



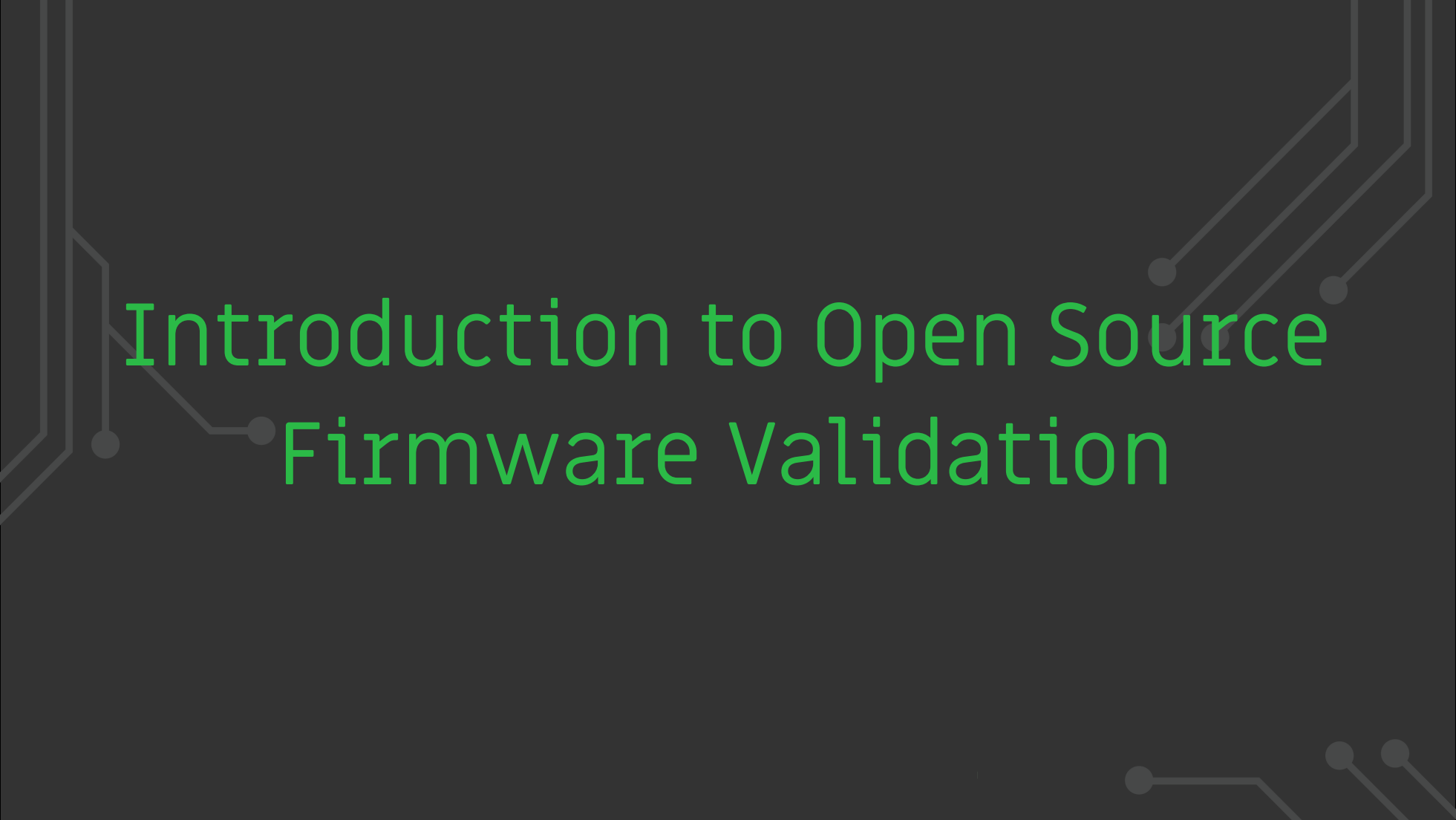
Dasharo User Group #10 🎉 and Developers vPub 0xF 🍺

Dasharo Open Source Firmware Validation Status



Agenda

- Short introduction to OSFV
- Stats
- Improvements
- Work in progress & future plans
- Q&A

The background features a dark gray field with light gray circuit-like lines. These lines are composed of straight segments and right-angle turns, some ending in small solid gray circles, resembling a printed circuit board (PCB) layout. The lines are distributed across the frame, with a higher density on the left and right sides, framing the central text.

Introduction to Open Source Firmware Validation

Introduction to Open Source Firmware Validation

- Open Source Validation of Open Source Firmware
- Based on Robot Framework
- Allows us to perform hundreds of automated tests to ensure the quality of Dasharo

For more details check the previous OSFV Status presentations at [DUG #08](#) and [DUG #06](#).

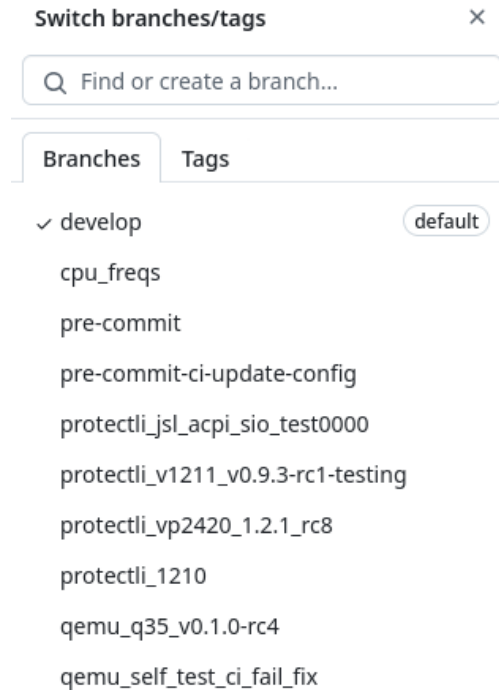
6:35 PM 20min	Dasharo OSFV status  Maciej Pijanowski Dasharo User Group #8
4:15 PM 20min	Dasharo OSFV status  Maciej Pijanowski Dasharo User Group #6

The background is a dark gray with decorative circuit-like lines in the corners. These lines are light gray and form various geometric shapes, including rectangles and triangles, with small circles at the ends, resembling a stylized circuit board.

