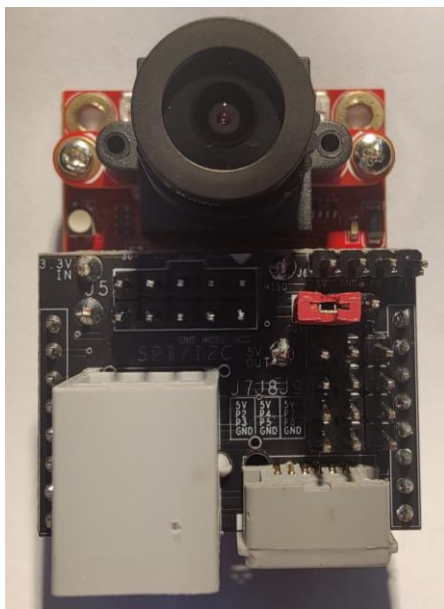


OpenMV I/F Board USERS GUIDE

[Rev 1.0]



2023. 09. 21

HAKYEONG JEON

hakyungi@hanmail.net

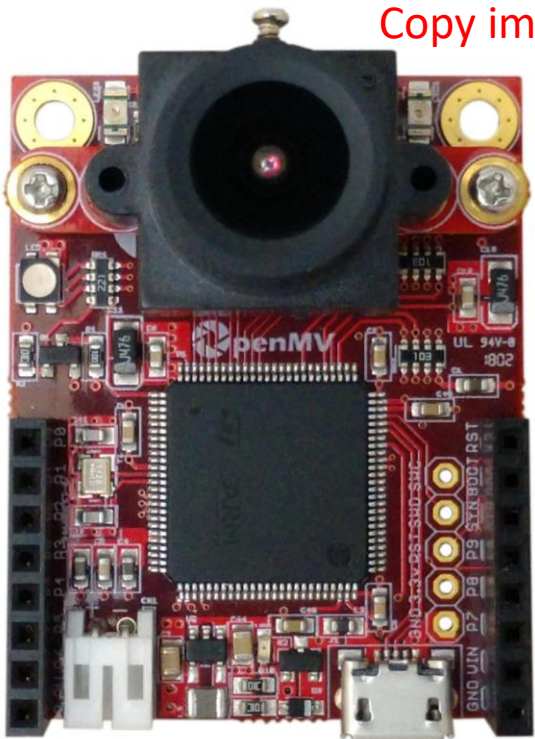
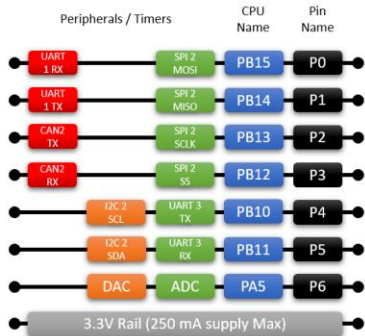
BOARD IMAGE

