

Tock Foundation

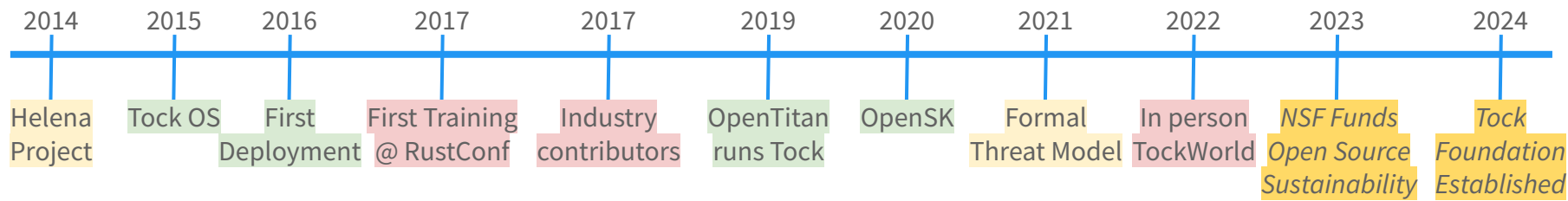
Membership



Our Mission

The Tock Foundation is an independent, non-profit organization dedicated to a future where computer systems are more secure, programmable, and efficient. We support the Tock OS project and its community by funding the core infrastructure of Tock as well as education, research and development initiatives.

A Brief History of Tock...



Project

vs.

Foundation

The Tock Operating System project is a collaborative open source project. Its contributors include practitioners and academics who share the goal of building a secure, resource efficient, and extensible operating system for low-resource embedded systems. Project contributors develop and maintain...

- Kernel features
- Development and debugging tools
- User-level libraries
- Support for existing hardware platforms

<https://github.com/tock>

The Tock Foundation supports the project by sustaining project infrastructure, developing and maintaining documentation, education, and training materials, auditing and fixing security issues, pursuing common-good development projects on behalf of members.

- Collaboration infrastructure
- Testing and reliability
- Community development and outreach
- Forward looking advances



Open Collaboration

Reliability

Our Values

Trust

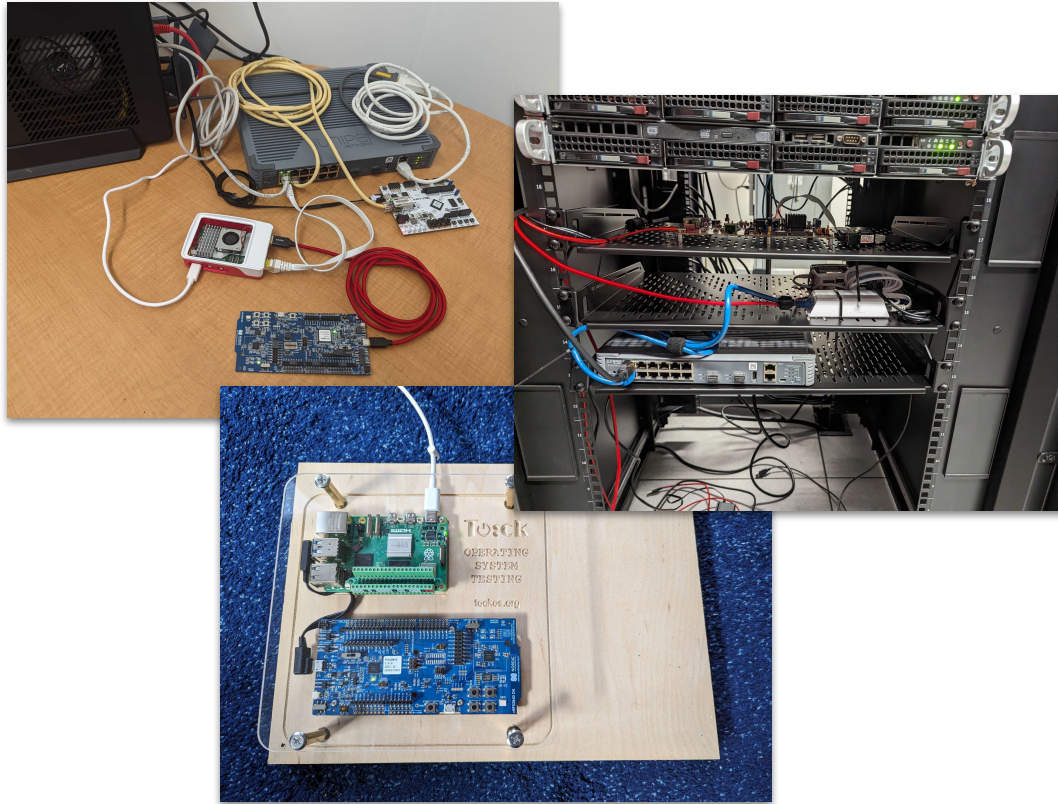
Resource Efficiency

Inclusivity



Current Projects





Treadmill enables continuous integration of embedded operating systems on all hardware platforms and allows distributed developers to get access for iteration and testing on niche hardware for development and debugging of new features.