OSFV Stats

Releases?

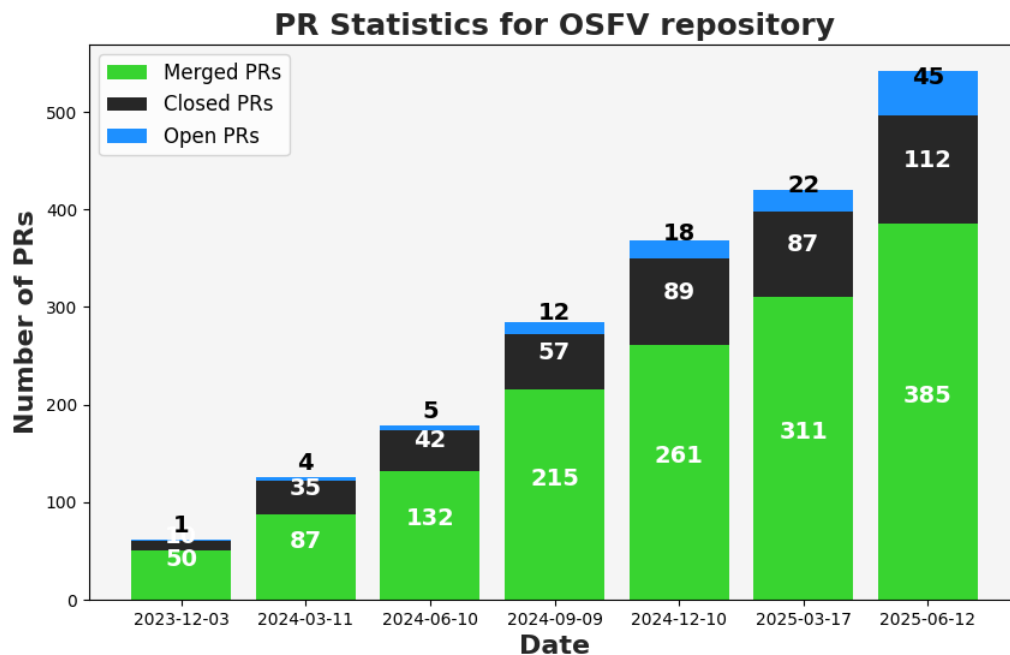
We have decided on switching to a rolling release for now



