



Web3 Pi

Pi cluster board — the **updated** **BOM**

The revised bill of materials for the pre-mounted board, what we already own and will attach ourselves — plus one open question for you.

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comments to be added inline

Core board items

#	Item	Qty	Status / comment
1	Raspberry Pi 5 (pool devices)	10	—
2	Web3 Pi UPS v1 (per-device)	10	—
3	PSU(s)	as designed	Power delivery for all devices — your call on topology
4	Power strip	if needed	Only if the PSU topology requires it
5	USB drives (device reimaging)	10	Already bought (our side); become self-flashing reimage sticks

Items 1–4 arrive mounted on the board; item 5 stays with us as the per-device reimage fallback.

Networking gear — **we attach it ourselves**

#	Item	Qty	Status / comment
6	Unmanaged switches — TL-SG1008D + TL-SG1005D	3	Just in case; I must be able to attach them to the board myself
7	Managed switch — TL-SG108E	1 (+1 fallback)	Already bought ; a fallback unit is useful — but above all, board-attachable by me
8	OpenWrt router on WaveShare CM4	1	Bought, configured, operational ; I have to be able to attach it to the board

The one hard requirement: the board design must leave mounting space, power and cable paths so these owner-supplied devices can be attached (and swapped) **without your involvement**.

Open question — the **inspection camera**

A **separate Raspberry Pi with a camera** will be used for visual inspection of the board — reading status LEDs, UPS panel indicators and other **small indicators** at a distance.

Question for you

Which camera should we use to ensure we can reliably read small indicators? (module, lens/focal length, mounting distance — your recommendation.)

What it has to cope with:

- small, bright point-source LEDs (color + blink patterns)
- the UPS front-panel indicators
- fixed mount, varying distance to targets
- unattended operation (focus must not drift)



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Summary

10× Pi 5 + 10× UPS + PSU(s) (+ power strip if needed) on the board;
3× unmanaged switches, the managed TL-SG108E and the CM4 OpenWrt router are ours and must be self-attachable; 10 reimage USB drives are already bought.

One answer needed: the inspection-camera recommendation.

Graphics on these slides are reused from web3pi.io with thanks.