On-Hardware CI & Remote Development

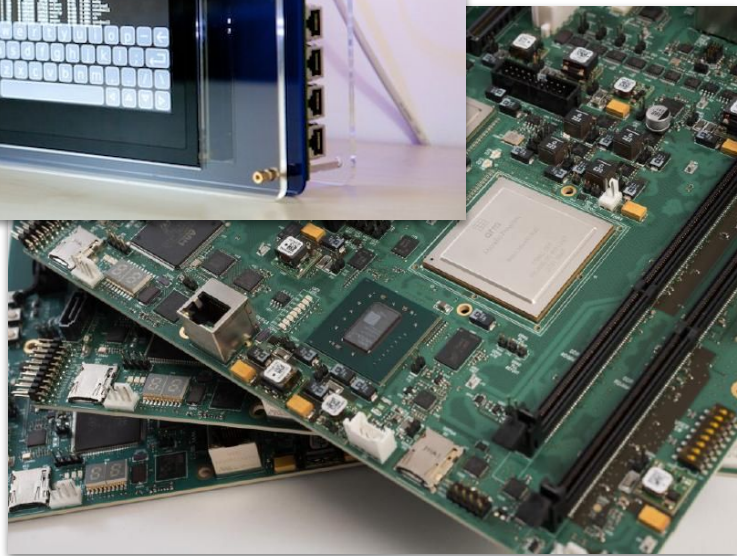


Minimizing code-size footprint is as important as memory footprint, especially in integrated systems where secure hardware does not have executable flash. This project is finding opportunities to dramatically decrease Tock's code-size and promote continuous efforts to avoid future bloat.

Category	Subcategory	kB Saved	% of Original
Hidden Data	Panic Data	3.5	4.0%
	Dyn Dispatch	10.1	11.6%
	Static Init	0.5	0.5%
	Total	14.1	16.3%
CGSC	Formatting	1.2	1.4%
	Drop	1.4	1.6%
	Futures	0	0%
	Total	2.6	3.0%
Monomorph.	Total	3.0	3.4%
Default Opts	Total	3.0	3.4%
Total Savings		22.6	26.4%

Code-size minimization





Emerging architectures support new promising protection mechanism, such as tagged-memory. This project will effectively use tagged memory to both more efficiently support Tock's existing protection mechanisms as well as to enhance security and robustness with new protection mechanisms.

Tock support for tagged-memory architectures



The Tock foundation strives to bring enthusiasm and access to secure systems development through outreach, trainings, and tutorials, particularly focused on members of under-represented groups in technology.



Secure Operating Systems 4 All



Membership



Members Benefit From

- Thought leadership & networking
 - Guest blog and co-marketing opportunities
 - Invitation to join project working groups and task forces
 - Collaboration with other influential organizations involved in Tock
- Visibility & strategy
 - Advance access to news and announcements
 - Prominent positioning of involvement through announcements and public recognition
- Community engagement
 - Opportunities to collaborate on initiatives that support the Tock community
- Goodwill with Open Source community

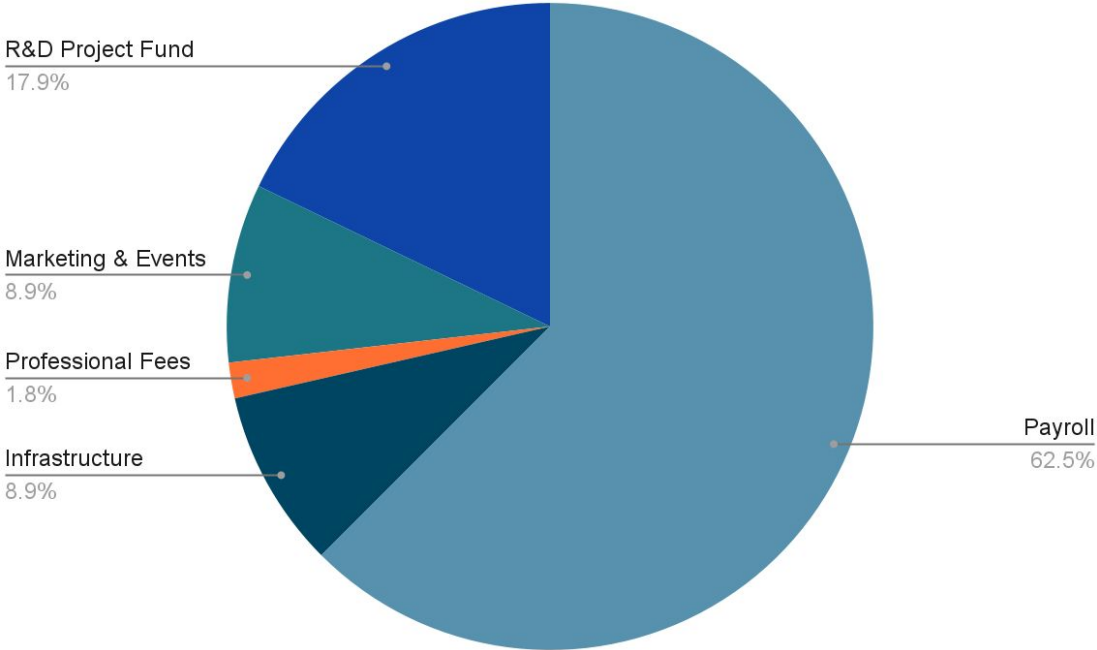


Memberships Help Fund

- Infrastructure and hosting for Tock ecosystem
- Security audits and improvements that benefit contributors, users, and adopters
- Educational, training, and documentation materials
- Community development and DEI initiatives
- R&D in emerging areas of interest to Tock community
- Foundation operations, administration, and legal obligations
- ... and more!



Projected Budget



Help Us Make the Core of Computing More Robust and Secure!

Email the Tock Foundation at
foundation@tockos.org to start a
conversation

