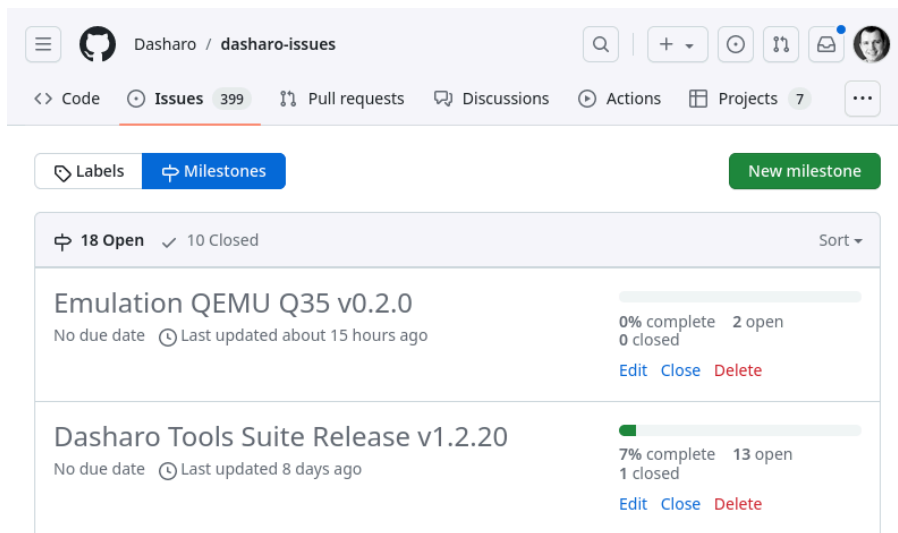# 👋 Dasharo User Group #8 🎉

Dasharo Community Release Roadmaps

Please note that the roadmap for the Dasharo Community Support Program is subject to change and may not represent final release candidates or end of support dates. This roadmap is intended to provide guidance and direction for the program's development, but is not a guarantee of specific timelines or outcomes. For more information on release candidates or release dates, please contact the Dasharo Team directly.
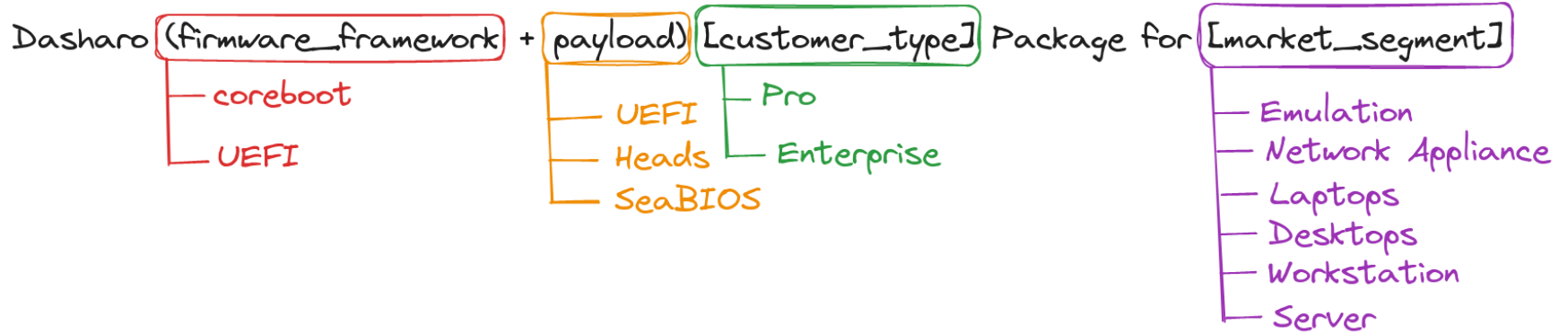
- For those watching this presentation first time we really encourage to look at past videos to get better context and understanding of the format.
  - [DUG#7](), [DUG#6](), [DUG#5](), [DUG#4](), [DUG#3](), [DUG#2](), [DUG#1]()
- We introduced statistics about our planning and execution effort.
- We decided to limit development stages we put on roadmap. Overall we are care about releases.
- All releases can be tracked as milestones in Dasharo Issues repo on Github

Note about Dasharo Naming Convention to which we fully switching starting from beginning of the 2025.

