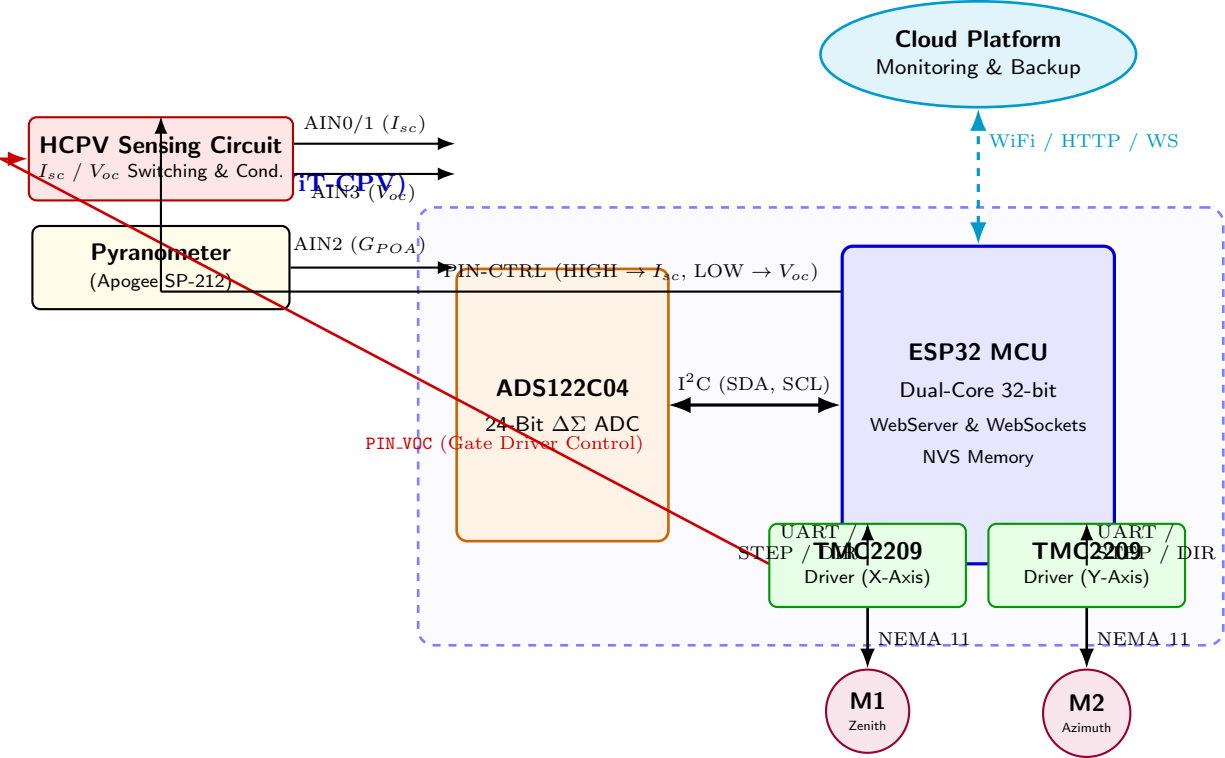

Cloud Platform
Monitoring & Backup
WiFi / HTTP / WS
HCPV Sensing Circuit
I_{sc} / V_{oc} Switching & Cond.
AIN0/1 (I_{sc})
AIN3 (V_{oc})
iT-CPV)
Pyranometer
(Apogee SP-212)
AIN2 (G_{POA})
PIN-CTRL (HIGH → I_{sc}, LOW → V_{oc})
ADS122C04
24-Bit ΔΣ ADC
PIN_VOC (Gate Driver Control)
I²C (SDA, SCL)
ESP32 MCU
Dual-Core 32-bit
WebServer & WebSockets
NVS Memory
UART / STEP / DIR
TMC2209
Driver (X-Axis)
UART / STEP / DIR
TMC2209
Driver (Y-Axis)
NEMA 11
NEMA 11
M1
Zenith
M2
Azimuth