PR stats

open-source-firmware-validation

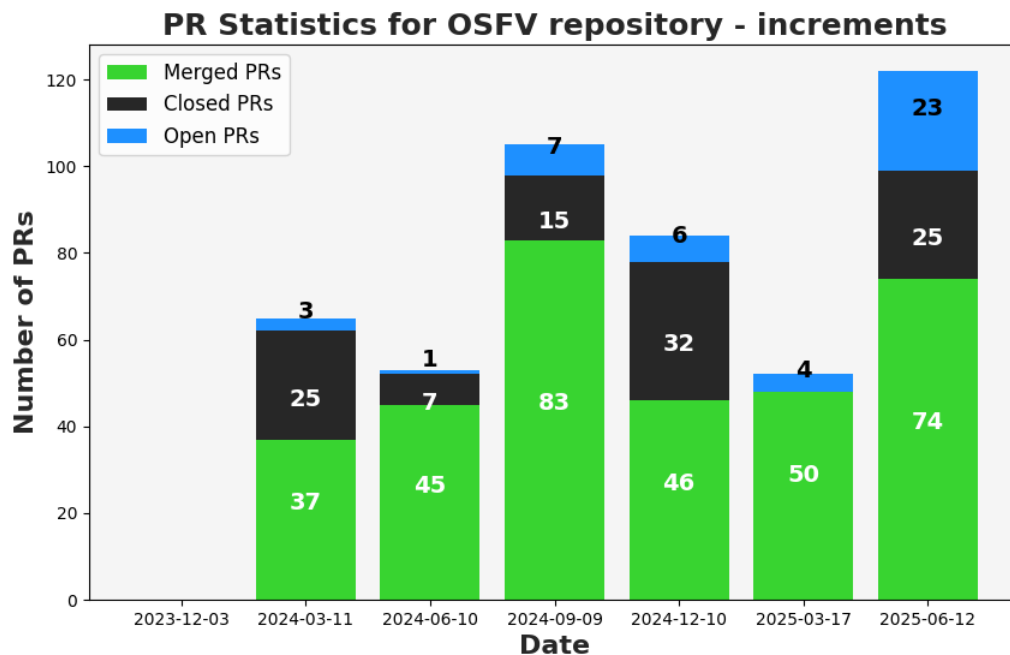
Total



PR stats

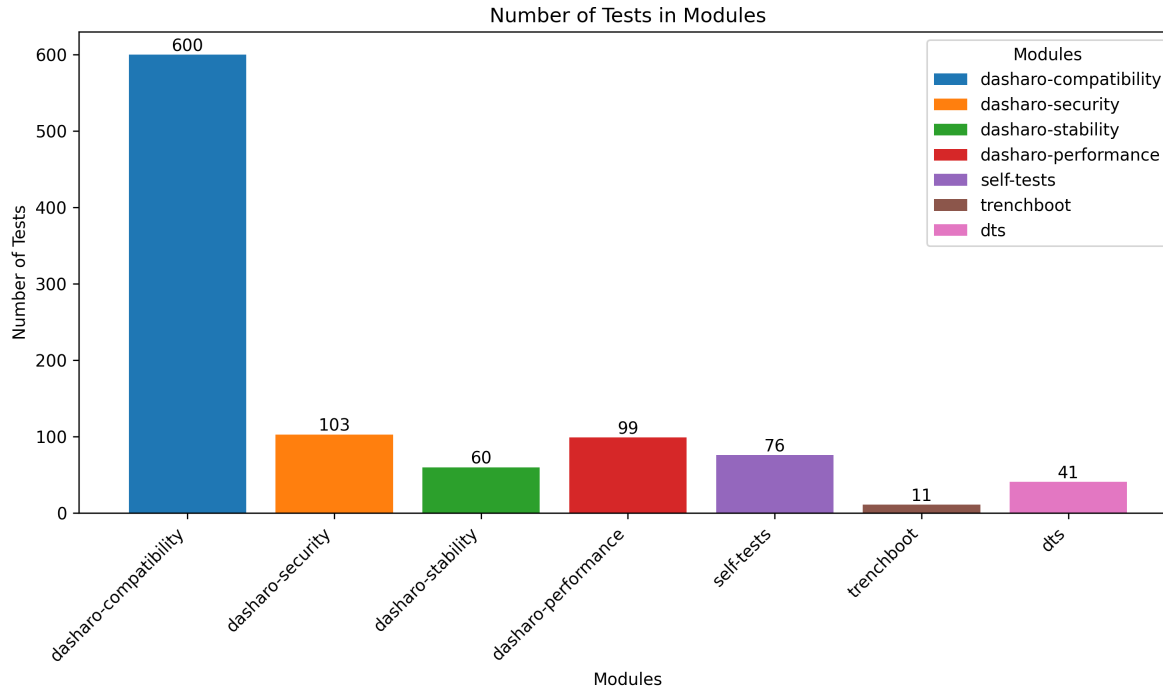
open-source-firmware-validation

Difference



Test modules stats

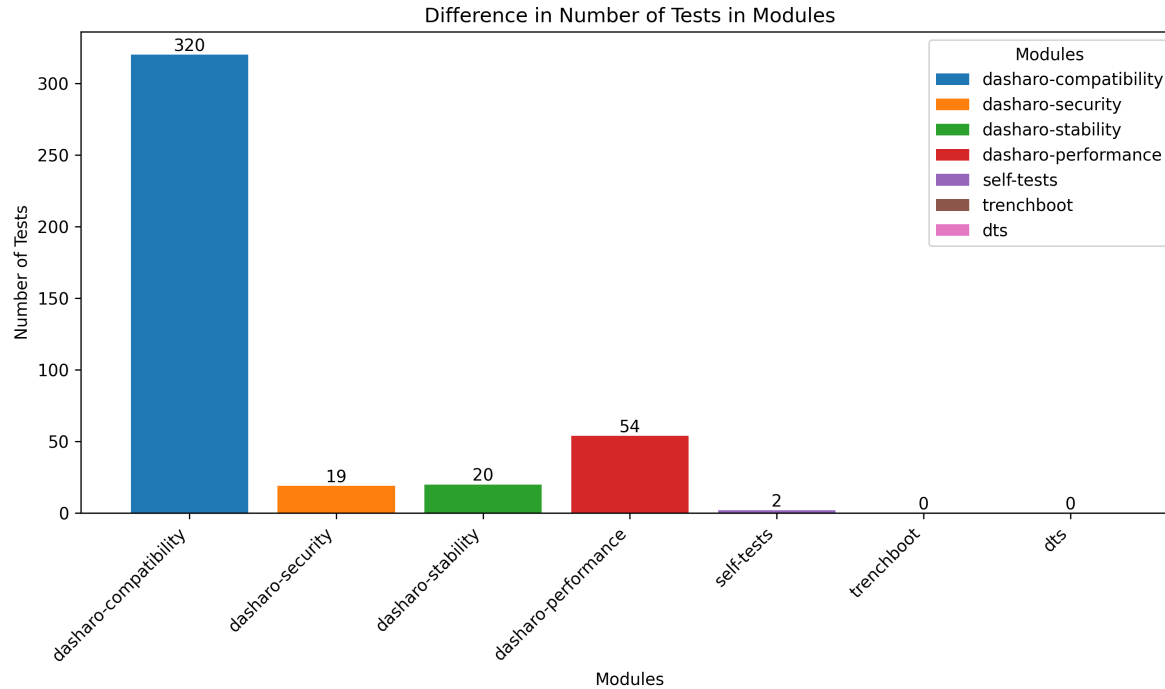
Total test cases



990 total test cases!

Test modules stats

Difference



Total count increased by **415** since DUG #09

New test cases

- Added FBT suite testing the fast boot feature
- Added ACPI suite testing ACPI drivers
- Added USC suite testing the Always On USB feature
- Added multiple benchmark test suites:
 - UPP, CPP, ETHPERF, DIO
 - testing the CPU, Ethernet and disks performance
- Automated the CBO - Custom Boot Order test suite
- Automated most of the AUD tests
- Extended NVM suite with an NVMe on x2 PCIe test
- Extended TPM suite with tests for the TPM Physical Presence Interface and changing the Endorsement Primary Seed
- Extended UTC Docking station tests with variants for every docking station, ME enabled/disabled

New platforms

- Protectli VP2440
 - 2x10 GBps Ethernet
 - available next quarter



The background is a dark gray with decorative circuit-like lines in the corners. In the top-left, lines extend from the left edge and turn downwards. In the top-right, lines extend from the right edge and turn inwards. In the bottom-right, lines extend from the bottom edge and turn inwards. In the bottom-left, lines extend from the left edge and turn inwards. All lines are light gray and end in small circles.

