

A

B

C

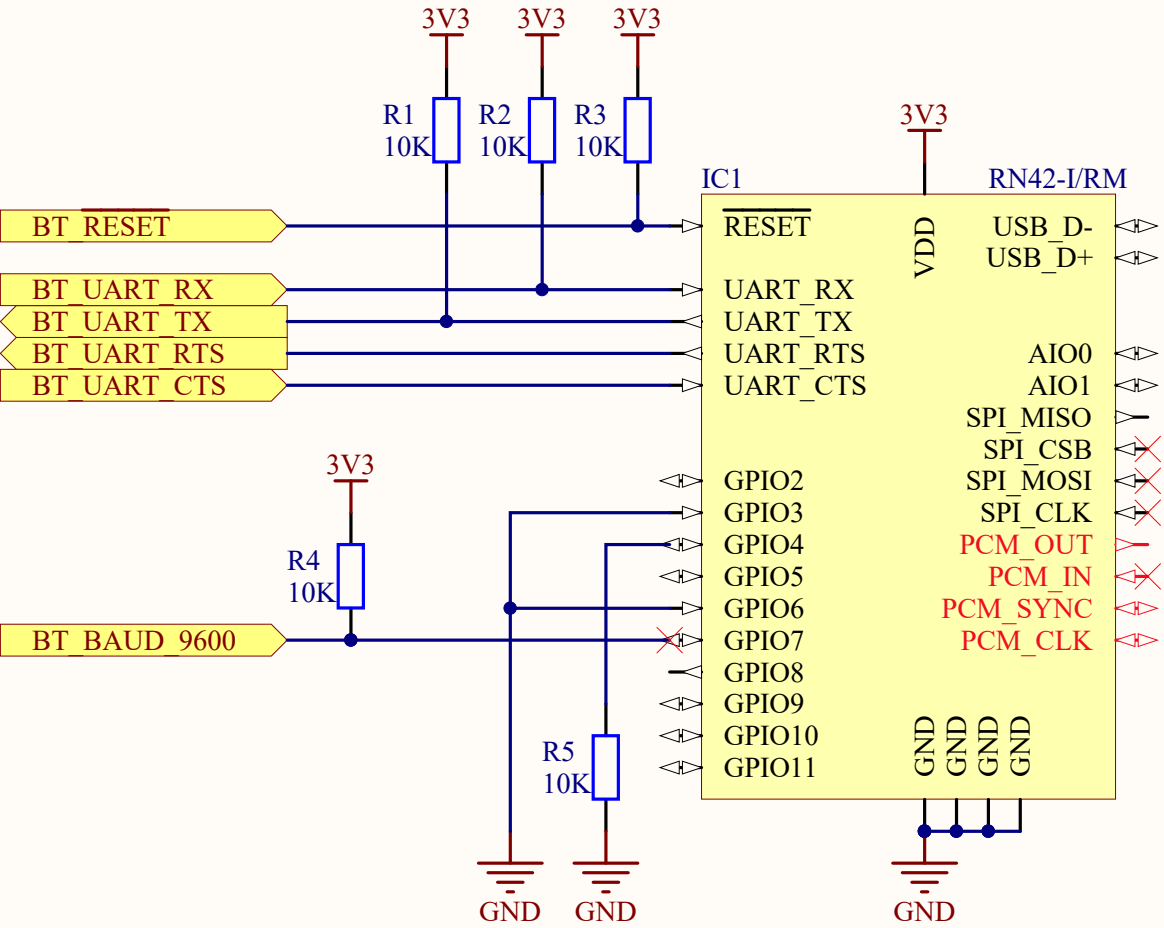
D

A

B

C

D



▲ Bluetooth module is in slave mode: It is discovered by a master device, paired by it and then acts as a transparent bridge between the master device and UART.