Copy image from openmv.io



By: Ibrahim Abdelkader & Kwabena W. Agyeman
<https://openmv.io>

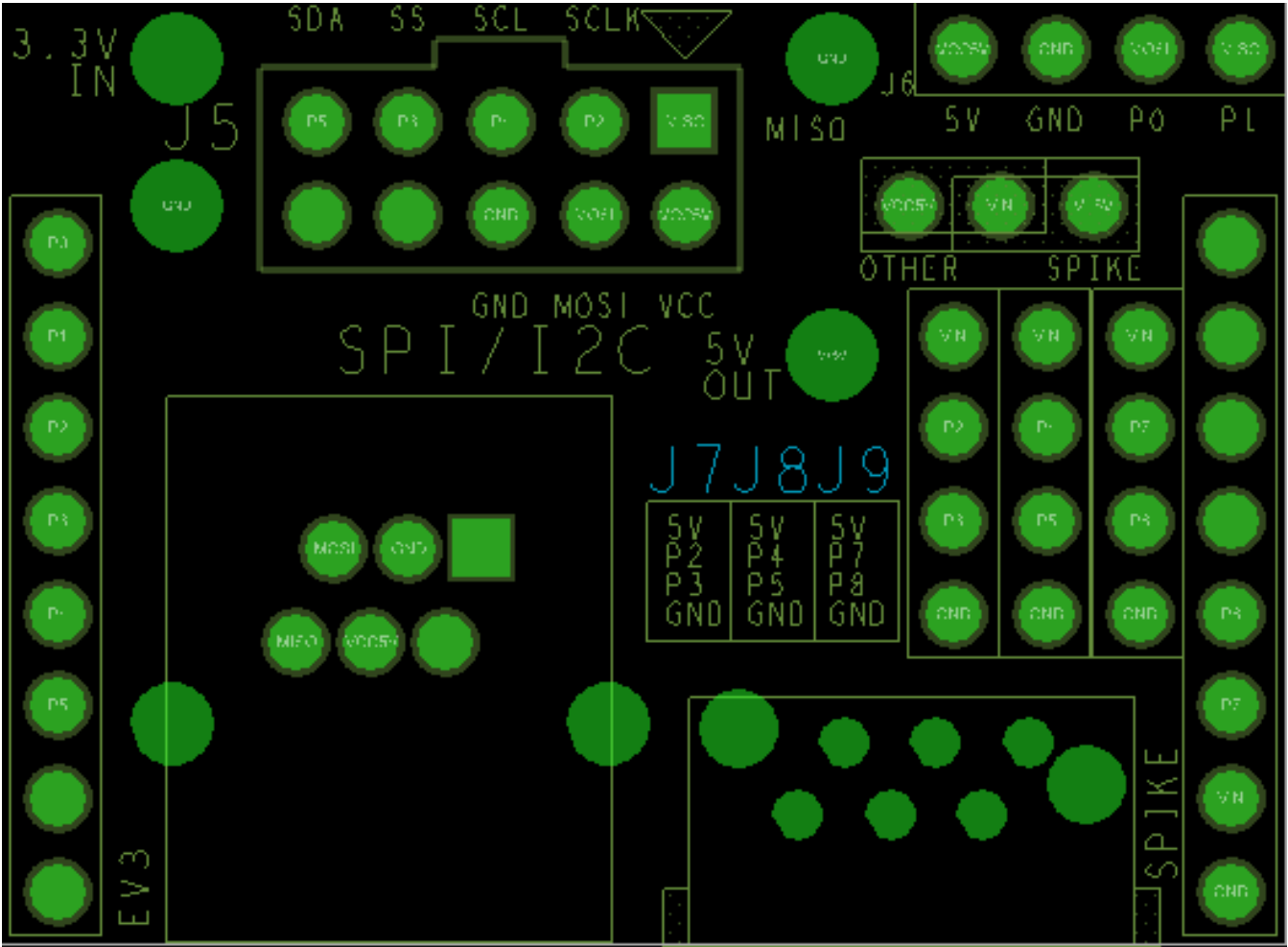
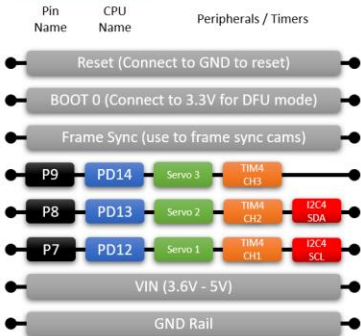
LED1 – Red
LED2 – Green
LED3 – Blue
LED4 – IR



All pins are 5V tolerant¹ with a 3.3V output
All pins can sink or source up to 25 mA²
¹ P6 is not 5V tolerant in ADC or DAC mode
² Up to 120mA in total between all pins