Key changes

Fedora support

Most test cases are also possible to run on Fedora. The test ID naming convention has changed to support the increasing count of supported operating systems

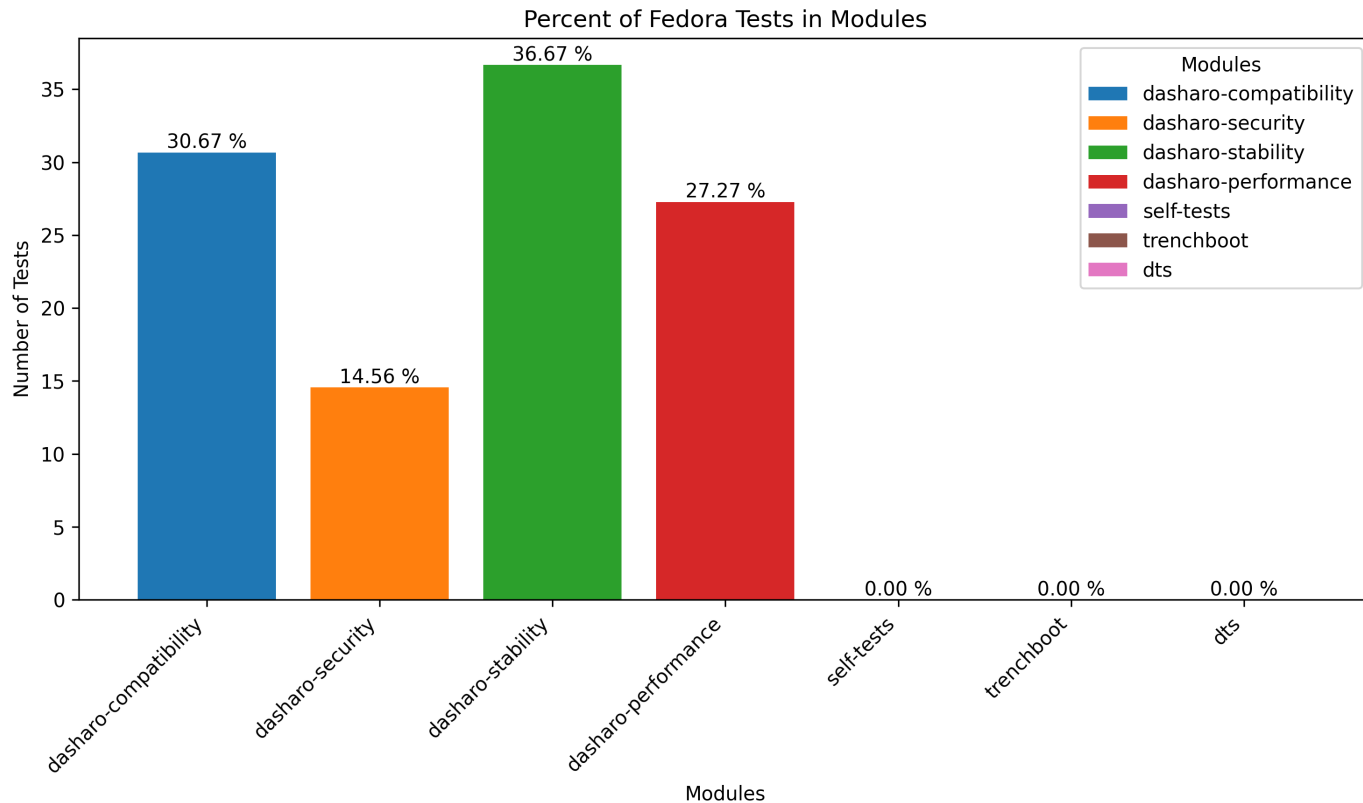
CPU001.201 CPU works (Ubuntu)

- CPU - Test suite ID - CPU Status
- 001 -Test case ID - CPU works
- 201 - Environment ID - Ubuntu

Environment ID examples:

- 101 - EDK2 UEFI
- 201 - Ubuntu, 202 - Fedora, 203 - QubesOS
- 301 - Windows

Fedora support



DeGoogle

Dasharo Test & Feature Matrix at Google Docs is now deprecated

Dasharo Test & Feature Matrix ☆ ↻ ☁							
File Edit View Insert Format Data Tools Extensions Help							
🔍 ↶ ↷ 🖨 🗑 100% ▾ zt % .0 .00 123 Default... ▾ - 10 + B I ↶ A ↷ 🏠 📄 📄 📄 📄 📄 ▾ 📄 ▾ 📄 ▾ 📄 ▾ 📄 ▾ 📄 ▾ 📄 ▾ 📄 ▾							
A46 ▾ 🔍							
	A	B	C	D	E	F	G
1	Release summary:						
2	VP2430	<- Set this to the device name and delete me!					VP2430 Protectli VP2430 v0.9.0-rc1 🟢
3					TPM Support (Ubuntu)		PASS
4	Releases:	Release date:	No. of tests:	Pass rate:	TPM Support (Windows)		PASS
5	v0.9.0-rc1		1	0.00%	Verify TPM version (firmware)		PASS
6					Verify TPM version (Ubuntu)		PASS
7					Verify TPM version (Windows)		PASS
8					Check TPM Physical Presence Interface (firmware)		PASS
9					Check TPM Physical Presence Interface (Ubuntu)		PASS
10					Check TPM Physical Presence Interface (Windows)		PASS
11					Change active PCR banks with TPM PPI (firmware)		PASS
19					Verified boot support (Ubuntu)		PASS
20					Bootimg from Slot A (Ubuntu)		PASS
21					Bootimg from Recovery (Ubuntu)		PASS
22					Recovery boot popup (firmware)		PASS
23					Recovery boot popup confirmation (firmware)		PASS
26					BIOS lock support (Ubuntu)		FAIL
27					BIOS lock support deactivation (Ubuntu)		FAIL
29					Measured Boot support (Ubuntu)		PASS
33					Check Secure Boot default state (firmware)		PASS
34					UEFI Secure Boot (Ubuntu)		PASS
35					UEFI Secure Boot (Windows)		PASS
39					Reset Secure Boot Keys option availability (firmware)		PASS
42					Check Password Setup option availability and default state		PASS
43					Password setting mechanism correctness checking		PASS
44					Attempt to log in with a correct password		PASS
45					Attempt to log in with an incorrect password		PASS
46					Attempt to log in with an incorrect password 3 times		PASS
+ ≡ Device summary TEMPLATE ▾ VP2430 Summary ▾ VP3210 results ▾ NS7x_TGL osfv-v0.3.0 ▾ Hardkerne < > ▼ 145 of 593 rows displayed							

