LightningPiggy &
The Unveiling of MicroPythonOS

LightningPiggy

Teach kids when they're young

- Fun
- Personal
- Save
- Invest
- Bitcoin and Sats

Why not a smartphone?

- Fragile
- Complex
- Expensive
- Distractions
- Turns Off

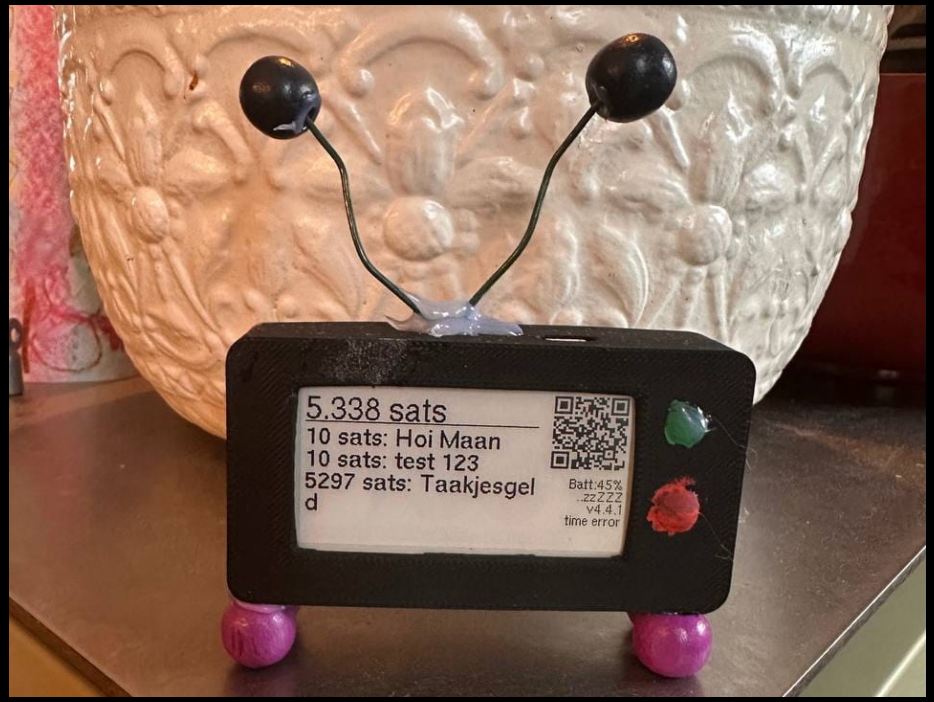
Perfect Kid’s Wallet

- Always On (ePaper)
- Balance in Sats
- Amount & Comment
- Receive QR code
- Instant refresh

Proof-of-Concept

- Credit: BlackCoffee
- LilyGo ePaper Board
- Backend: LNBits
- Hard-coded Config
- Arduino IDE Installer

Awesome Added Features



- Easy Web Installer
- Battery Management
- Shake-to-Wake
- Update Notifications
- Webbrowser Config

