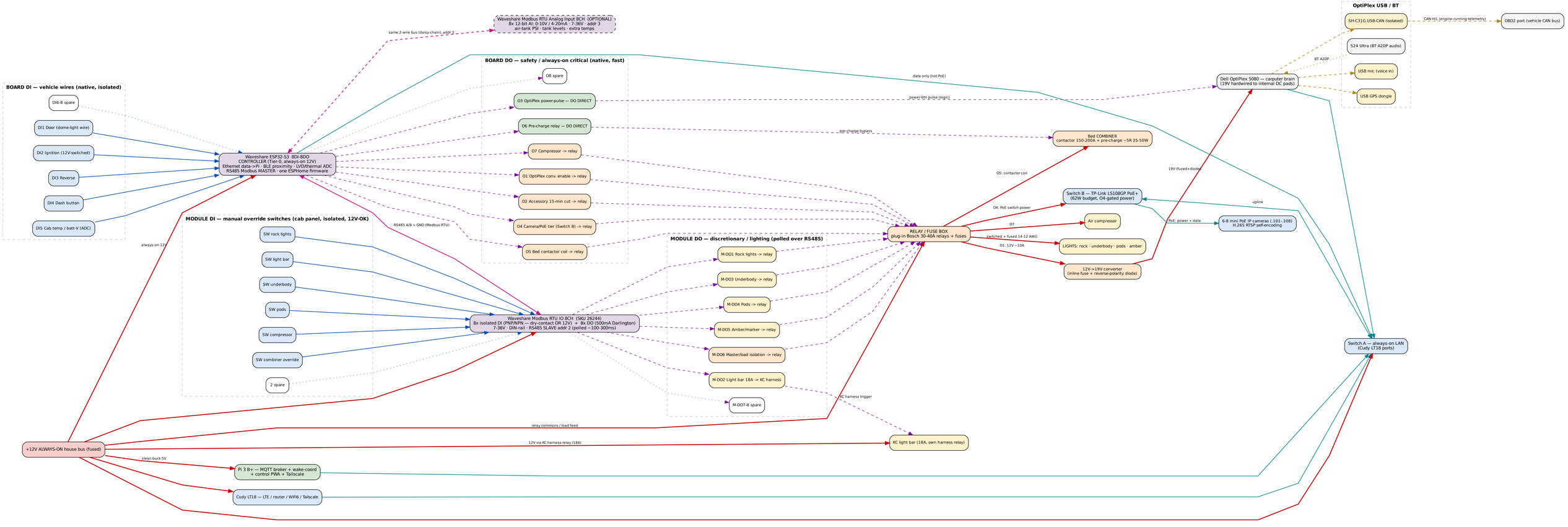2014 RAM 1500 Carputer — CONTROL WIRING · OPTION A: ONE ESP32-S3 8DI-8DO + RS485 Modbus IO module (rev 3.10)
One always-on controller is the Modbus MASTER; an isolated 8-DI / 8-DO module hangs on its RS485 bus for manual-override switches + extra loads, so the board's own 8 DI stay free for the vehicle wires.
LEGEND: blue = DI signal in · purple dashed = DO trigger (to relay coil) · red = 12V / load power · teal = Ethernet data · gold dashed = USB · magenta = RS485 Modbus (A/B)