

The Libre-SOC Gigabit Router

A Libre-Licensed Gigabit Router ASIC
Delivering on EU Digital Sovereignty

Wolves Summit 2021

Sponsored by NGI POINTER

Wed Oct 2021 14:00 CEST

Why create a Libre-Licensed ASIC?

- ▶ Security, auditability, Sovereignty
- ▶ Security through obscurity is always broken (eventually)
- ▶ Fully Libre-Licensed including the VLSI toolchain:
there's nowhere to hide vulnerabilities
- ▶ EU Digital Sovereignty: LIP6 Labs coriolis2
is Europe's only Silicon-proven toolchain.
OpenLANE: DARPA. Cadence VLSI etc. are US-owned.

Who are we?

- ▶ Libre-SOC: Luke Leighton and Jacob Lifshay
Software Engineers with Hardware experience
- ▶ LIP6 / CRNS: Jean-Paul Chaput, Marie-Minerve Loureat
Prof. Dimitry Galayko. HITAS/YAGLE, coriolis2 VLSI
- ▶ Chips4Makers: Staf Verhaegen
Developer of the FlexLib Cell Library
- ▶ RED Semiconductor: David Calderwood, Luke Leighton
Commercial realisation of Libre-SOC designs.

What are we making?

- ▶ A Gigabit Router ASIC which will OpenWRT (A "Linksys"). 5 Ethernet ports, 2 USB ports.
- ▶ End-users will have full control over the firmware (No locked DRM)
- ▶ End-users can check there is no hardware spying
- ▶ Customers can be confident their business communications are not at risk
- ▶ Expected retail price of a commercial Gigabit Router product to be around EUR 60 in large enough volume.

The end

Thank you

Questions?

- ▶ Discussion: <http://lists.libre-soc.org>
- ▶ Libera IRC #libre-soc
- ▶ <http://libre-soc.org/>
- ▶ <https://www.ngi.eu/ngi-projects/ngi-pointer/>