OSFV results

The test results are now being published on the [OSFV Results repo](#)

 README  

osfv-results

This repository contains test results for Dasharo firmware for the following mainboards:

- [MSI Z690-A PRO](#) -- project [Alder Lake Desktop](#)
- [MSI Z790-P PRO](#) -- project [Raptor Lake Desktop](#)
- [NovaCustom NV41PZ](#)
- [NovaCustom V540TU](#)
- [NovaCustom V560TU](#)
- [NovaCustom V540TNx](#)
- [NovaCustom V560TNx](#)
- [Protectli VP2420](#)
- [Protectli VP66xx](#)
- [Dell OptiPlex 7010/9010](#)
- [QEMU Q35](#)

OSFV results



JakubRed and filipleple

boards/Protectli/VP66xx/ add v9.0.2-rc1_resul...



f94ef8d · last week



History

Name	Last commit message	Last commit date
 ..		
 VP6650_v0.9.1_results.csv	VP6650_v0.9.1_results.csv: use RFC 4180 for...	5 months ago
 VP6650_v0.9.2-rc1_results.csv	boards/Protectli/VP66xx/ add v9.0.2-rc1_resu...	last week
 VP6670_v0.9.1_results.csv	boards/Protectli: add new test results	5 months ago
 VP6670_v0.9.2-rc1_results.csv	Adding Protectli VP6670 v0.9.2-rc1 results.	last week
 results.csv.license	boards/Protectli/: Add VP66xx v0.9.0 release	9 months ago
 v0.9.0-results.csv	boards/Protectli/: Add VP66xx v0.9.0 release	9 months ago

OSFV results

 **JakubRed** and **filipleple**

boards/Protectli/VP66xx/ add v9.0.2-rc1_results.csv

f94ef8d · last week  History

PreviewCodeBlame

164 lines (164 loc) · 9.26 KB

 Raw

	Test name	Test ID	Result	Comments
2	Audio subsystem detection (Ubuntu)	AUD001.201	PASS	
3	Audio subsystem detection (Windows)	AUD001.301	PASS	
4	HDMI audio recognition (Ubuntu)	AUD007.201	PASS	
5	HDMI audio recognition (Windows)	AUD007.301	PASS	
6	HDMI audio playback (Ubuntu)	AUD008.201	PASS	
7	HDMI audio playback (Windows)	AUD008.301	PASS	
8	BIOS lock support (Ubuntu)	BLS001.201	PASS	
9	BIOS lock support deactivation (Ubuntu)	BLS002.201	PASS	
10	Change Auto Boot Time-out and check after reboot	BMM001.001	PASS	
11	EQ resets Auto Boot Time-out to default value	BMM002.001	PASS	

OSFV results

150	Bootimg from Recovery (Ubuntu)	VBO008.001	PASS	
151	Recovery boot popup (firmware)	VBO009.001	PASS	
152	Recovery boot popup confirmation (firmware)	VBO010.001	PASS	
153	Recovery popup is not displayed when correctly signed firmware is flashed in RW_A	VBO011.001	PASS	
154	Self-signed binary is bootable without errors	VBO012.001	PASS	
155	Windows 11 installation and boot	WBT001.001	PASS	
156	Wireless card detection (ESXi)	WLE001.011	PASS	
157	Wireless card detection (Ubuntu)	WLE001.201	PASS	
158	Wireless card detection (Windows)	WLE001.301	PASS	
159	Wi-Fi scanning (Ubuntu)	WLE002.201	PASS	https://github.com/Dasharo/open-source-firmware-validation/issues/855
160	Wi-Fi scanning (Windows)	WLE002.301	PASS	
161	Bluetooth scanning (Windows)	WLE003.002	PASS	
162	Bluetooth scanning (Ubuntu)	WLE003.201	PASS	

OSFV results

Wifi Ubuntu scanning test failing despite it working when conducted manually #855

Edit

New issue



Open



JakubRed opened last week



Device

VP6650 [#2](#)

RTE version

v1.1.0

OSFV version

fixes_vp6650_v092-rc1, [6602f78](#)

Affected component(s) or functionality

WLE002.201 Wi-Fi scanning (Ubuntu)

Brief summary

Wifi Ubuntu scanning test failing despite it working when conducted manually

How reproducible

90%

Assignees



No one - [Assign yourself](#)

