must be possible to build without a network connection once a suitable set of packages and binaries have been gathered.	Yes	
<b>4.5. If the platform requires signed firmware, it shall be possible for the owner to sign the image with a user-provided key. It must be possible to re-sign the firmware with a new key. Signing must continue to work after End Of Support.</b>		
Yes		Owner: The owner of the physical machine.
<b>5. Documentation</b>		
<b>5.1. Documentation describes features of firmwares, and build and install procedures.</b>		
a. The documentation shall describe the validation scope (i.e. the test regime).	Yes	
Yes		<b>Secret LEVEL</b>
<b>5.3. The documentation shall describe the readiness of the OSF with one of the following levels:</b>		
a. Pre-silicon. The OSF is good enough for pre-silicon entrance on the corresponding OCP platform as-is.	Yes	
b. Power-On. The OSF is good enough for power-on entrance on the corresponding OCP platform as-is. This is the level described in this checklist.	Yes	
c. Pre-production. The OSF is good enough for pre-production entrance on the corresponding OCP platform as-is.	Yes	
d. Production. The OSF is good enough for production entrance on the corresponding OCP platform as-is.	Yes	
<b>6. Test Regime</b>		
<b>6.1. The platform with OSF must be capable of booting an operating system whose code is openly available under an OSI-approved license (such as Linux).</b>		
Yes		
<b>6.2. Bare minimum. The platform with OSF needs to be able to be cold re-booted into OS 100 times sequentially without issue.</b>		
Yes		
<b>6.3. If the system advertises support for a warm reboot, the platform flashed with OSF needs to be able to be warm re-booted into OS 100 times sequentially without issue.</b>		
Optional		
<b>6.4. Any support contract or warranty must confirm the system is conformant with such reboot tolerance.</b>		
Yes		
<b>7. Standard Compliance</b>		
<b>7.1. For a given architecture family, the minimum standard interfaces required to boot and set a reasonable set of firmwares must be provided. E.g., if required, ACPI should be available. On Power or BIOS-V, flattened device tree should be available.</b>		
Yes		
<b>8. Firmware Configuration</b>		
<b>8.1. The OSF needs to provide a tool so that firmware configuration can be viewed and changed from, at minimum, Linux, and optionally Windows.</b>		
Yes		
<b>8.2. This tool must be released in source form under an OSI-approved license. Existing examples in Linux include effbootmgr, sysfs variables, etc.</b>		
Yes		
<b>9. Firmware Upgrade</b>		
<b>9.1. Open-source software must exist to update the firmware OR sufficient public documentation exists to write such software.</b>		
Yes		Open-source: Source code which is redistributable under an OSI-compatible license as defined by <a href="https://opensource.org/licenses">https://opensource.org/licenses</a> and is publicly available for download.
<b>9.2. Owners must have the ability to update the firmware on the machine regardless of its state in its current life cycle.</b>		
Yes		Owner: The owner of the physical machine.

## Security Checklist Assessment Form

This form will help you self-assess the security compliance level of the product you're submitting. It is ok if you answer "no" as future adopters would like to still understand the Security Profile of your product. If you choose, you can apply for higher badge levels depending on the security of your product.

**This Profile is REQUIRED for all product recognition, please fill it out for the main motherboard in your product or any cents.**

### Reference Documents:

For more details and background context on the questions in this Security Profile, please refer to the following detailed documents:

- Secure Boot - [link](#)
- Attestation of system components - [link](#)
- Common Threats - [link](#)
- Secure Firmware Development Best Practices - [link](#)

### Additional Security Badge Levels

If you are ready to apply for a "Security Badge" for your product as a differentiator, fill out the additional details on your Security Profile for each level.

This is an annual self-assessment. Specific Badge requirements will evolve year over year so we are awarding this on an annual basis. To update your Security Badges to the latest year, the self-assessment will be required for the latest criteria.

For 2021 Security Badges, you can qualify for either Bronze, Silver or Gold Security Badge levels, as described here:

2021 Bronze: secure boot + attestation support ("small" requirements)

2021 Silver: Bronze level + "should" requirements + secure update + secure recovery + threat model document + semi open (e.g. source code available to customers under NDA)

2021 Gold: Silver + full feature set (including support for "may" requirements), publicly open security code, and FIPS certification.

To qualify for a certain level, the product needs to meet all requirements marked as such in the Security Profile below.

## Self-Assessment Form

### 1. Badge Level

#### a. What is being certified?

System = a motherboard, or the main board of a system.

Card = a peripheral device, such as MC, HBA, Disk, etc.

System
No Badge

#### b. What level of security badge are you applying for?

### 2. Cryptography and Randomness

a. Does all the cryptography used in product follow the recommendations in relevant NIST Special Publications? (e.g. NIST, CISA, etc.)

[Yes/No]
----------

Badge Level

Bronze

Additional Explanation (if needed)

b. Are cryptographic implementations validated under the NIST Cryptographic Algorithm Validation Program (CAVP)??

[Yes/No]
----------

Silver

c. Are cryptographic modules validated at overall level 2 or higher under FIPS 140-2 or FIPS 140-3?

[Yes/No]
----------

Gold

### 3. Secure Provisioning

a. Are initial provisioning operations carried out in a trusted facility?

