

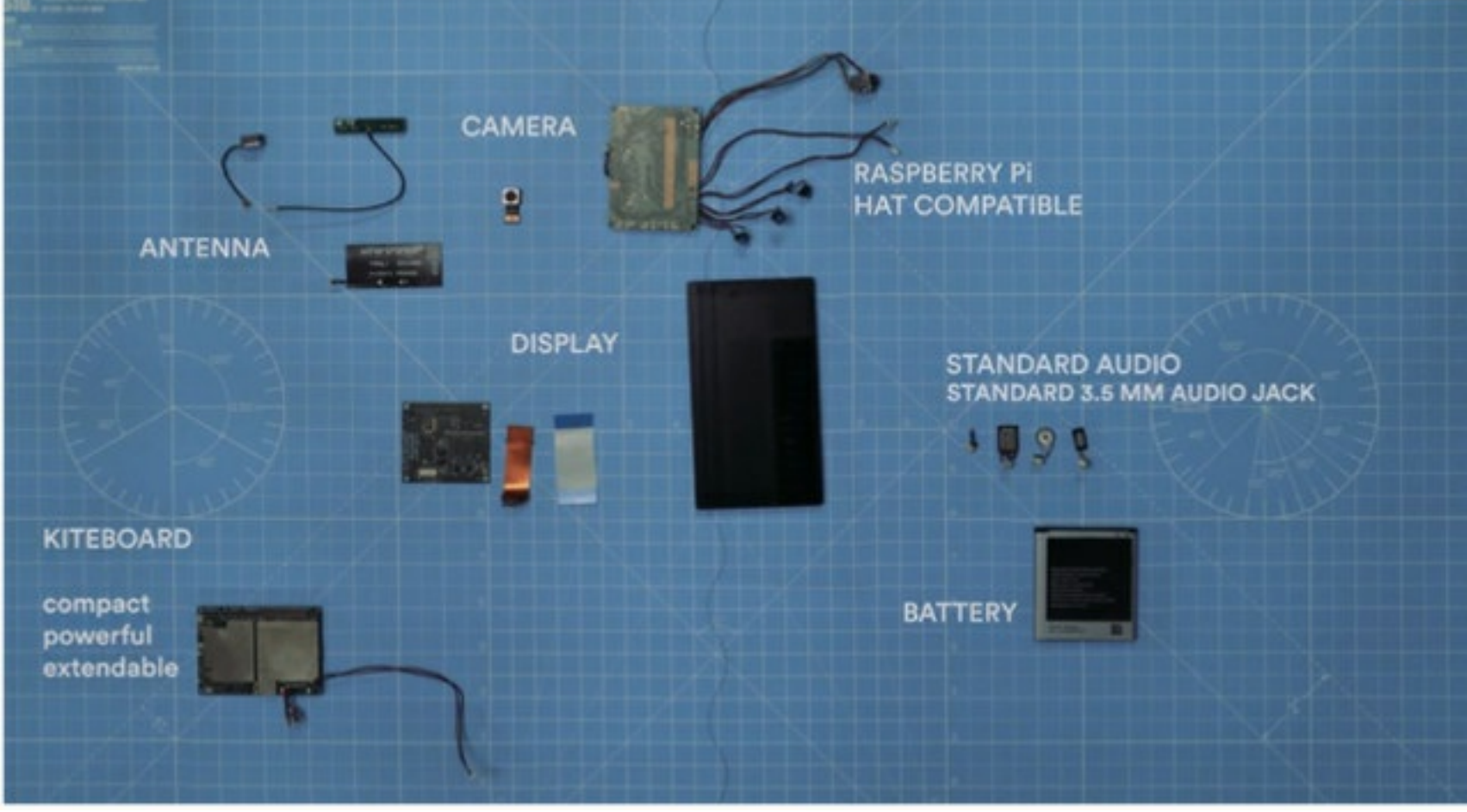
APRIL 24, 2018BY CNXSOFT · NO COMMENTS

## Kite is an Open Source Hardware Android Smartphone Powered by Snapdragon 450 Processor (Crowdfunding)

Kite is an open source hardware [Android phone](#) kit specifically targeting makers which you can assemble yourself into a Kitephone.



