

Building Tianocore into coreboot

Disclaimer: We're interns

Introductions

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Introductions continued

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About Google Engineering Practicum

- Basic structure of an EP internship
 - 12-weeks
 - Pods of two/three
 - Two hosts and a mentor

Tianocore

- Open source UEFI (Unified Extensible Firmware Interface)
- Limitations of Tianocore
- Tianocore + coreboot

Goals

This has been done before - what's different?

- Add full integration into coreboot build
- Develop tests to make sure it stays working

What we're working on now

Learning - There are a lot of pieces involved in this process

- coreboot
- Tianocore
- Makefiles
- Bash scripting
- Toolchains
- Kconfig
- Git

Next Tasks

- Trying to get coreboot & Tianocore booting to an OS in QEMU
- Add additional versions of the GCC toolchain if needed
- Finish coreboot build integration
- Add boot and build tests
- Work with people in the community who have been looking at this
- Document processes

Questions?
(Remember, we just started)

References

<https://www.coreboot.org/TianoCore>

https://github.com/tianocore/tianocore.github.io/wiki/Coreboot_UEFI_payload

<https://review.coreboot.org/#/c/15057/>