Great Product Finished

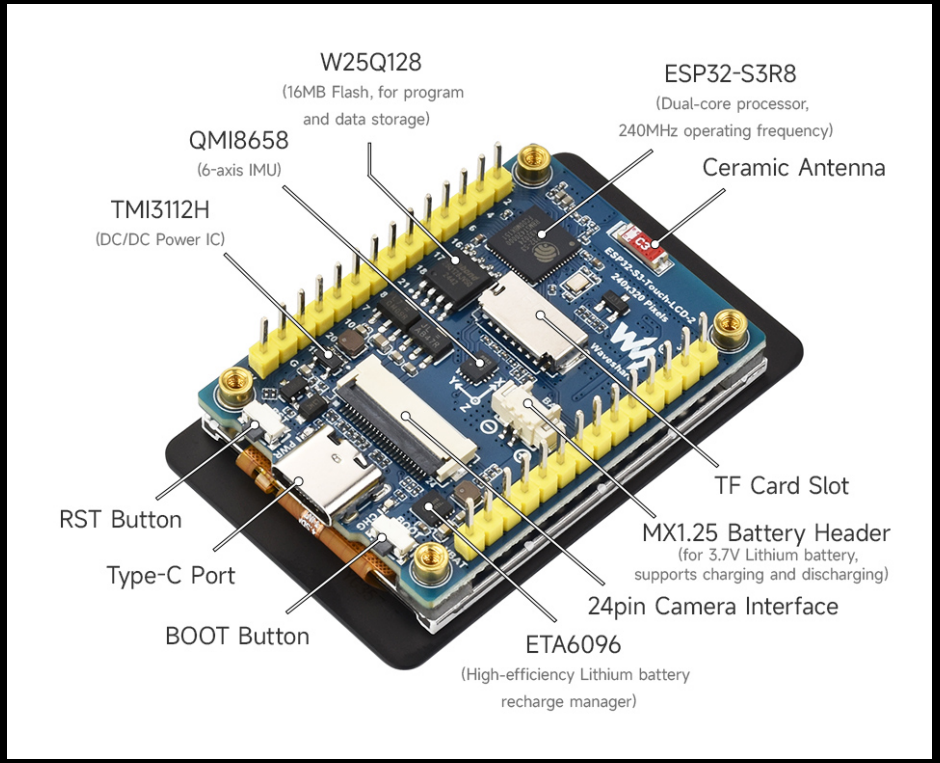
- Wisdom and Greeting
- Fiat Balance & Price
- Localization
- Access Point Config
- Nostr Wallet Connect

Build Your Own

- LightningPiggy.com
  - /market
  - /build
- Make It Your Own
- 3D Printable Cases
- Valuable Present

New LightningPiggy

New LightningPiggy



- Color Touch Screen
- 251% More Pixels
- Camera
- Accelerometer
- MicroSD Card

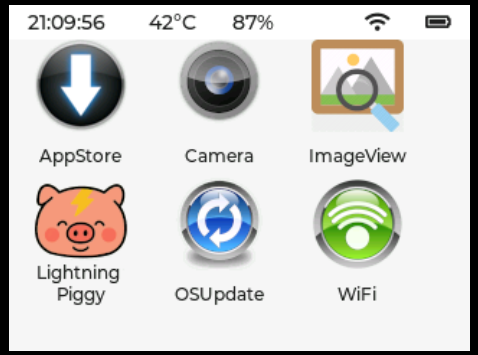
Need Android-like OS for ESP32

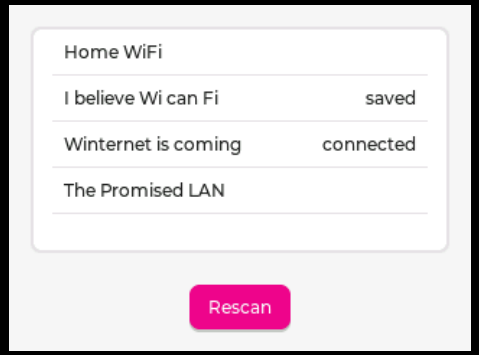
- App Store
- WiFi Manager
- Update and Rollback
- Slick User Interface
- Easy Development

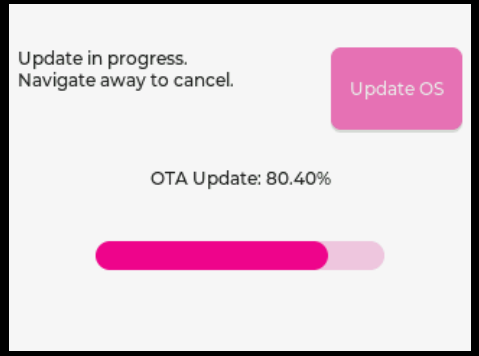
Possible?

- No MMU
- 300KB SDRAM
- 8MB PSRAM
- 16MB ROM
- IBM PS/2 1981

Enter MicroPythonOS!