Dasharo (firmware_framework + payload) [customer_type] Package for [market_segment]
- firmware_framework: coreboot, UEFI
- payload: UEFI, Heads, SeaBIOS
- customer_type: Pro, Enterprise
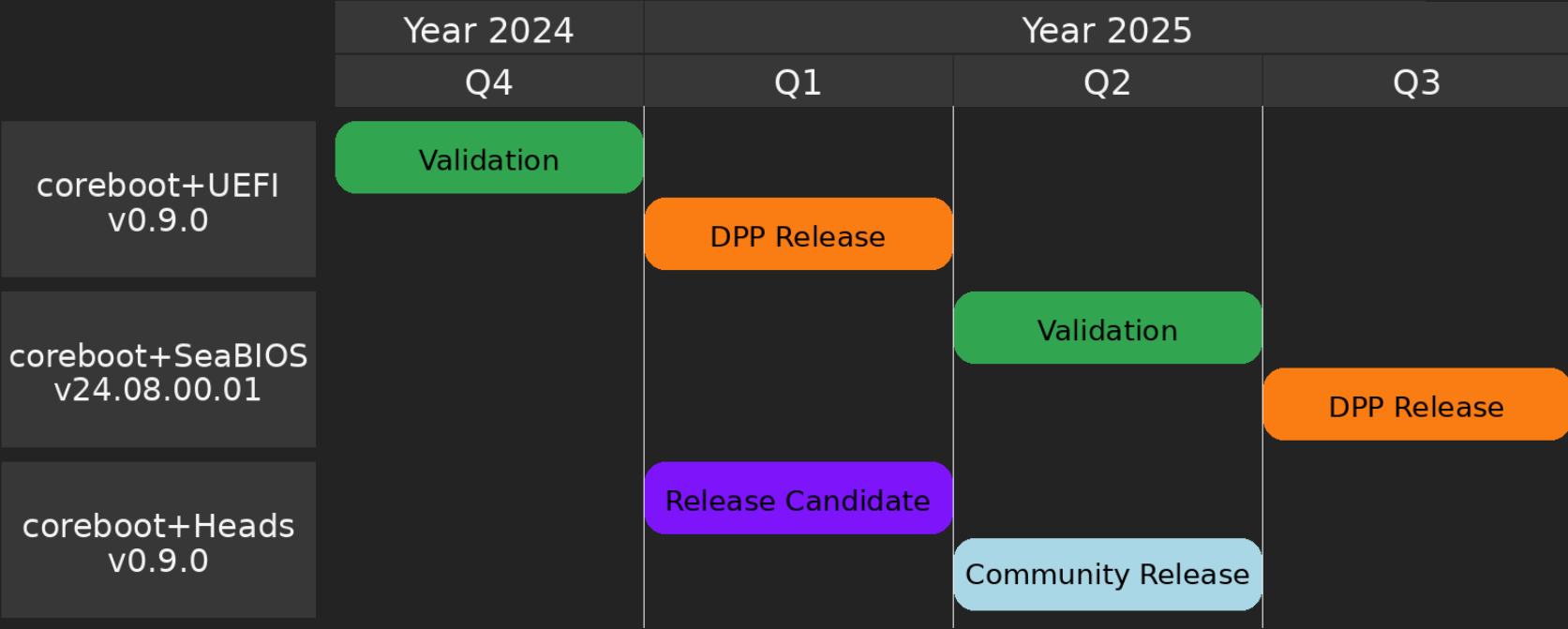- market_segment: Emulation, Network Appliance, Laptops, Desktops, Workstation, Server

- Dasharo (coreboot+UEFI) Pro Package for Desktop

- Dasharo (coreboot+Heads) Pro Package for Laptops

- Dasharo (coreboot+SeaBIOS) Enterprise Package for Network Appliance

> **Notice**
>
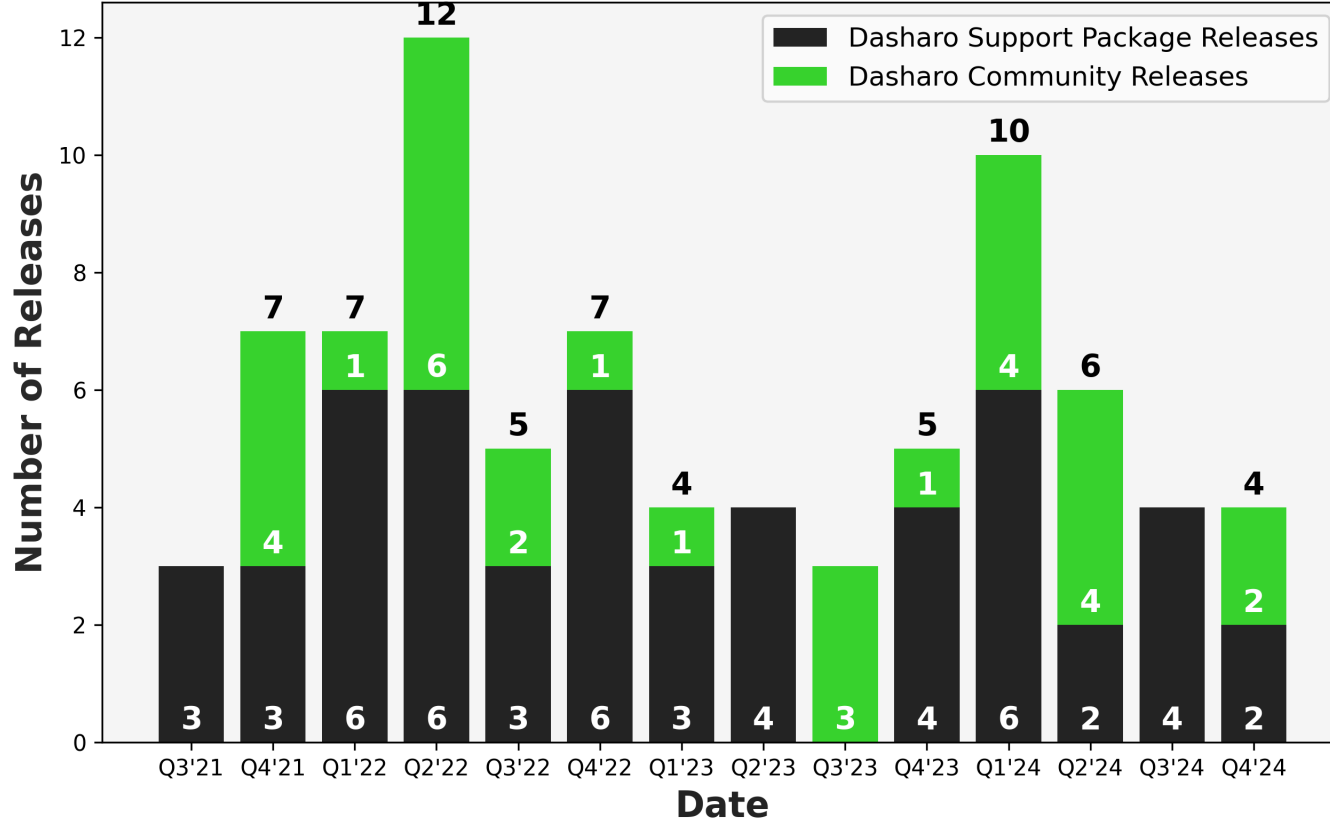> Until EOQ4'24 we are in transition period. More information in #762.