[Yes/No]
----------

Bronze

b. Does the product have a unique and immutable device ID key, an attestation key, and a key identifying the authority over updates?

[Yes/No]
----------

Bronze

c. Does the product support authenticated ownership transfer?

[Yes/No]
----------

Gold

### 4. Secure Boot support

a. Does secure boot start from an immutable source?

[Yes/No]
----------

Bronze

b. On each reset of a device, are secure boot public keys used to authenticate the first stage mutable code or manifest?

[Yes/No]
----------

Bronze

c. Is an anti-rollback mechanism provided?

[Yes/No]
----------

Bronze

d. Is error detection of critical security parameters implemented?

[Yes/No]
----------

Bronze

e. Is secure boot failure notification provided?

[Yes/No]
----------

Bronze

f. Is a secure boot key revocation mechanism provided?

[Yes/No]
----------

Silver

g. Does the device support multiple secure boot root keys or root key digests?

[Yes/No]
----------

Silver

### 5. Attestation support

5.1 Measurement and Attestation (only needed if certifying a component device)

a. Does the device support the OCP Attestation protocol, as an attester device?

[Yes/No]
----------

Bronze

b. Is the first measurement taken by an immutable root of trust?

[Yes/No]
----------

Bronze

c. Must the device be reset in order to clear the measurements?

[Yes/No]
----------

Bronze

d. Is the measurement storage integrity protected (e.g., in a TPM)?

[Yes/No]
----------

Bronze

e. Are dynamic changes in configuration or firmware measured?

[Yes/No]
----------

Silver

f. Does the vendor provide a list of what is measured (code and configuration)?

[Yes/No]
----------

Silver

g. Does the vendor provide expected measurement values?

[Yes/No]
----------

Gold

h. Does the device offer a structured log of measurements?

[Yes/No]
----------

Gold

5.2 Verification Support (only needed if certifying a platform)

a. Does the platform support the OCP Attestation protocol, as a verifier?

[Yes/No]
----------

Bronze

b. Does the platform support comparing the inventory to a manifest containing expected devices and their configurations?

[Yes/No]
----------

Gold

### 6. Secure Firmware Update support

a. Does the product support secure firmware updates (i.e. validate firmware signatures upon update)?

[Yes/No]
----------

Silver

b. If yes, please provide link to relevant feature documentation:

[Link]
--------

Silver

c. Are dynamic updates authenticated and / or measured?

[Yes/No]
----------

Silver

### 7. Recovery support

a. Does the product support automatic recovery in case of firmware corruption?

[Yes/No]
----------

Silver

b. If yes, please provide link to relevant feature documentation:

[Link]
--------

Silver

### 8. Threats Assessment

a. Are there any known unfixed CVEs in the product or one of its components, as of the date of release? (if yes, please provide explanation on how the security risk is mitigated)

[Yes/No]
----------

Bronze

b. What is the mechanism available for getting future firmware patches? (e.g. provide a link to a documented security response process, or free form explanation)

[Freeform text, or Link to documentation]
---

Bronze

c. Please provide a link to a threat model document for the product. (For an example template for a threat model document, please refer to appendix A of the common security threats document)

[Link]
--------

Silver

d. Was the product developed following any documented SDL (Security Development Lifecycle)?

[Yes/No]
----------

Silver

e. If Yes, and the SDL is available publicly, please provide a link to it.

[Link]
--------

Silver

9. Access to firmware source code	Self-Assessment	Badge Level	Additional Explanation (if needed)
a. Is the source code for security-relevant features available for review (e.g. code available under NDA, or via a trusted 3rd party audit report)?	[Yes/No]	Silver	
b. Is the source code and build environment for all security features available in a public repository?	[Yes/No]	Gold	
c. If Yes, please provide the link to the source code:	[Link]	Gold	

Needed for both OCP Inspired™ and OCP Accepted™ product recognition			
Please answer the following questions:	Required?	Answer	Action
Did you execute and pass the Redfish Service Validator v1.3.9?	Yes		If yes, upload report in Contribution Portal. If no, provide reason.
Did you execute and pass the Redfish Protocol Validator v1.0.2?	Yes		If yes, upload report in Contribution Portal. If no, provide reason.
Does the platform's manageability interface conform to the Redfish Interop Validator v1.1.7 with the appropriate Redfish profile?	Yes		If yes, upload report in Contribution Portal. If no, provide reason.
If applicable, which platform does the manageability interface conform to?	Select One	Server	If yes, upload report in Contribution Portal. If no, provide reason.
Did you execute and run the Redfish Usecase Checker v1.0.6 (reco	Yes		If yes, upload report in Contribution Portal. If no, provide reason.
<b>All exceptions will need to be approved by the Project Leads. If approved, then it will proceed to the IC for review for consideration.</b>			

BMC (if applicable)		Needed for OCP Accepted™ product recognition			
Submission Type	Description	License	Recognition	Action	
For Source Code + Binary Blobs	Package: source code and instructions enabling one to build a binary		for OCP Accepted™	<a href="https://github.com/opencomputeproject/OpenSystemFirmware/[vendor_name]/[product_name]/">https://github.com/opencomputeproject/OpenSystemFirmware/[vendor_name]/[product_name]/</a>	