A

B

C

D

A

B

C

D

1

2

3

4

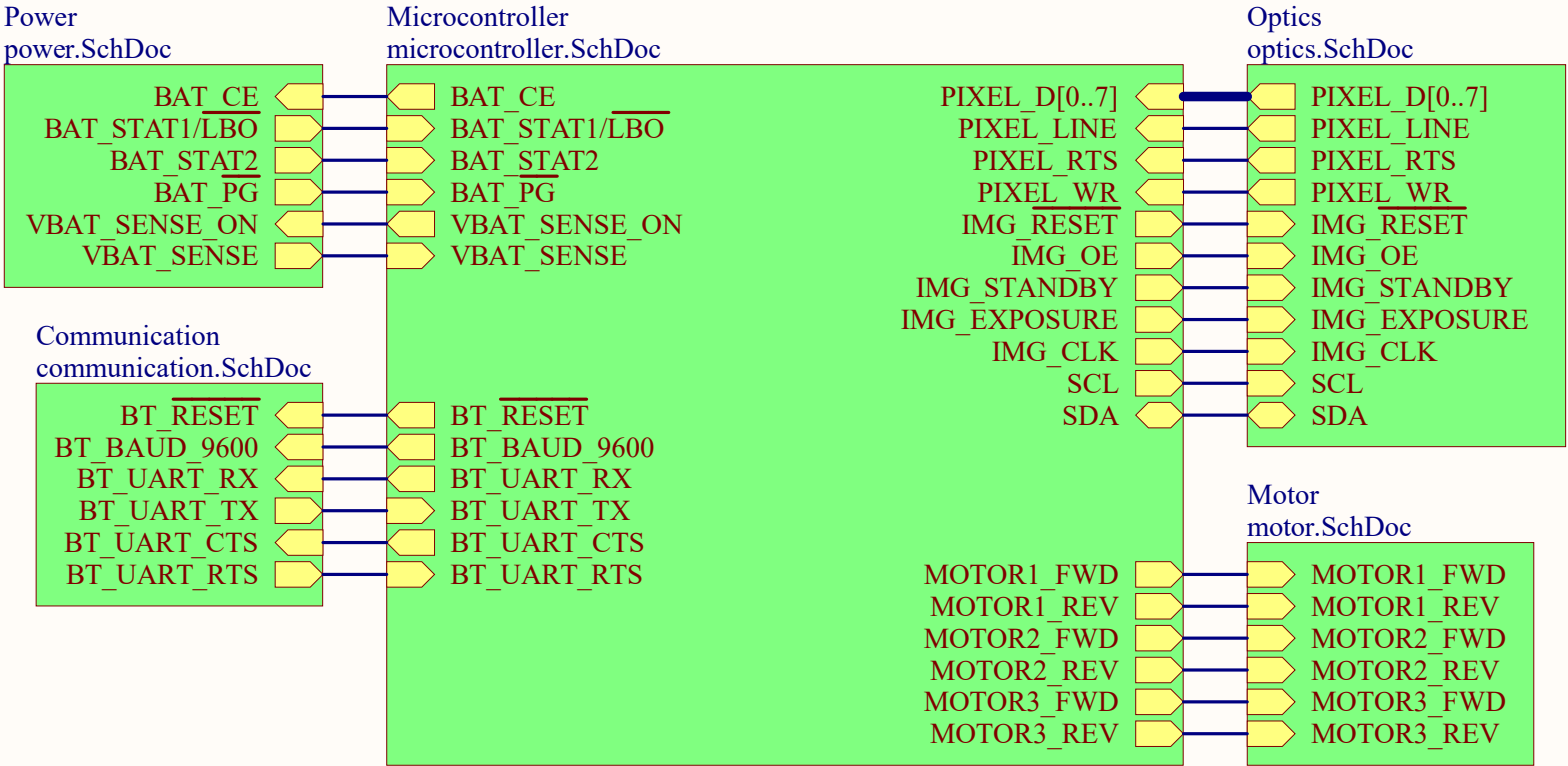
1

2

3

4

▲ Main board, contains:
- Processor
- Wireless communication
- Vision and optics
- Motor drivers