Labels



bug

Type



No type

Projects



No projects

Milestone



No milestone

Relationships



None yet

Development



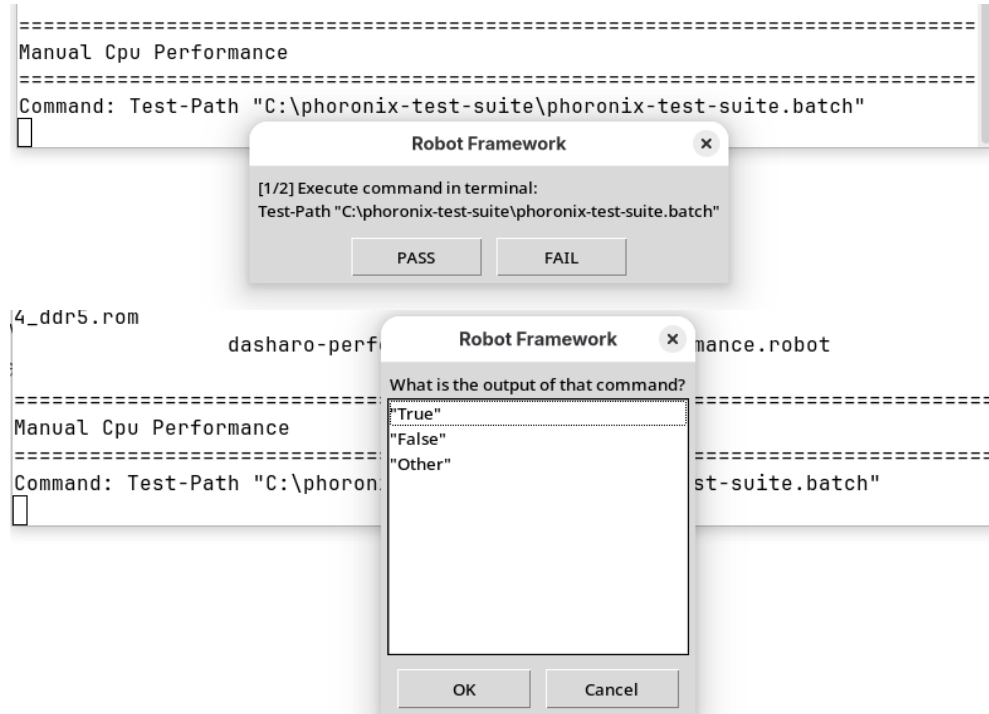
Code with Copilot Agent Mode



Manual test documentation deprecated

docs.dasharo.com/unified-test-documentation

Manual tests will be slowly transferred to OSFV to reduce redundancy and improve coherence



Adding HW tests to OSFV CI

Performing CI tests on real hardware will greatly improve the reliability of OSFV