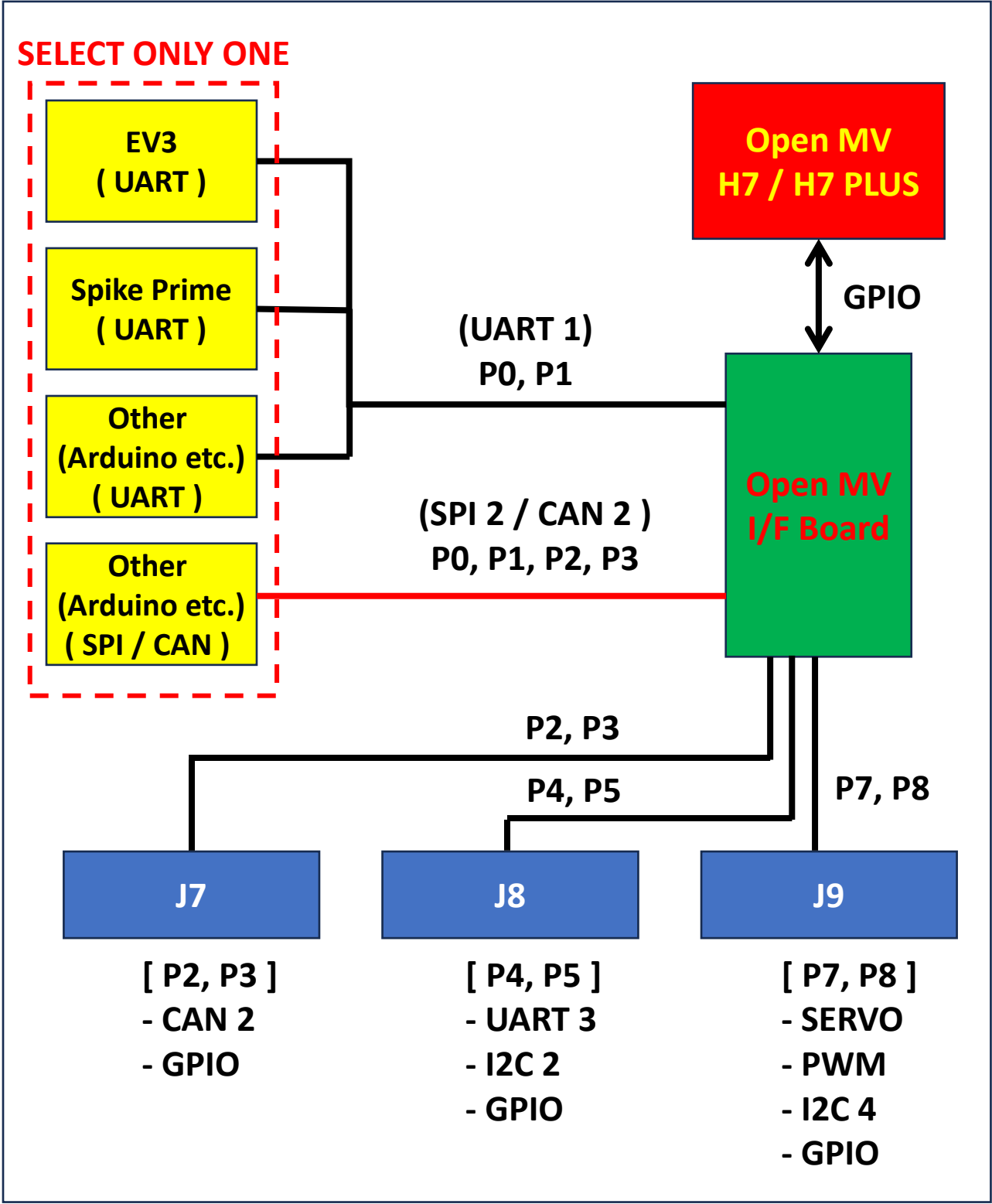
Max current used w/o μ SD card < 150 mA
Max current used w/ μ SD card < 250 mA

Micro SD Slot
SD < 2GB Max
SDHC < 32GB Max
SDXC < 2TB Max



OpenMV I/F Board

BLOCK DIAGRAM



The diagram at the top shows the location of the voltage select jumper on the EV3 and SPIKE PRIME boards. A red box highlights the jumper, and a red arrow points to it with the text "VOLTAGE SELECT JUMPER".

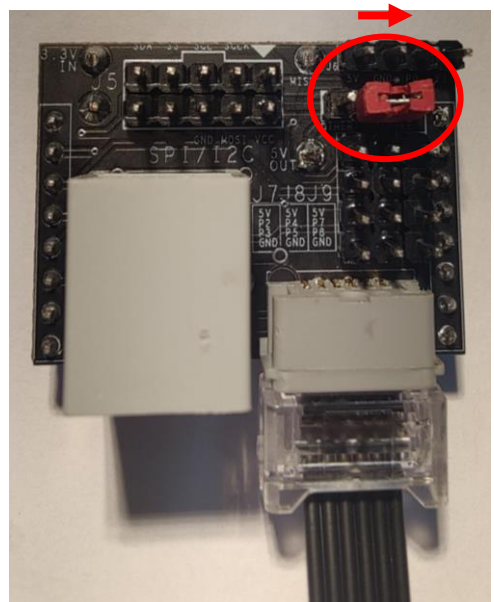
Below the diagram, two rows of icons and text explain the jumper settings:

- 5V SOURCE EV3**: Indicated by a red hatched square icon.
- 3.3V SOURCE SPIKE PRIME**: Indicated by a blue circle icon.

