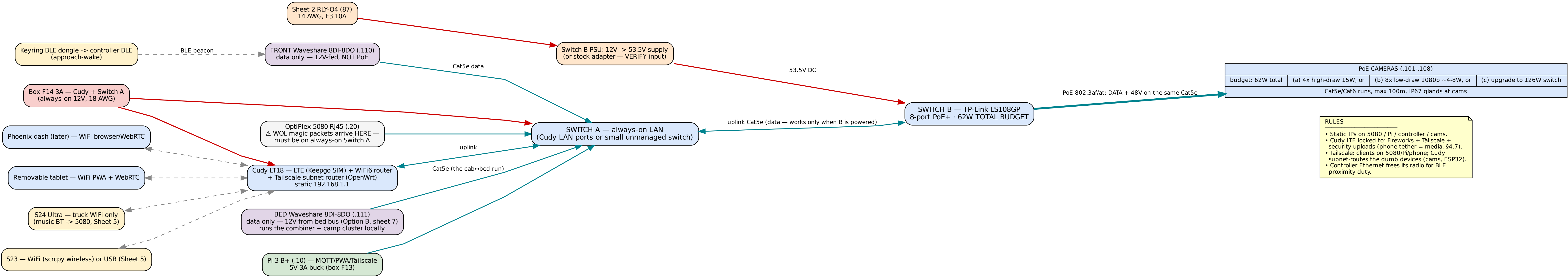


FULL WIRING SHEET 4 of 5 — NETWORK & PoE (rev 3.15)
 TWO-SWITCH SPLIT: Switch A = ALWAYS-ON (controller, Pi, 5080-WOL, Cudy uplink — must stay powered for Wake-on-LAN). Switch B = LS108GP PoE+ camera tier, power GATED by RLY-O4 (cut when asleep).
 Ethernet = data, no fuses; PoE carries 48V down the same Cat5e (high V = low current = low loss — camera converts down internally).
 LEGEND: teal = Ethernet data · teal-thick = Ethernet + PoE 48V power · red = 12V power feed · gray dashed = WiFi/BT



RULES

- Static IPs on 5080 / Pi / controller / cams.
- Cudy LTE locked to: Fireworks + Tailscale + security uploads (phone tether = media, \$4.7).
- Tailscale: clients on 5080/Pi/phone; Cudy subnet-routes the dumb devices (cams, ESP32).
- Controller Ethernet frees its radio for BLE proximity duty.