The phone is based on a Qualcomm Snapdragon 450 mainboard (Kiteboard v2), and comes with a 720p touchscreen display module, a 12MP camera, antennas, buttons, a 3,000 mAh battery, and a Raspberry Pi HAT compatibility board to optionally interface to external hardware.



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Kiteboard v2 specifications:

- SoC – Qualcomm Snapdragon 450 octa-core Arm Cortex A53 @ 1.8 GHz with Adreno 506 GPU
- System Memory – 2 GB RAM
- Storage – 16 GB storage + [microSD card](#) slot
- Connectivity
  - Cellular
    - LTE Cat. 6/3G/2G, 2x nano SIM slots (dual-SIM dual standby)
    - Two variant
      - North America with
        - LTE FDD Bands: 2,4, 5, 7, 12, 13, 14, 25, 26
        - LTE TDD Bands: 41
        - WCDMA 850, 1700, 1900, 2100
        - GSM 850, 1900
      - Rest of the World (Europe, Russia, etc...)ul>      - LTE FDD Bands: 1, 3, 5, 7, 8, 20
      - LTE TDD Bands: 38, 39, 40, 41
      - WCDMA 850, 900, 1900, 2100
      - GSM 850, 900, 1800, 1900Cellular
  - WiFi a/b/g/n/ac
  - BT 4.2 LE
  - Low power GPS engine
- USB – USB 3.0 OTG port
- Sensor – 9 axis eCompass, accelerometer & gyroscope
- Interfaces – 2x display interface, 2x camera interfaces
- Fast charging support for LiPo batteries



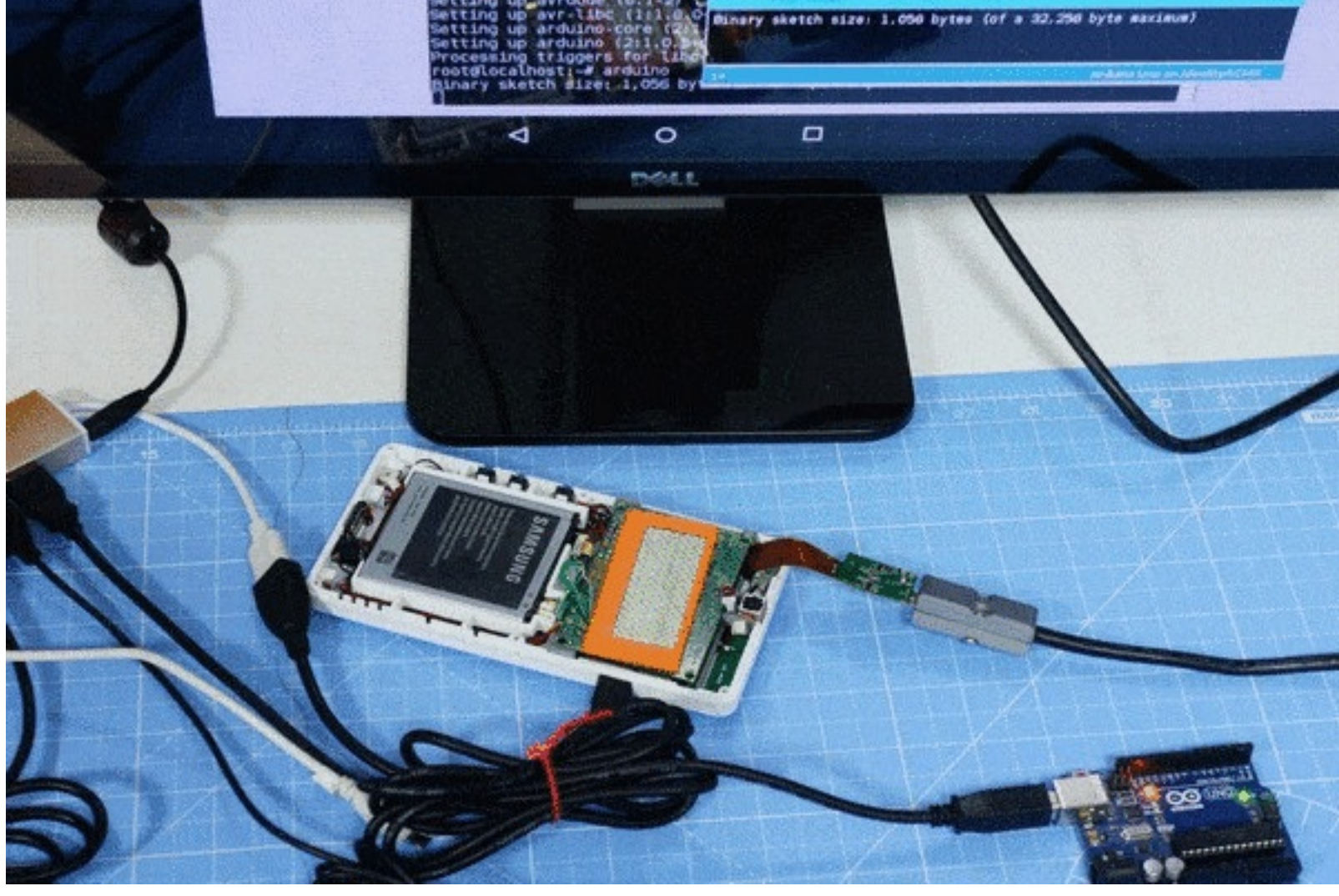
Assembled Kite Prototype with Custom Case, and Some DIY Electronics Modules

