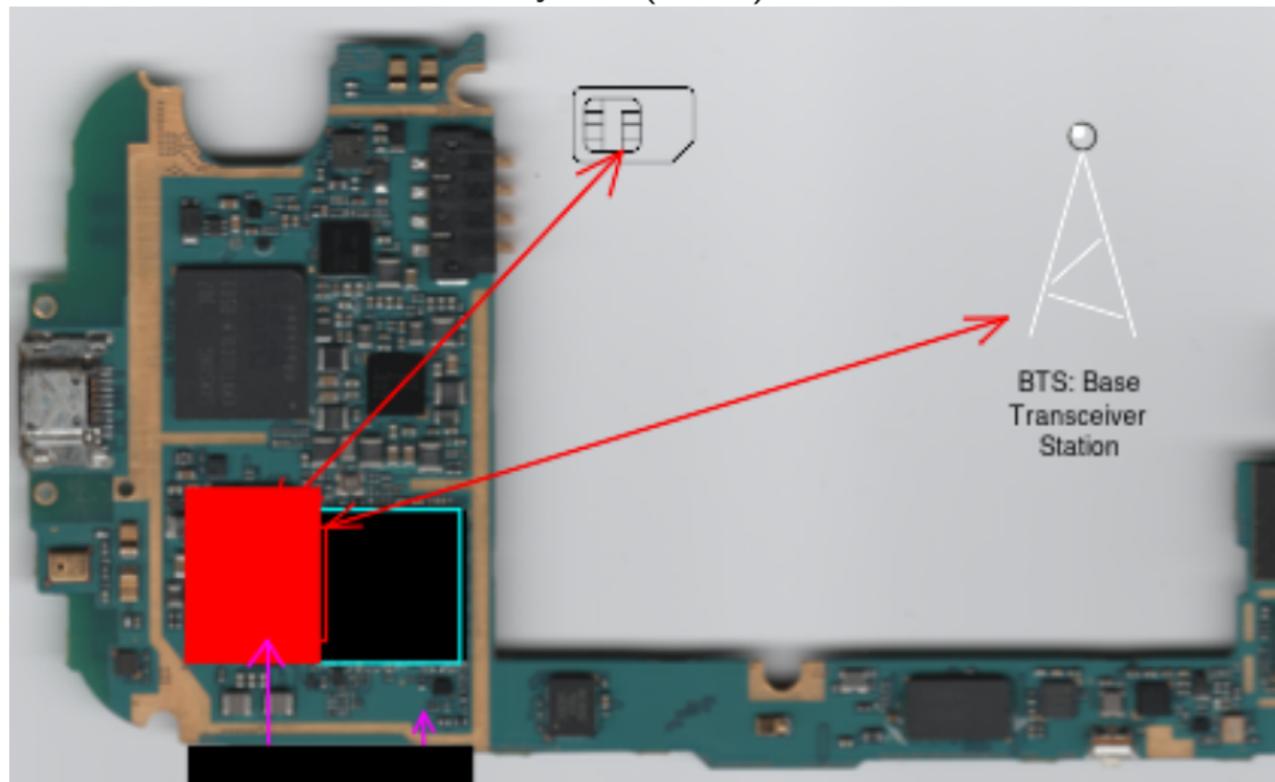# Smartphones freedom status in 2023

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In this presentation

- ▶ What is a smartphone
- ▶ Hardware and freedom
- ▶ Android vs GNU/Linux: Applications and OS
- ▶ Android Applications status: SDK etc
- ▶ GNU/Linux status
- ▶ Android status

A Galaxy SIII (I9300):

BTS: Base
Transceiver
Station

Hardware

	Pinephone	Pinephone Pro	Librem 5
Boot	Free	Free	Nonfree DDR4 firmware
WiFi	nonfree firmware	nonfree firmware	nonfree firmware
Modem	Can be isolated	Can be isolated	Usually isolated
Battery	Replaceable	Replaceable	Replaceable
Works	Depends	No suspend to RAM	Yes
Price	OK for free software people	OK for free software people	Too expensive

Hardware

	Fairphone	Pixel 7
Boot	Nonfree, signed	Nonfree, signed?
WiFi	nonfree firmware	nonfree firmware
Modem	Not isolated	Can be isolated
Battery	Replaceable	Non replaceable
Works	Yes	Yes
Price	Expensive	OK for free software people

GNU / Linux applications

- Few adapted applications

Andbox / Waydroid

- Uses more RAM / space
- Limited interfaces to hardware

Android applications

- ▶ F-Droid
- ▶ Depends on nonfree Android SDK
- ▶ ~~https://android-rebuilds.beuc.net/~~
  https://codeberg.org/Starfish/SDK-Rebuilds
  Sources without EULA.
  WIP: now building and publishing.

GNU / Linux

- Usable on the PinePhone
- Issue: applications

Android

- GloDroid
    - Good architecture.
    - Pinephone 3GiB.
    - No data connection.
    - No multipart SMS (Silence key exchange)
    - (also no modem isolation)

Wanna join the fun?

Replicant Meetup 14:00 @ CDC

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