A

A

B

B

C

C

D

D

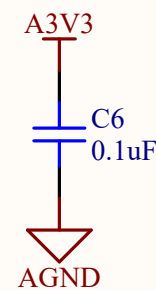
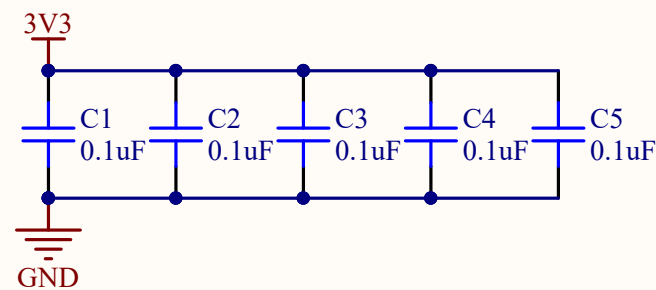
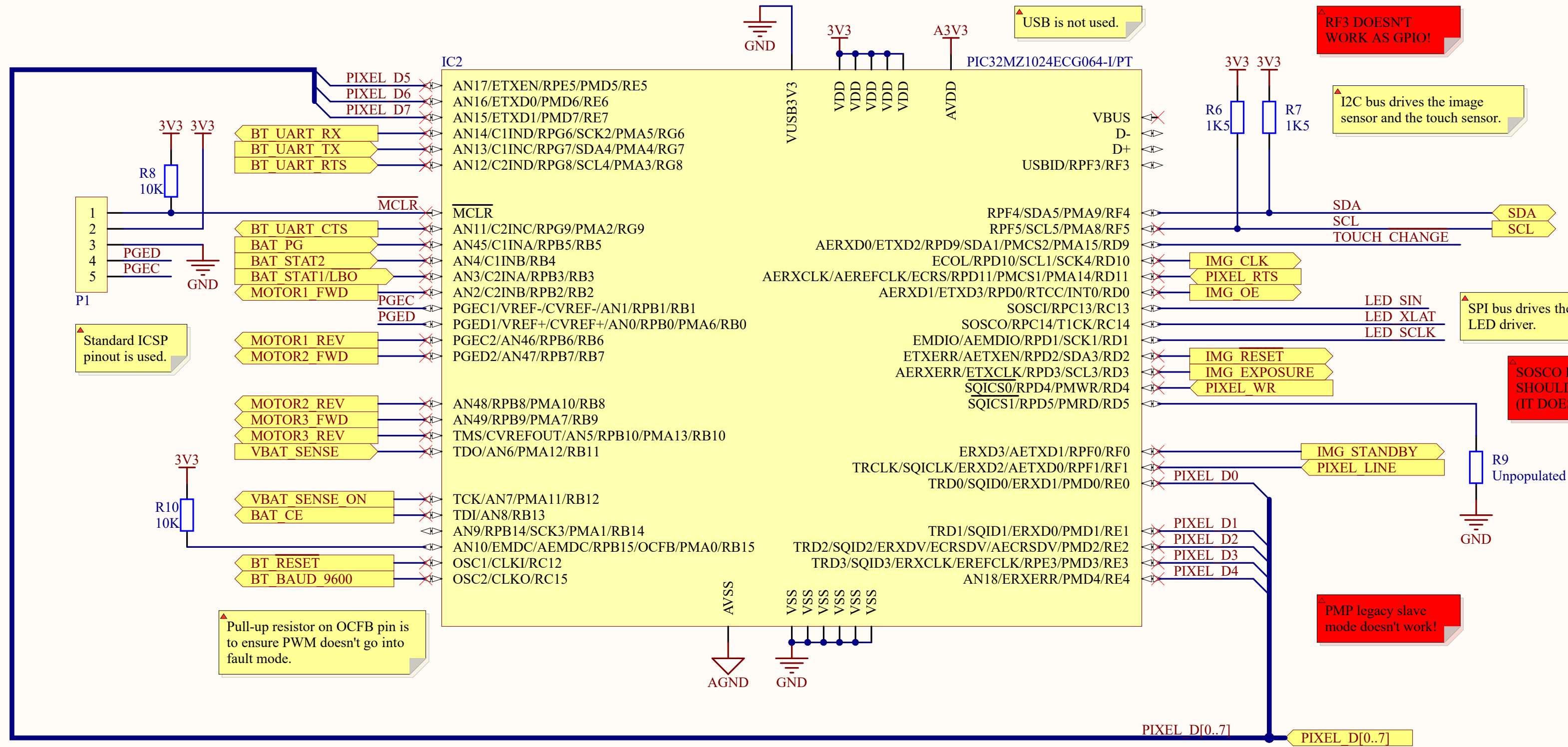
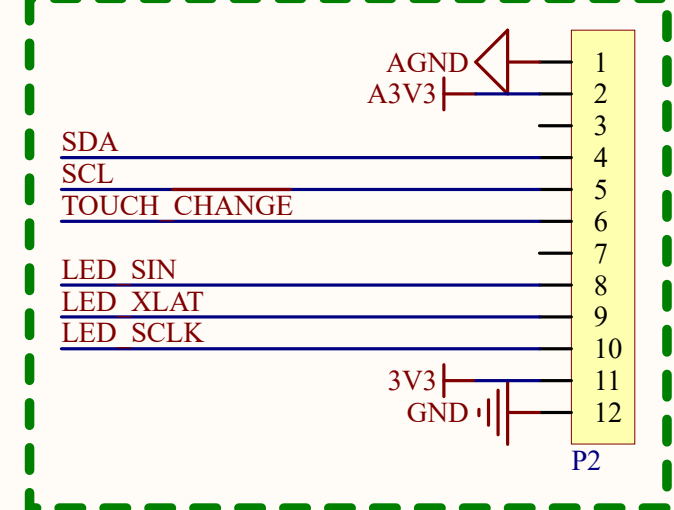


