## Solar pi-top [v3]





- I'm an independent contractor- I provide tech support services to IT companies.
- My hobby interests are in building technology (e.g. FOSS hardware & software) and making it easier to use and more accessible.
- In the past, I have worked in technical support roles for IT companies in wireless networking, help desk, and hardware repair.

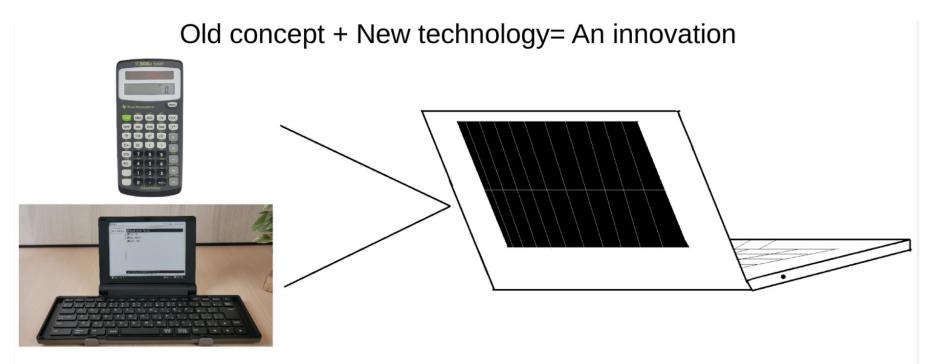
@techrecount

https://github.com/EI2030/Low-power-E-Paper-OS

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### **About Me**





Existing Solar Powered Product (TI30Xa Solar-Old Tech)+ = Solar Powered Digital Typewriter New Low Power GUI-based Typewriter (Pomera-New tech) = & Minimum goal of next gen tech

## How could we get there?

- Microcontrollers (MCUs) (e.g. Espressif ESP32 WROVER w/8MB RAM)
- Human Machine Interface (HMI) Products that utilize ESP32 MCUs include M5Stack, M5Paper, Inkplate 6 & 10" (\$200k+ Crowdsupply funded)
- Ambig Micro Apollo3/4 MCUS are in IoT & Wearables such as in watches & sensorsthat use ultra-low power- 6uA/mhz-
- RTOS & Linux Development- Genode microkernel (sel4-based) -compact Linux in a MCU

#### Why develop Linux on MCU?

- Setting limits on power consumption makes it easier to achieve solar goal
- Cheaper

# Adding microcontrollers/other boards as a Cyberdeck



## Pi-top as a Solar Tracker