Dasharo [Segment] [Vendor] [Model] Roadmap

subject to change

Year 2024	Year 2025		
Q4	Q1	Q2	Q3

coreboot+UEFI v0.9.0
- Validation (Q4 2024)
- DPP Release (Q1 2025)

coreboot+SeaBIOS v24.08.00.01
- Validation (Q2 2025)
- DPP Release (Q3 2025)

coreboot+Heads v0.9.0
- Release Candidate (Q1 2025)
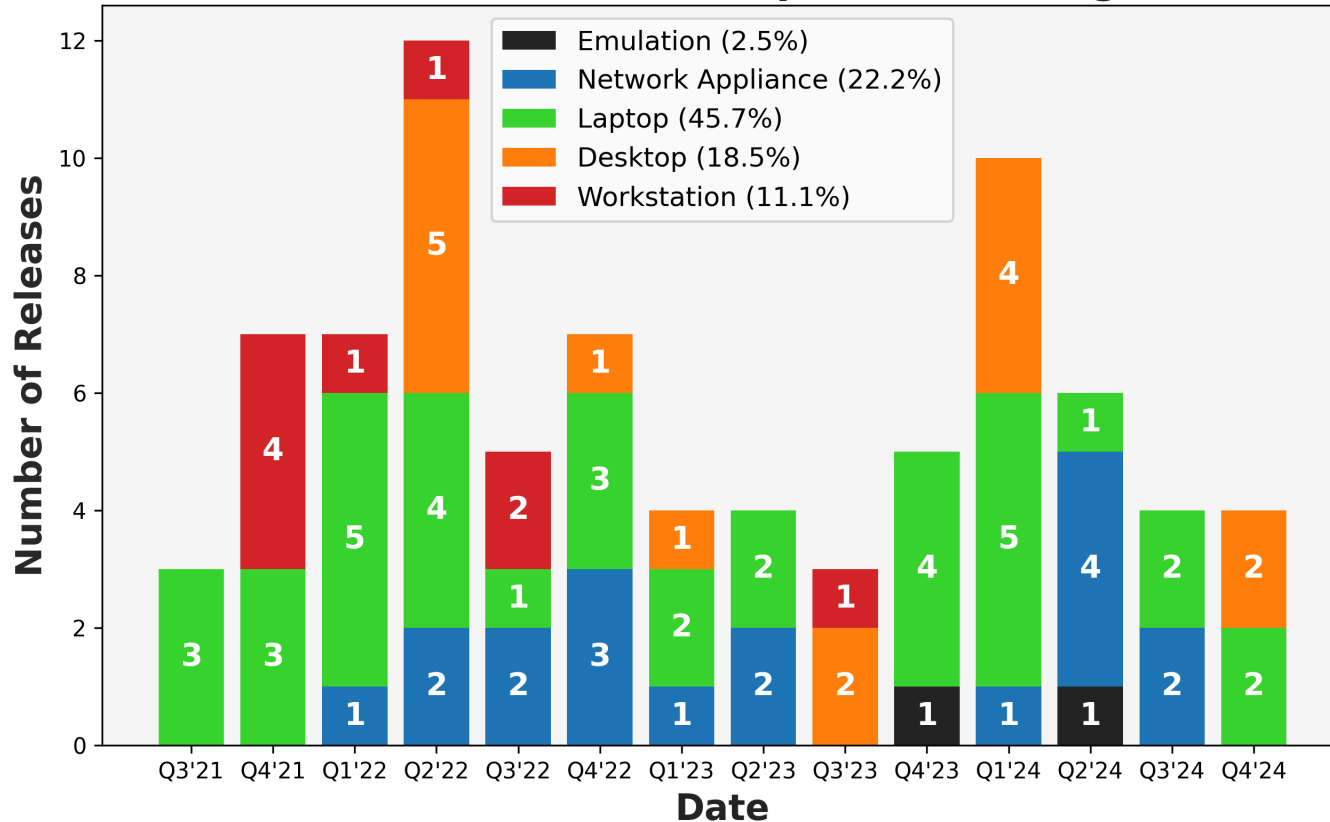- Community Release (Q2 2025)

Dasharo Community Support Roadmap | December 2024 (v0.8) | CC-BY-SA-4.0

Number of Dasharo Public Releases in time
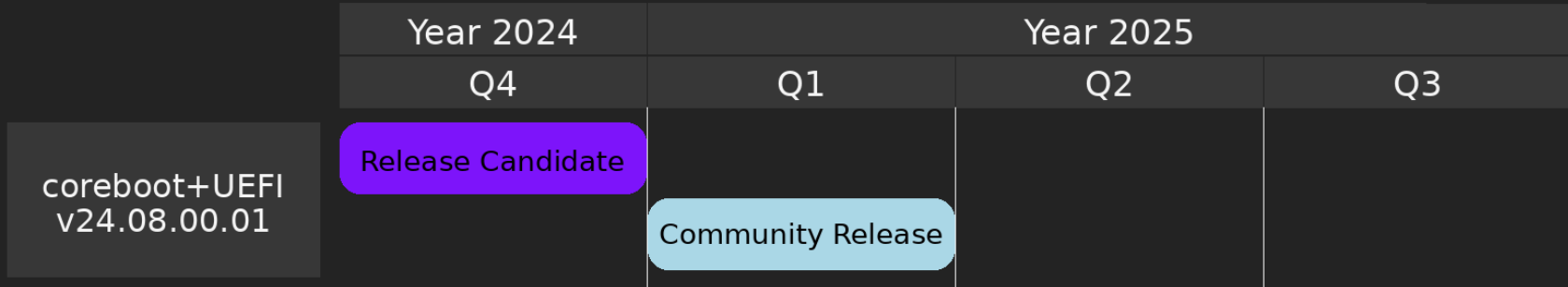
Dasharo Public Releases per market segment