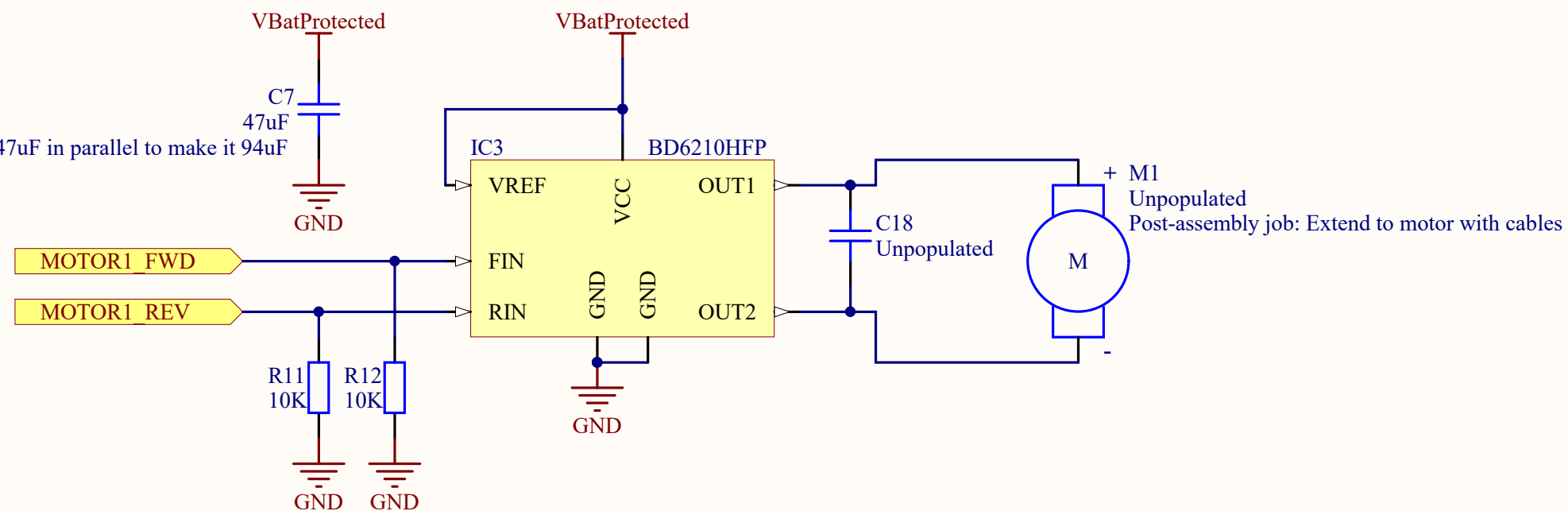
Image sensor writes on port E, strobing an external interrupt on each write. Port E is in turn DMA'ed into memory. At the end of each image line transfer, DMA destination address is incremented and is restarted.