- The work is in progress
- Two representatives prepared as a start

MSI Z690 DDR4 i5 14600k

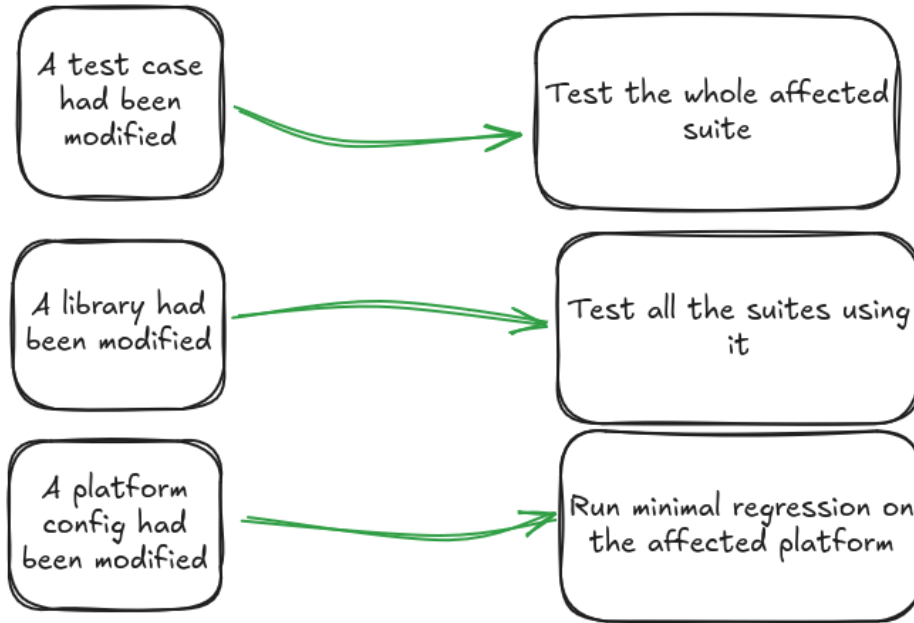


PC Engines APU3C AMD GX-412TC



Adding HW test to CI

Automatic test scope determining

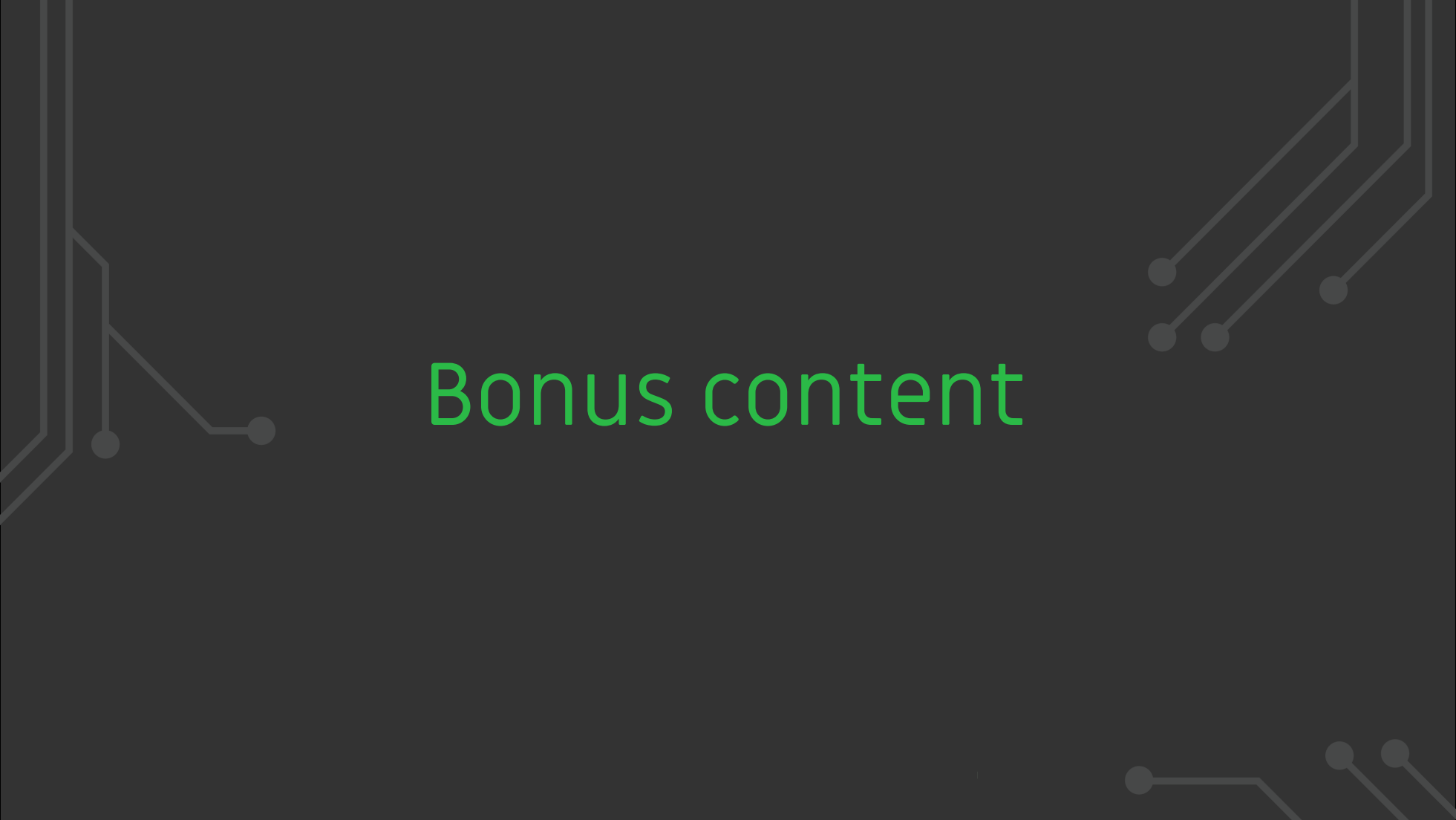


Priorities for the future

- CI tests on real hardware on every PR
 - Ensuring nothing unexpected breaks on changes
- Full SeaBIOS support is still on the roadmap

The image features a dark gray background with stylized, light gray circuit-like lines in the corners. These lines consist of straight segments and right-angle turns, ending in small solid gray circles, resembling a printed circuit board (PCB) layout. The lines are positioned in the top-left, top-right, and bottom-right corners, framing the central text.

Thank you!

The image features a dark gray background with decorative circuit-like lines in the corners. These lines are light gray and consist of straight segments connected by right angles, ending in small circular nodes. The lines are positioned in the top-left, top-right, and bottom-right corners, creating a sense of a circuit board or digital interface.

Bonus content

OSFV Dashboard

Working on our own tool for documenting and publishing test results

Choose a platform: Protectli VP66XX ▾
Choose a release: v0.9.2-rc1 v2 ▾
Choose a DUT: VP6670 ▾
Release ID: 2158e5187ac79f80adb68db72a0938f5
[Download results in CSV format](#)
[Create a new release based on this one](#)
[Go to tester page for this release](#)

Tests enabled for selected platform:

Result	ID	Name	Automation
PASS	AUD001.201	Audio subsystem detection (Ubuntu)	automated
PASS	AUD001.301	Audio subsystem detection (Windows)	automated
PASS	AUD007.201	HDMI audio recognition (Ubuntu)	manual
PASS	AUD007.301	HDMI audio recognition (Windows)	manual
PASS	AUD008.201	HDMI audio playback (Ubuntu)	manual
PASS	AUD008.301	HDMI audio playback (Windows)	manual
PASS	BLS001.201	BIOS lock support (Ubuntu)	automated
PASS	BLS002.201	BIOS lock support deactivation (Ubuntu)	automated
PASS	BMM001.001	Change Auto Boot Time-out and check after reboot	automated
PASS	BMM002.001	F9 resets Auto Boot Time-out to default value	automated

OSFV Dashboard

Will include details of manual tests, causes of fails and links to issues and logs from the tests.

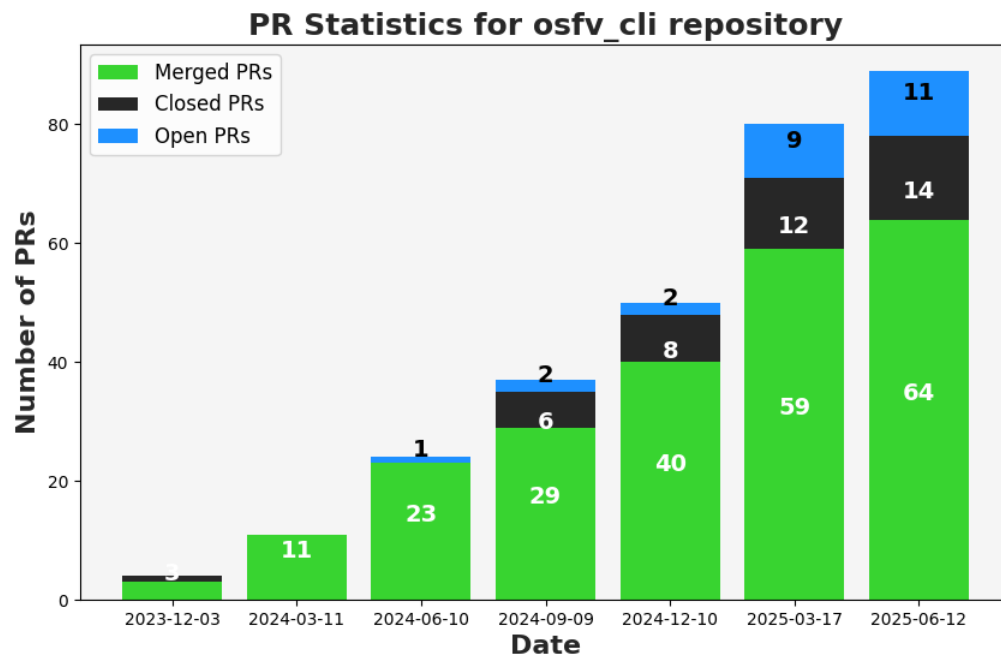
A large step towards the best documentation and repeatability of the testing process

