Contributing to QEMU

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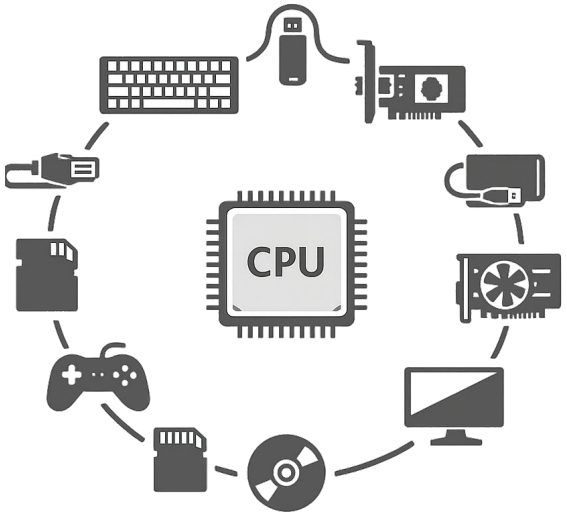
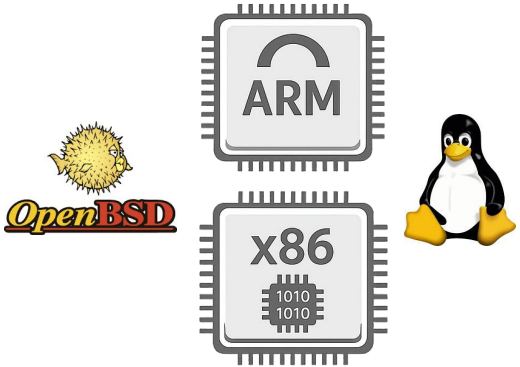
QEMU: Quick EMUlator

System emulation

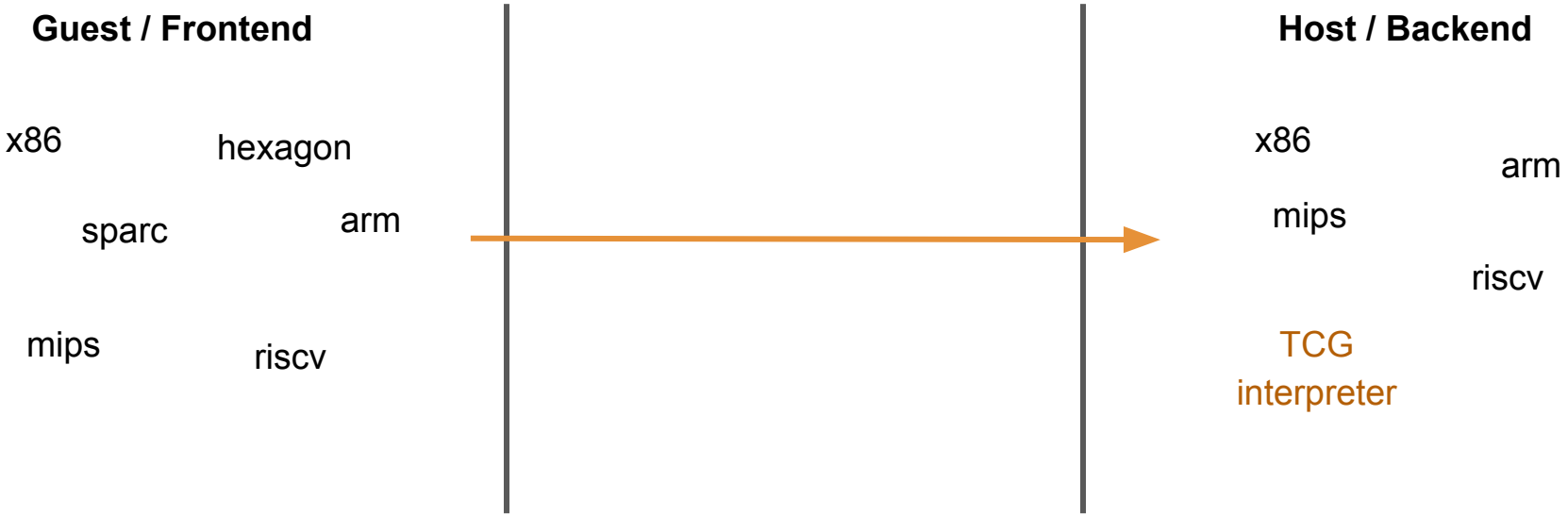


aka “softmmu”