Legend:
- Emulation (2.5%)
- Network Appliance (22.2%)
- Laptop (45.7%)
- Desktop (18.5%)
- Workstation (11.1%)

Y-axis: Number of Releases

X-axis: Date

Dasharo Roadmap Status Overview

Legend:
- New (26.4%)
- Changed (40.0%)
- On Track (16.0%)
- Released (12.0%)
- Removed (5.6%)

Y-axis: Number of Releases

X-axis: Date

Date	New	Changed	On Track	Released	Removed	Total
2023-03-16	9					9
2023-07-06	3	6	3			12
2023-09-28	5	4	5	3		17
2023-12-03	1	11	1	1		14
2024-03-11	9	7	2	3	2	23
2024-06-10	2	7	5	3	1	18
2024-09-09	1	7	4	3	2	17
2024-12-12	3	8	2	2	2	15
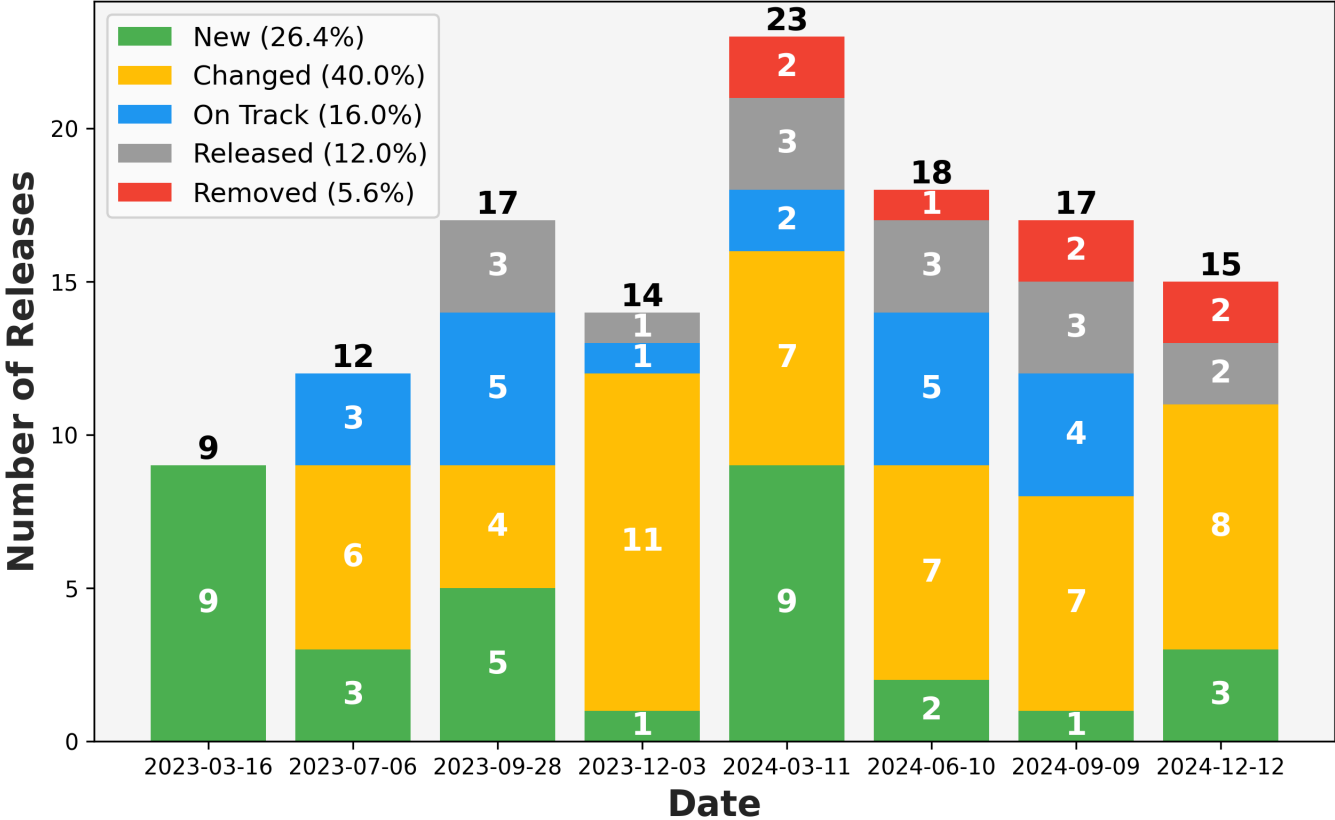
Dasharo Emulation QEMU Q35 Roadmap
subject to change

	Year 2024	Year 2025		
	Q4	Q1	Q2	Q3
coreboot+UEFI v24.08.00.01	Release Candidate			
		Community Release		

Dasharo Community Support Roadmap | December 2024 (v0.8) | CC-BY-SA-4.0

- Based on our experience with Dasharo (coreboot+SeaBIOS) for PC Engines, we plan to release the same code for QEMU Q35.
- This will improve CI/CD and automatic validation of coreboot+SeaBIOS.
- It will also enhance OSFV validation scope to the sortbootorder payload.