Connection to UI Board



A

Post-assembly job: Solder one more 47uF in parallel to make it 94uF

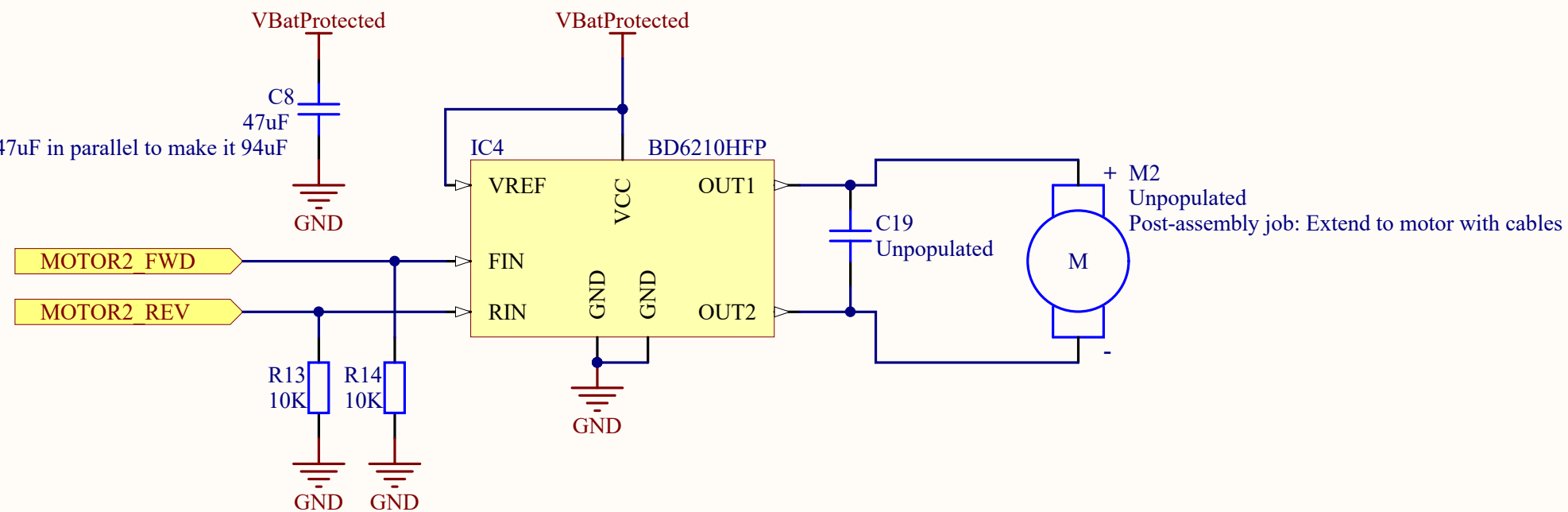


▲ Motors drivers are supplied directly from the battery, after protection stage. This provides charging current (back EMF) for the battery when the motor is speeding down.

▲ In the case of 4.2V supply, 3.3V logic PWM has enough high voltage (> 2V) to register as high input.

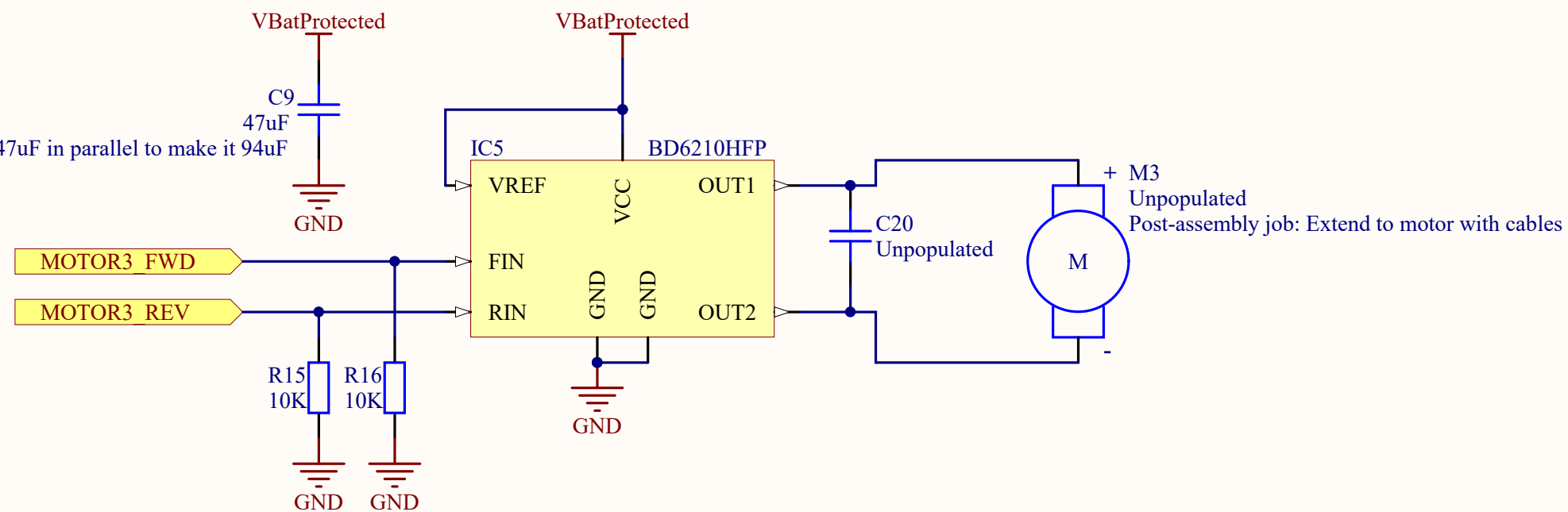
B

Post-assembly job: Solder one more 47uF in parallel to make it 94uF



C

Post-assembly job: Solder one more 47uF in parallel to make it 94uF



D

A

B

C

D

A

B

C

D

A

B

C

D