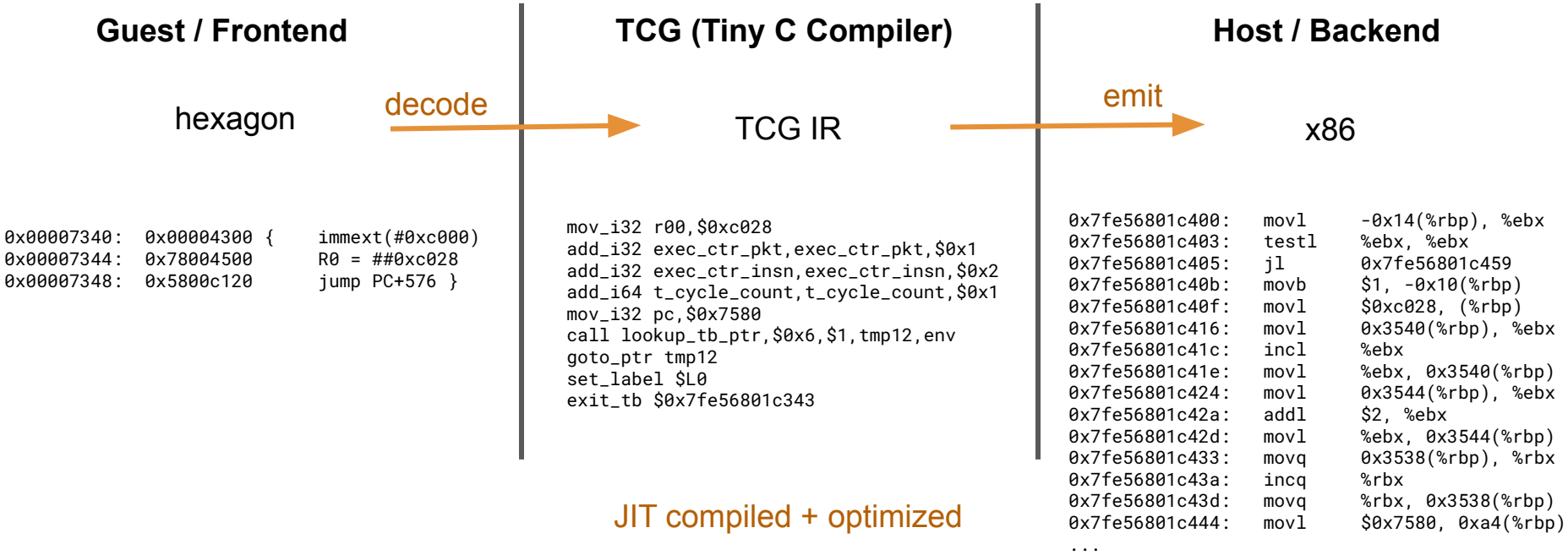
User mode emulation



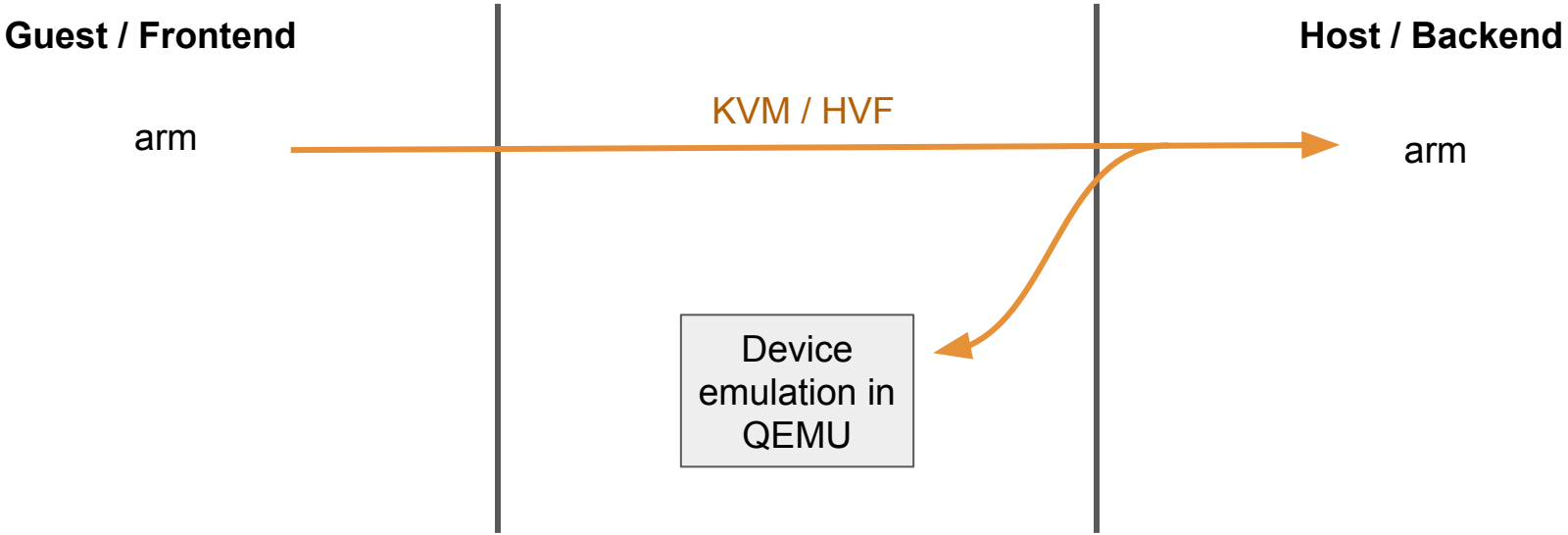
Translation



Translation



Virtualization



Repo structure

- Mostly C (with OOP). Some shell, python, and **Rust**.
- 3M LoC
- Build: configure, meson, make, ninja
- Overall structure

```
├── accel                # hypervisors (kvm, hvf, etc.)
├── hw                   # HW devices  (pci, usb, etc.)
├── linux-user, bsd-user # userspace emulation syscalls
├── target               # per-arch front-end (decode & translation)
├── tcg                  # TCG backend (JIT and generator)
├── tests
├── build                # qemu-system-hexagon, qemu-system-aarch64, etc.
└── …
```

Contributing

- Mailing list patches (like Linux kernel, git, etc.)
- Gitlab for CI and issue tracker
- GSoC and Outreachy

Useful links

Really nice blogposts / talks:

- rev.ng getting started videos: part 1 and part 2
- Airbus' "qemu internals" blog

Official (and sometimes a bit outdated) docs:

- Getting started for devs and Submitting a patch
- Good first issues
- Code style

Thanks

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