(a) LegoSENSE carrier board with modules

4 Modules with sensors

Carrier Board

Raspberry Pi
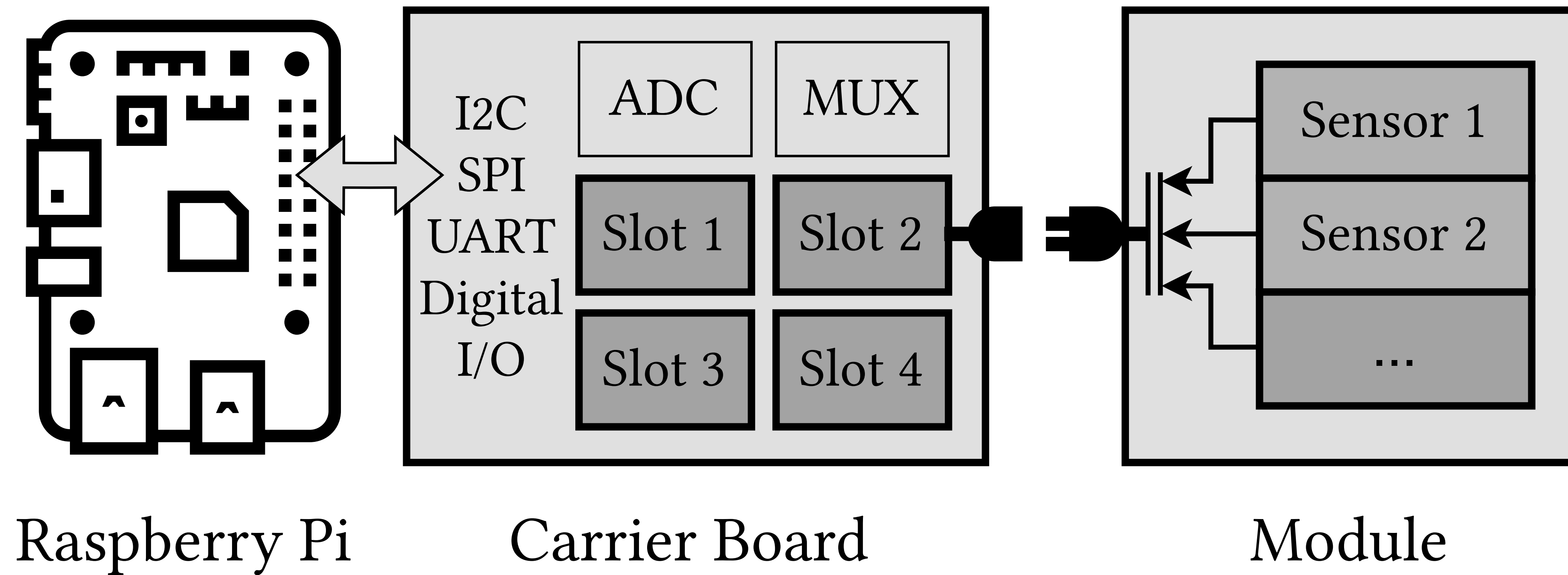
(b) LegoSENSE's hardware architecture

I2C
SPI
UART
Digital
I/O

ADC

MUX

Slot 1

Slot 2

Slot 3

Slot 4

Sensor 1

Sensor 2

...

Raspberry Pi

Carrier Board

Module