PASS	CPU001.301	CPU works (Windows)	automated
PASS (*)	CPU002.011	CPU cache enabled (ESXi)	manual
PASS	CPU002.201	CPU cache enabled (Ubuntu)	automated
PASS	CPU002.301	CPU cache enabled (Windows)	automated
PASS (*)	CPU003.011	Multiple CPU support (ESXi)	manual
CPU Packages: 1 CPU Cores: 2 CPU Threads: 4 Hyperthreading Active: true Hyperthreading Supported: true Hyperthreading Enabled: true HV Support: 3			
PASS (*)	CPU004.011	Multiple-core support (ESXi)	manual
PASS	CPU004.201	Multiple-core support (Ubuntu)	automated

PR stats

osfv-scripts

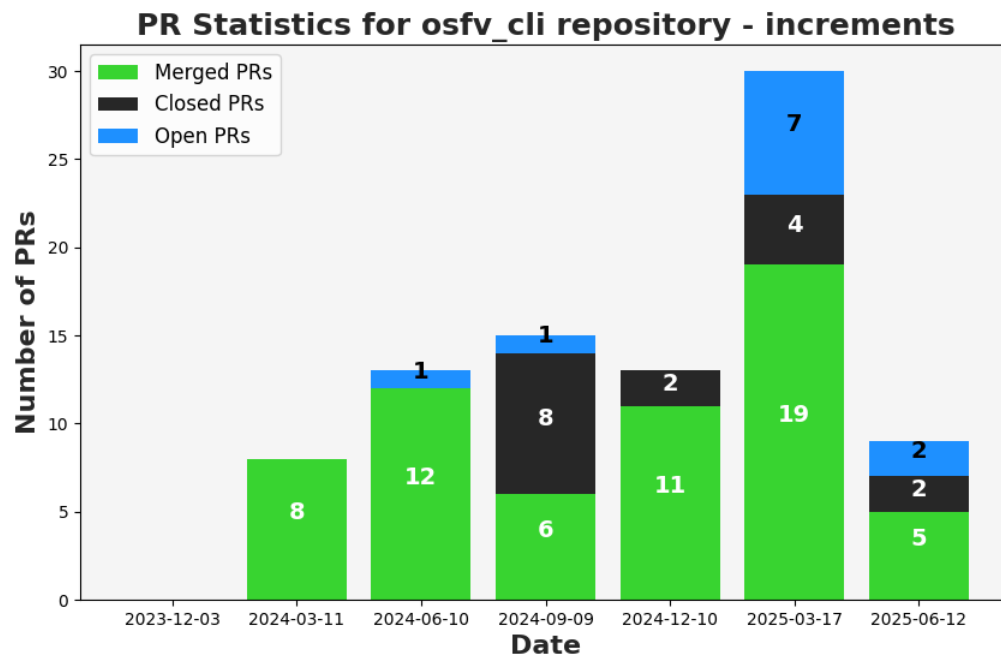
Total



PR stats

osfv-scripts

Difference



Power On finally reliable

OSFV CLI uses the Power LED to determine the state of the platform

```
fgolas in ~ λ osfv_cli rte --rte_ip 192.168.10.198 pwr pwr_led
DUT model retrieved from snipeit: V1410
Using rte command is invasive action, checking first if the device is not used...
Asset 150 is already checked out by you
Power LED state: OFF
```

```
fgolas in ~ λ osfv_cli rte --rte_ip 192.168.10.198 pwr on
DUT model retrieved from snipeit: V1410
Using rte command is invasive action, checking first if the device is not used...
Asset 150 is already checked out by you
Powering on...
```

```
fgolas in ~ λ osfv_cli rte --rte_ip 192.168.10.198 pwr pwr_led
DUT model retrieved from snipeit: V1410
Using rte command is invasive action, checking first if the device is not used...
Asset 150 is already checked out by you
Power LED state: ON
```

Power On finally reliable

```
fgolas in ~ λ osfv_cli rte --rte_ip 192.168.10.198 pwr pwr_led
DUT model retrieved from snipeit: V1410
Using rte command is invasive action, checking first if the device is not used...
Asset 150 is already checked out by you
Power LED state: ON
```

```
fgolas in ~ λ osfv_cli rte --rte_ip 192.168.10.198 pwr off
DUT model retrieved from snipeit: V1410
Using rte command is invasive action, checking first if the device is not used...
Asset 150 is already checked out by you
Powering off...
```

```
fgolas in ~ λ osfv_cli rte --rte_ip 192.168.10.198 pwr pwr_led
DUT model retrieved from snipeit: V1410
Using rte command is invasive action, checking first if the device is not used...
Asset 150 is already checked out by you
Power LED state: OFF
```

The image features a dark gray background with stylized, light gray circuit-like lines in the corners. These lines consist of straight segments and right-angle turns, ending in small circular nodes. The lines are positioned in the top-left, top-right, and bottom-right corners, creating a frame-like effect around the central text.

Thank you! #2