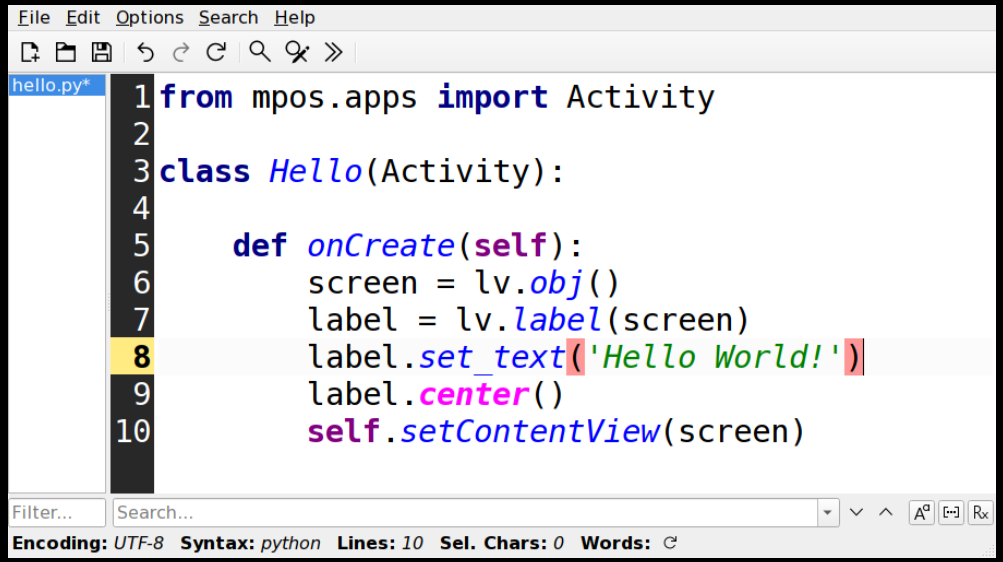


- Launcher
- WiFi + Auto-Connect
- OSUpdate
- AppStore
- Settings

LVGL 9.3

- Lightweight
- 30+ Widgets
- Animations
- Image Decoders
- L10n, i18n
- UI Editor

Easy Android-like Development API

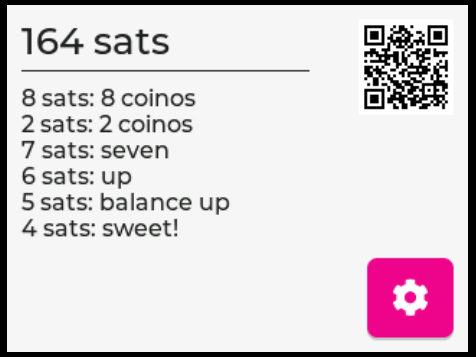


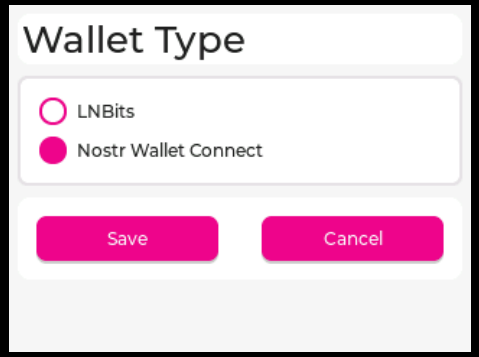
- Create Screen
- Add Label
- Set Label Text
- Center Label
- Activate Screen

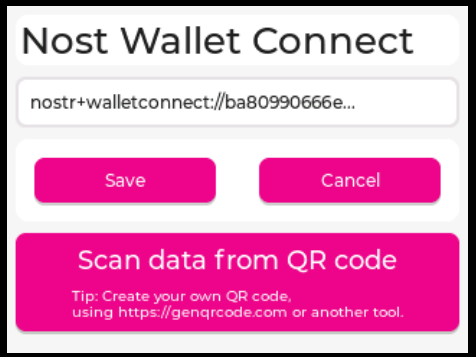
Available Apps

- Camera + QR decode
- Image Viewer
- Lightning Piggy
- Your App Here ;-)
  - Games
  - Nostr Client
  - Music Player

LightningPiggy App







- First Release
- Showcase OS
- Validate Frameworks
- Feature Parity

Live Demo

- You are looking at it.
- Yes, really!
- This is it.
- You were in it this whole time!

Your turn!

- Buy the devices
- Join the projects
- Build lots of apps
- Share
- Reach out