The Librem-5 Phone FSFE Group Bonn Meeting, May 2018

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Outline

1 The Librem-5

2 Hardware and Software

3 Current status

About me

- Debian Developer (libvirt et al., gbp, LTS, ...)
- GNOME contributor
- FSFE Supporter
- Freelancing Free Software Developer

Topic

1 The Librem-5

2 Hardware and Software

Current status

A security and privacy focused phone



"Classic" Phone Features

- Camera
- GPS
- Wifi
-
- "Regular" phone calls and SMS





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- end to end encrypted calls and messaging
- user has full control over the device

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1 The Librem-5

2 Hardware and Software

Current status

Based on NXP iMX.8 CPU

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- The user space software is only one part of the project.
- not a common phone CPU
- Vivante Graphics (etnaviv kernel driver/mesa)
- Reaching for RYF
- Mainline kernel (or close to it)
- No software updateable firmware

PureOS

- Debian based
- FSF endorsement
- Runs currently on Purism's laptops
- Rolling distribution

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- Work on making GNOME apps phone ready (HdyLeaflet, Status, Demo)
- Design based approach

Wayland compositor

- Uses wlroots
 - Compositor library
 - Used by sway, waycooler, waymonad, ...
- Phosh: The phone shell, GTK+/GNOME based (Demo)

Cl / Builds

based on Gogs / Jenkins

"Apps"

- flatpak based
- GNOME Builder as development enviroment
- "App repositoroy" will host free software, not GNOME only

Other flavours

- Plasma Mobile (runs on the test boards)
- UBPorts

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- Plasma Mobile (runs on the test boards)
- UBPorts
- Your free software phone platform goes here



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The Librem-5

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UI/UX design progress



Figure: Design

Hardware design progress

- iMX.8 looks good
- dev boards in the works
- M.2 cellular baseband
- wifi / bt is hard (firmware)

Software

- development images available
- developer documention available
- minimalistic compositor / shell
- calls: basic dialer application
- basic sms application

Encryted Messaging

• likely based on fractal / matrix

Browser

• Work on making Web/Epiphany adaptive (Demo)

Join the fun

- librem-5@lists.puri.sm / https://lists.puri.sm/
- Blog: https://puri.sm/posts/tag/phones/
- Developer documentation: https://developer.puri.sm
- Questions?

Thanks

• Send mail to <agx@sigxcpu.org>