A single display and camera is used in the kit, so the extra interfaces are for advanced users. The phone will run Android 7.1 with F-Droid app store (no GMS), and most resources used to make the phone will be made available publicly, include KiCad schematics and PCB layout, Gerber files, 3D printable designs compatible with FreeCAD, and Android source code. There will be some binary blobs for GPU, model, WiFi & Bluetooth, GPS, camera, etc... 24-hours of video tutorials will be provided showing how to assemble the phone, and customize it.

The video gives an overview of the phone, and shows some of the cool things you can do with the phone.

If you don't have time to watch the short video above, some of those projects include:

- Dual display game console
- Using the phone as a desktop machine using HDMI add-on board
- PianoPhone with a small display showing a piano and an I2S amplifier
- Phone with braille keyboard



Kite + HDMI add-on board used to program an Arduino board

This looks all good, except the case is not provided in the kit, on the 3D files, so you'd have to print it yourself with your own 3D printer or a 3D printing service. This will probably reduce the number of backers, although Shree Kumar – the lead developer – explains you can ask to add a case to your pledge, but you should then expect shipping to be delayed in that case...

If you are interested, Kite has [just launched on Kickstarter](#) with a \$941,000 funding goal. Pledges for the complete kit start at \$274 plus shipping with delivery planned for January 2019. Backers will receive a shipping survey in October to add things like an extra display, HDMI board, extra camera, etc., and potentially a 3D printed case. Shipping add \$18 to \$40 depending on the destination, and if your country is not listed you can contact them to add it.

I also discussed with Shree over email about the potential for purchasing spare parts and long term supply commitment, so that users can repair their phone themselves, as they'll know how to assemble and disassemble it. After a quick check, he explained it should be possible to make the kit available till 2022 or more, and if the project is popular enough, an upgraded baseboard may follow.



○ Hexa Core,Mali T864 GPU

○ Android7.1 OS

○ 4G RAM,32G ROM

○ Type C,USB3.0

MK39

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