Dasharo (coreboot+SeaBIOS) for QEMU Q35 v24.08.00.01-rc1 Pre-release

- Basic support for Dasharo (coreboot+SeaBIOS) with sortbootorder a la PC Engines, but for QEMU Q35
- Main goal of this release is to enable support for automated validation of Dasharo (coreboot+SeaBIOS) in OSFV through Dasharo/open-source-firmware-validation#574
- Build from following reference: https://github.com/Dasharo/dasharo-pq/actions/runs/12019402689

▾ Assets 4

⬡ **qemu_q35_24.08.00.01.rom**	8 MB	2 weeks ago
⬡ **qemu_q35_24.08.00.01.rom.sha256**	97 Bytes	2 weeks ago
Source code (zip)		2 weeks ago
Source code (tar.gz)		2 weeks ago

☺

<> Code   Issues 1   Pull requests 1   ⊙ Actions   Projects   Wiki   Security   Insights   Settings

← Dasharo

✓ **make libpayload reproducible** #30

Re-run all jobs   ···

Summary

Jobs

✓ build_pcengines (pcengines, apu…

✓ build_pcengines (pcengines, apu…

✓ build_pcengines (pcengines, apu…

✓ build_pcengines (pcengines, apu…

✓ build_q35 (emulation_qemu, x86…

Run details

⏱ Usage

⎙ Workflow file

Triggered via push 1 hour ago
⊙ pietrushnic pushed ⊶ 660d167 `rel_24.08.00.01`

Status
Success

Total duration
17m 34s

Artifacts
5

build.yml
on: push

Matrix: build_pcengines

✓ 4 jobs completed
Show all jobs

Matrix: build_q35

✓ 1 job completed
Show all jobs

Artifacts
Produced during runtime

Name	Size		
⬡ dasharo-emulation_qemu-x86_q35-smm_tseg_seabios	340 KB	⬇	🗑
⬡ dasharo-pcengines-apu2-seabios	693 KB	⬇	🗑
⬡ dasharo-pcengines-apu3-seabios	693 KB	⬇	🗑
⬡ dasharo-pcengines-apu4-seabios	693 KB	⬇	🗑
⬡ dasharo-pcengines-apu6-seabios	693 KB	⬇	🗑

Dasharo Network Appliance PC Engines apu2/3/4/6 Roadmap

subject to change

Year 2024	Year 2025		
Q4	Q1	Q2	Q3

coreboot+SeaBIOS v24.08.00.01 — DPP Release (Q4 2024)

coreboot+SeaBIOS v24.11.00.01 — DPP Release (Q4 2024)

coreboot+UEFI v0.9.1 — DPP Release (Q1 2025)

Dasharo Community Support Roadmap | December 2024 (v0.8) | CC-BY-SA-4.0

- According to information on mailing list next release will happen in lat December and it will be `v24.12` .
- We will most likely schedule release of Dasharo based on it in Q1'25.

Dasharo Network Appliance Protectli VP4670 Roadmap
subject to change

Year 2024	Year 2025		
Q4	Q1	Q2	Q3
coreboot+SeaBIOS v0.9.0	DPP Release		

Dasharo Community Support Roadmap | December 2024 (v0.8) | CC-BY-SA-4.0

- Shifted again. We are kept busy with other projects and implementation didn't left PoC phase.

- If it will be published it would be Tech Preview.

- Milestone link

Dasharo Network Appliance MinnowBoard Turbot Roadmap
subject to change

Year 2024			
Q1	Q2	Q3	Q4
			DPP Release

Dasharo (coreboot+UEFI) v0.9.0

- Unfortunately we canceled this effort for now.
- Main issue were random soft locks described in issue #1000
- `@miczyg` suspect issue with C6 state and C6 DRAM which ought to be reserved for it.
- Interestingly coreboot 4.11 does not have this problem, so it may mean that it is because of using MRC binary for memory initialization.
- Good news are that rebased code base sitting in our repo here and it based on recent coreboot 24.02.01.

Dasharo Network Appliance Hardkernel Odroid-H4+ Roadmap
subject to change

	Year 2024		Year 2025	
	Q3	Q4	Q1	Q2

coreboot+UEFI
v0.9.0

Porting

Validation

DPP Release
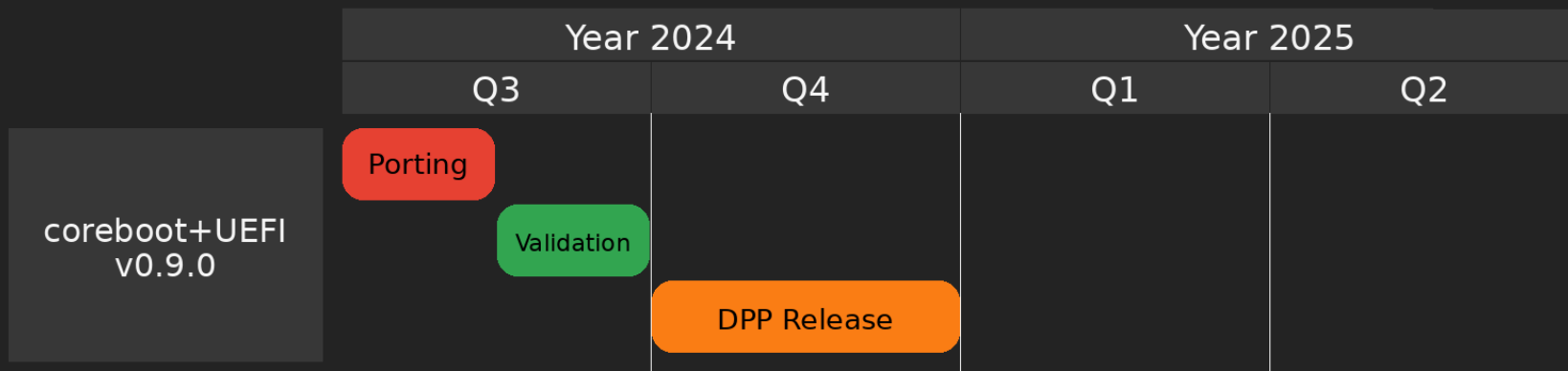
Dasharo Community Support Roadmap | December 2024 (v0.8) | CC-BY-SA-4.0

