#### Concept #2:

# E-ink, low-power CPU, and solar power: 3 Sides of the same lid

- A laptop able to stay online for 12hrs while being re-charged daily in ambient conditions- e.g near a window or a few ceiling lights.
- Doesn't depend or emphasize staying online, but is capable of doing so (Encourages work/life balance)
- Uses E-ink or Low Power Display such as Memory-In-Pixel (MIPS)
- Converging High Tech & Low Tech (It sounds high tech today, but commonplace tomorrow)
- What would this look like?

## Ti-30Xa Solar (Self-Powered) +

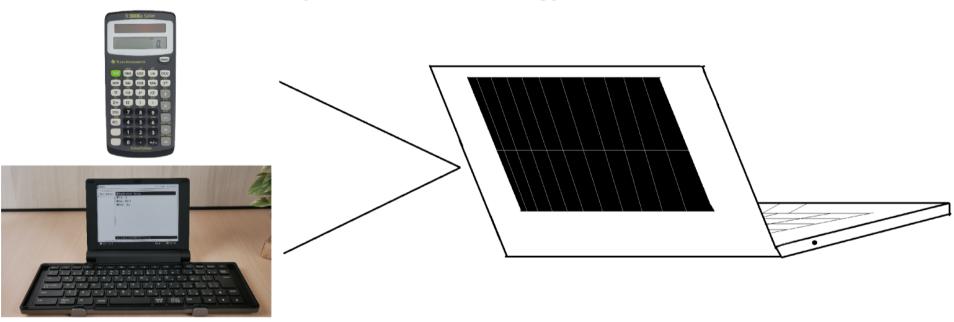


### Pomera DM30 Digital Memo+



#### What would this look like?

Old concept + New technology= An innovation



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