Two photographs below show the physical boards with the jumper settings:

- The left photo shows the EV3 board with the jumper set to 5V (red hatched square). A red arrow points to the jumper, and a red circle highlights the 5V setting.
- The right photo shows the SPIKE PRIME board with the jumper set to 3.3V (blue circle). A red arrow points to the jumper, and a red circle highlights the 3.3V setting.

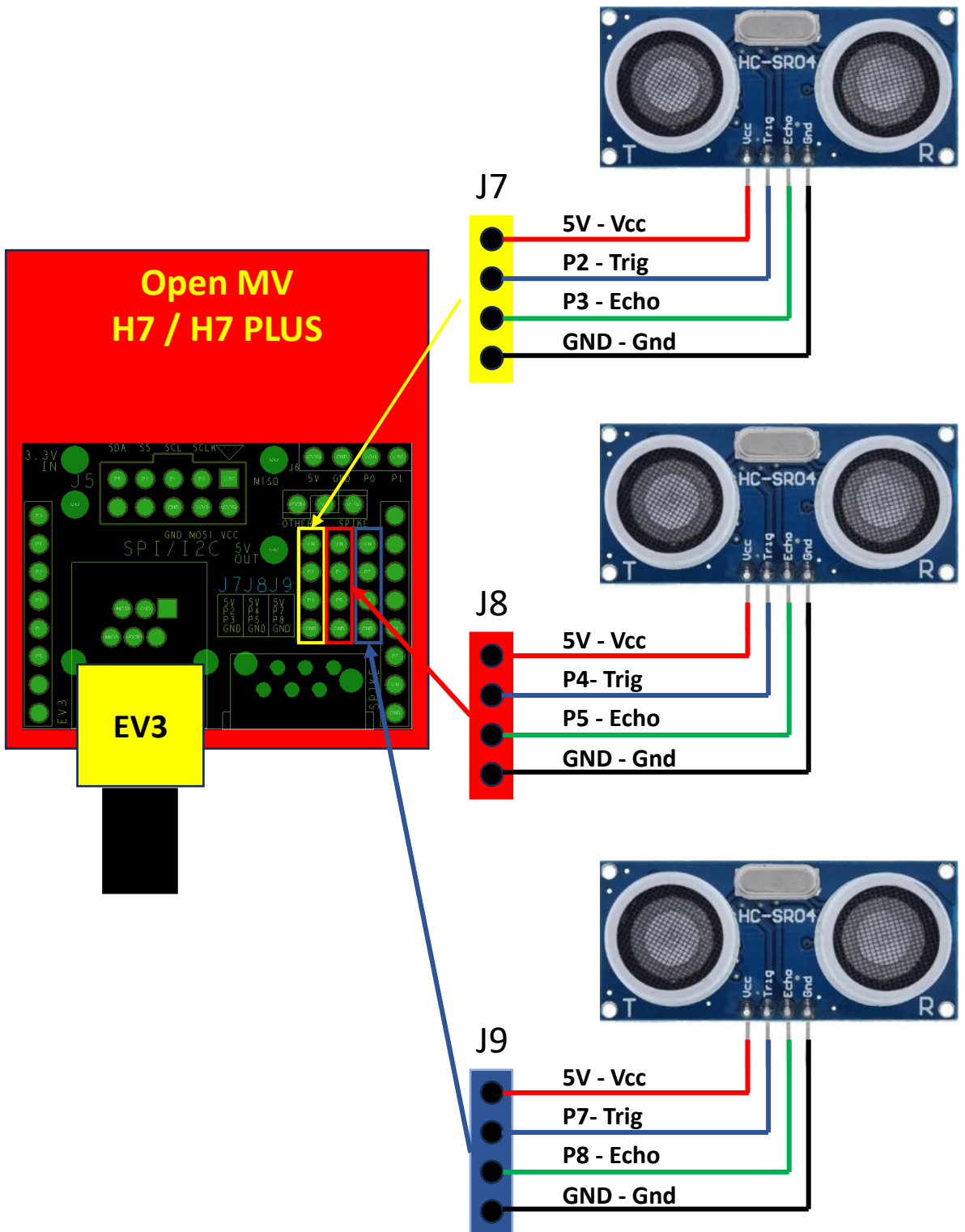
THIS IS VERY IMPORTANT FOR SPIKE PRIME



THIS IS VERY IMPORTANT FOR SPIKE PRIME

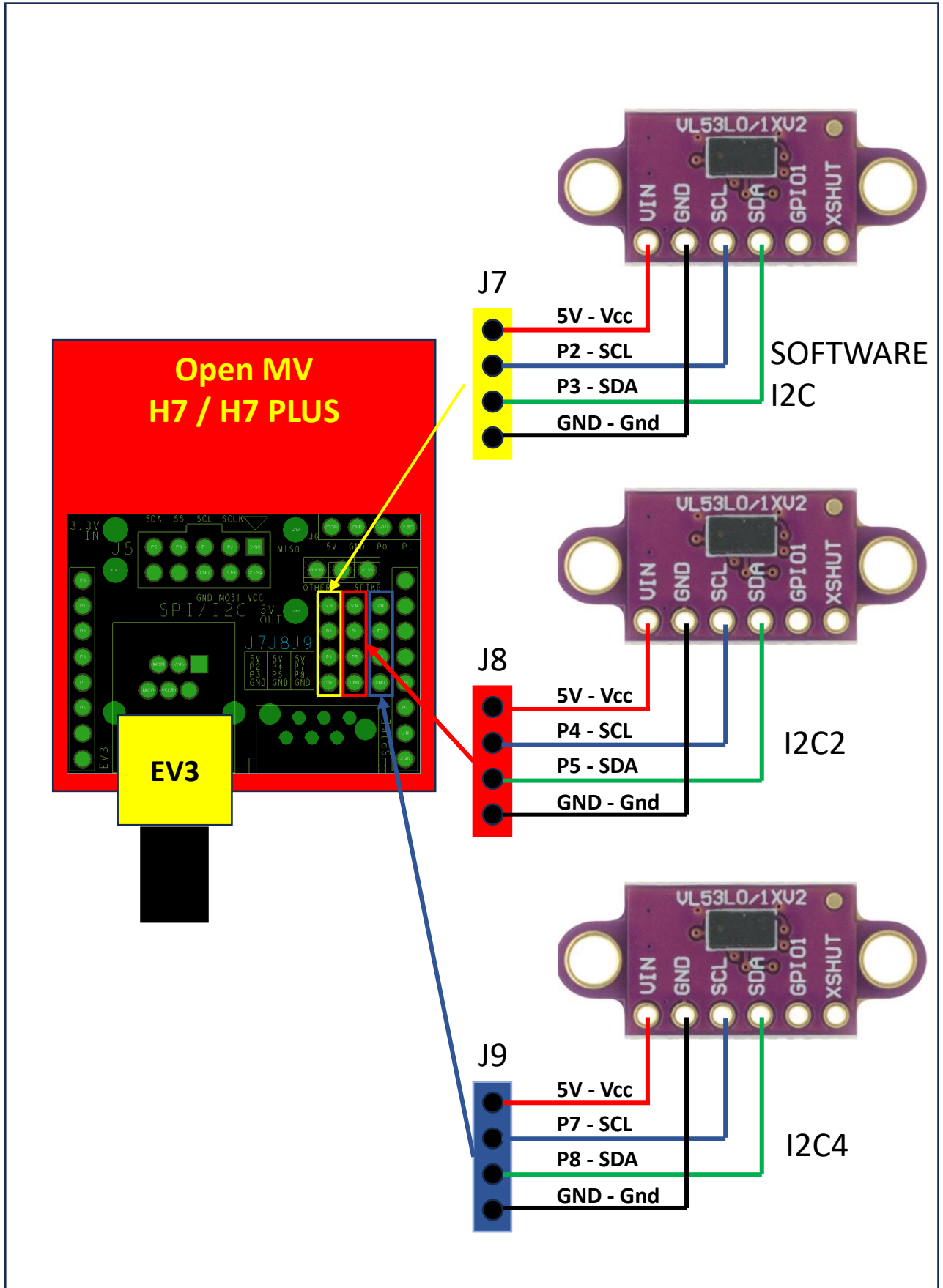
EXAMPLE (USE GPIO)