- Unfortunately, we still didn't released binary despite we should be quite close.

- We have code complete and platform ready for validation.

- We just didn't have resources to assign anyone to that activity because of other priorities.

- Our plan is to release validated binary by the end of 2024.

- `v0.9.0-rc3` is available here.

Dasharo Laptop Novacustom Roadmap
subject to change

	Year 2024	Year 2025		
	Q4	Q1	Q2	Q3
V56TU **coreboot+Heads** **v0.9.0**	Validation DPP Release			
NV4x **coreboot+Heads** **v0.9.2**		Validation DPP Release		
NV4x **coreboot+SeaBIOS** **v1.7.2.x**		Validation DPP Release		

Dasharo Community Support Roadmap | December 2024 (v0.8) | CC-BY-SA-4.0

Dasharo Desktop Dell OptiPlex 7010/9010 Roadmap
subject to change

Year 2024	Year 2025		
Q4	Q1	Q2	Q3

coreboot+SeaBIOS v0.1.1

- Validation
- DPP Release

Dasharo Community Support Roadmap | December 2024 (v0.8) | CC-BY-SA-4.0

- Release is very close to be published. All code related tasks are completed.
- We are now validating the platform. We face some struggles because of OSFV lack support for SeaBIOS (hence QEMU Q35 coreboot+SeaBIOS release). More about that in OSFV status presentation.
- After adding SeaBIOS support we should get more streamlined support for Dell OptiPlex and PC Engines releases.

Dasharo Desktop MSI PRO Z690-A Roadmap
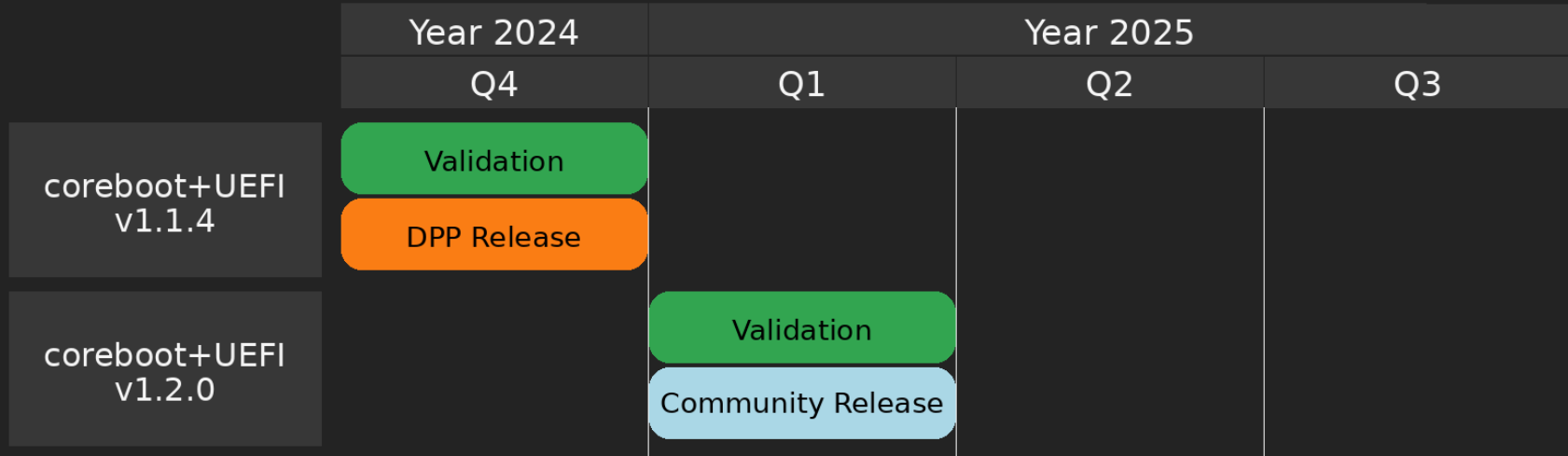
- `v1.1.4` was released according to schedule. Release notes can be found here.
- Since releases for MSI PRO Z690-A and Z790-P are identical we will discuss those in details on later slides.