EV3(or Spike Prime) + OpenMV Camera + HC-SR04



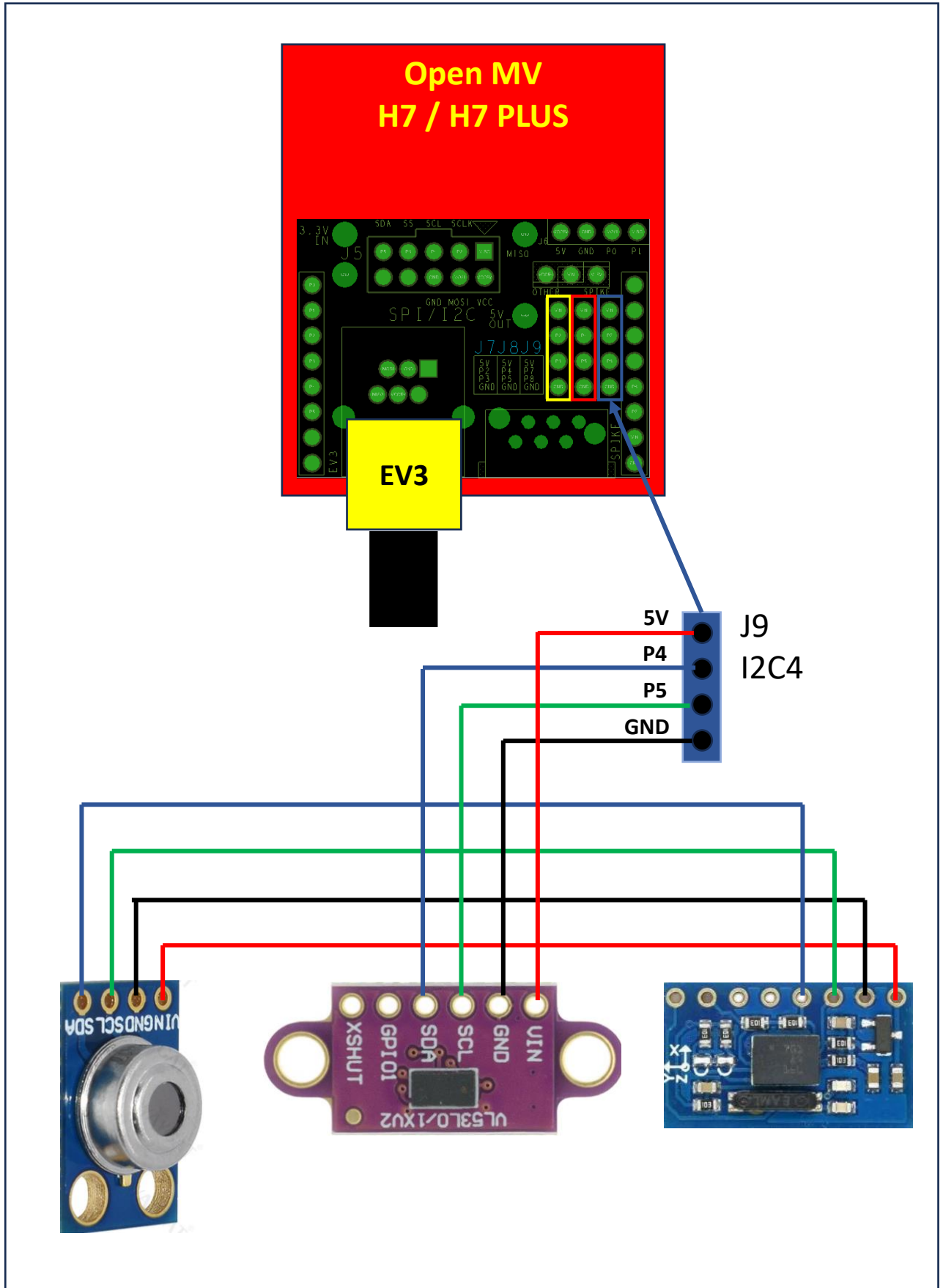
EXAMPLE (USE I2C)

EV3(or Spike Prime) + OpenMV Camera + VL53L0X



EXAMPLE (USE I2C)

I2C BUS (Multi-Device on same line)



EXAMPLE (WITHOUT CAMERA)

UART (BNO055 IMU SENSOR WITH UART MODE)