Dasharo Desktop MSI PRO Z790-P Roadmap
subject to change

	Year 2024	Year 2025		
	Q4	Q1	Q2	Q3
coreboot+UEFI v0.9.2	DPP Release			
coreboot+UEFI v1.0.0		Validation / Community Release		

Dasharo Community Support Roadmap | December 2024 (v0.8) | CC-BY-SA-4.0

- `v0.9.2` was released according to schedule. Release notes can be found here.
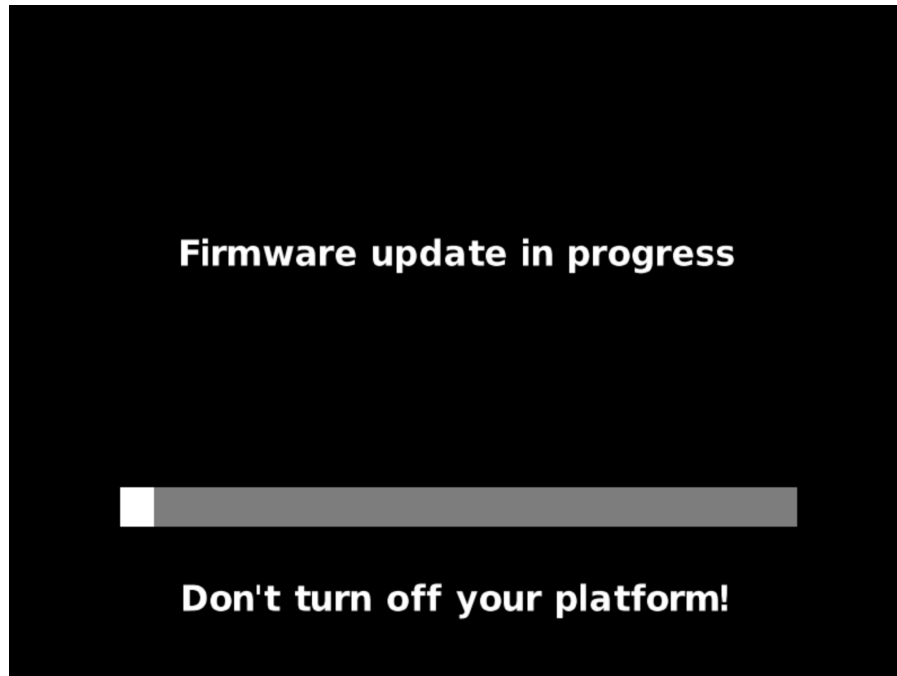
- UEFI Update Capsules for Open Source firmware

- UEFI Capsule Update in Dasharo Universe
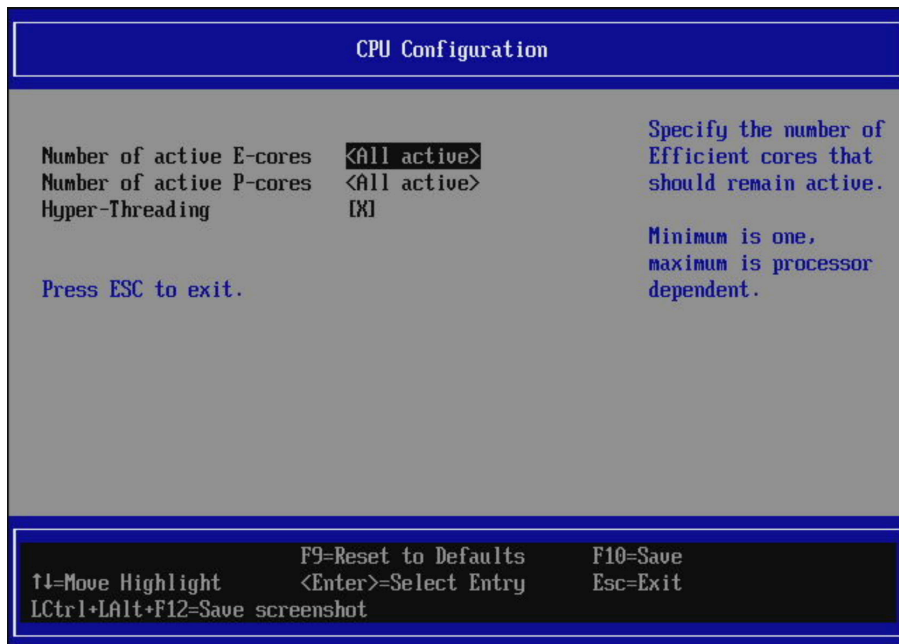
- **CPU Configuration in Dasharo Universe**

- Now you can change:

  - **Number of Active P-cores**

  - **Number of Active E-cores**

  - **Hyper-Threading** status

- Dasharo EDKII fork updated from `edk2-stable202002` to `edk2-stable202402`.
- It is hard to enumerate all issues this update fixes.
- Roughly looking at sum of TianoCore Bugzilla tickets that updates cover over 1100 of those.
    - `7055 files changed, 1046876 insertions(+), 528841 deletions(-)`
    - Of course not all are relevant to Dasharo use of EDKII.
- Some notable fixes, which catch our eye:
    - (CVE-2022-36763) - Heap Buffer Overflow in Tcg2MeasureGptTable()
    - CryptoPkg: consume OpenSSL 3.0
    - When setting a new PK in setup mode, PK should not be required to be self-signed
    - Make package and platform builds reproducible across source format changes
    - XHCI fixes
    - Coverity scan fixes
    - ACPI 6.4 support
- If you are interested in full story behind this update please check issue #432.
- New EDKII base would be gradually introduced in all Dasharo (coreboot+UEFI) releases.

Prioritize TPM2.0 usage and support multiple TPMs in coreboot

miczyg1 commented on Jun 8, 2022   (Member) ···

The problem you're addressing (if any)
coreboot has a compile time option not choose one of the TPMs: TPM1.2, TPM 2.0 SPI/LPC memory mapped, TPM 2.0 CRB memory mapped. Using fTPM or dTPM dynamically is not possible.

Describe the solution you'd like
Unify TPM drivers in coreboot. TPM 2.0 is first priority then TPM 1.2 eventually. TPM 1.2 support is being neglected by modern platforms.

Where is the value to a user, and who might that user be?
User will be able to dynamically switch between dTPM/fTPM with #112
Also, this will prevent bricks when vboot is enabled and secdata is not mocked for fTPM.

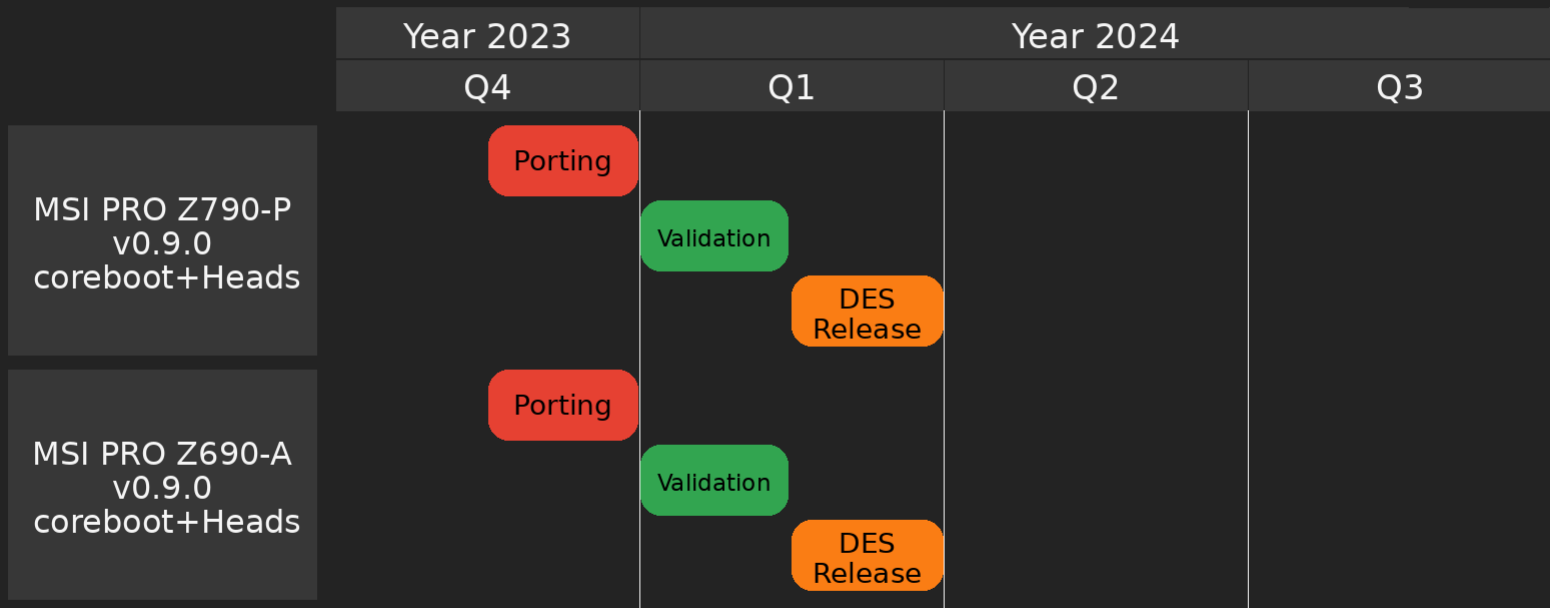**Describe alternatives you've considered**
None

Additional context
None

☺   👀 1

Dasharo Desktop Roadmap
subject to change

| Year 2023 | Year 2024 | | |
| Q4 | Q1 | Q2 | Q3 |

MSI PRO Z790-P
v0.9.0
coreboot+Heads — Porting, Validation, DES Release

MSI PRO Z690-A
v0.9.0
coreboot+Heads — Porting, Validation, DES Release

- Dasharo (coreboot+Heads) for MSI plans will be announced during next DUG, it is very likely releases will have in first half of 2025.

Q&A

CHANGELOG

Changelog DUG#8

- (NEW) QEMU Q35 v24.08.00.01 planned for Q1'25

- (REMOVED) PC Engines apu2/3/4/6 Dasharo (creboot+SeaBIOS) legacy planned for Q4'24

- (CHANGED) PC Engines apu2/3/4/6 Dasharo (coreboot+UEFI) v0.9.1 planned for Q4'24

- (CHANGED) PC Engines apu2/3/4/6 Dasharo (creboot+SeaBIOS) v24.08.00.01 planned for Q3'24

- (CHANGED) Protectli VP4670 planned for Q4'24

- (REMOVED) MinnowBoard Turbot Dasharo(coreboot+UEFI) planned for Q3'24

- (CHANGED) Hardkernel Odroid-H4 Dasharo(coreboot+UEFI) planned for Q4'24

- (NEW) V56TU Dasharo (coreboot+Heads) v0.9.0 planned for Q4'24

- (NEW) NV4x Dasharo (coreboot+Heads) v0.9.2 planned for Q1'25

- (CHANGED) NV4x Dasharo (coreboot+SeaBIOS) v1.7.2.x planned for Q1'25

- (CHANGED) Dell OptiPlex 7010/9010 v0.1.0 planned for Q3'24

- (RELEASED) MSI Z690-A v1.1.4 planned for Q4'24

- (CHANGED) MSI Z690-A v1.2.0 planned for Q4'24

Changelog DUG#8

- (RELEASED) MSI Z790-P v0.9.2 planned for Q4'24

- (CHANGED) MSI Z790-P v1.0.0 planned for Q4'24

Q&A