Sound Recorder (I): Flash Memory
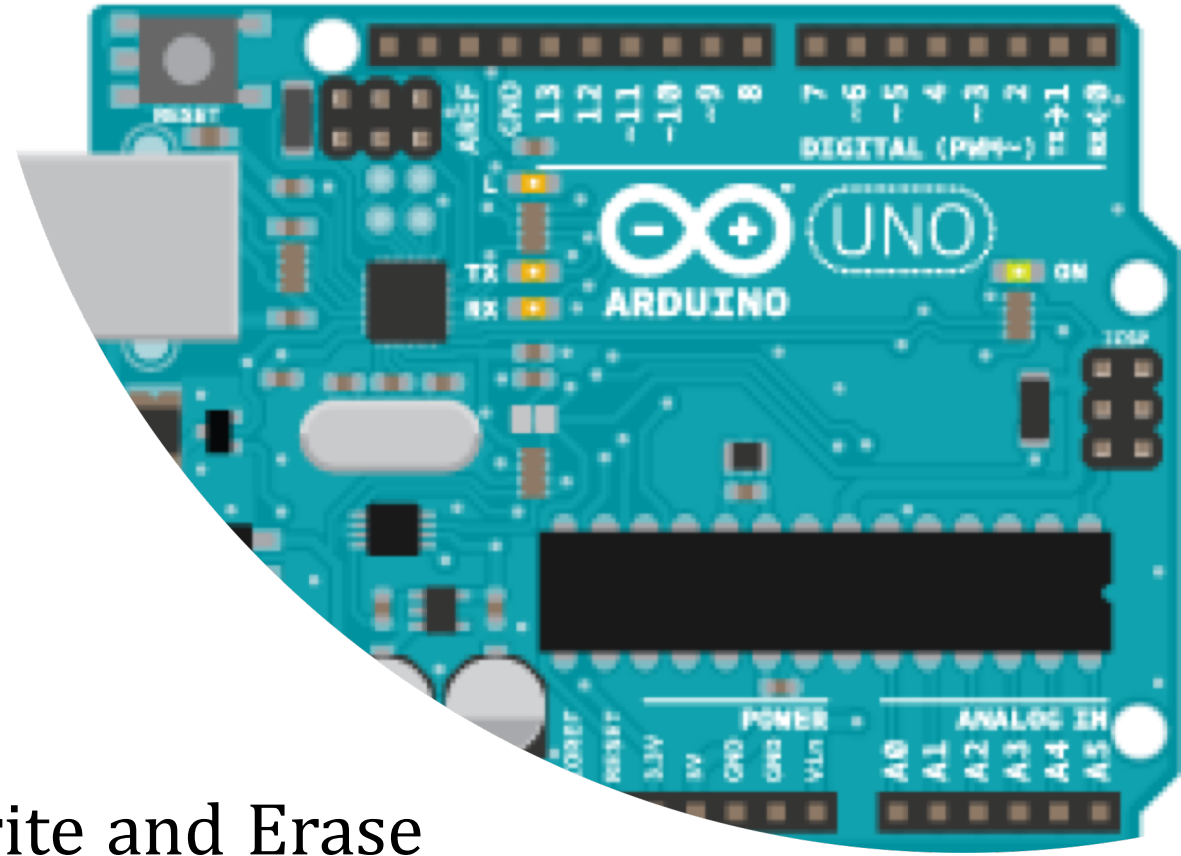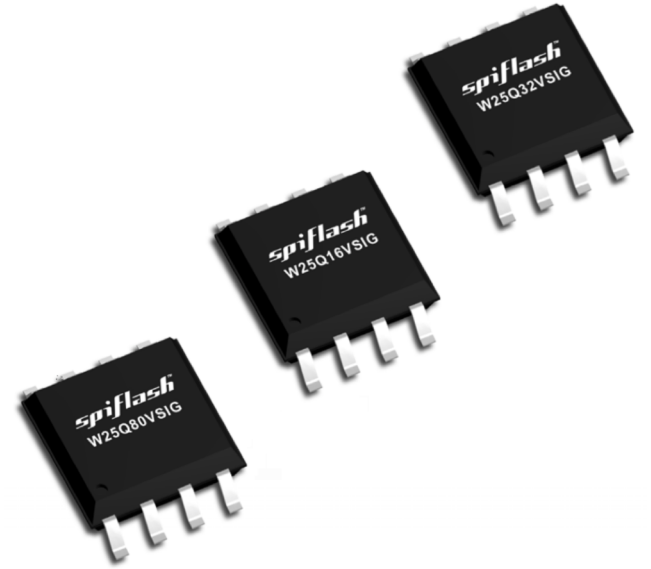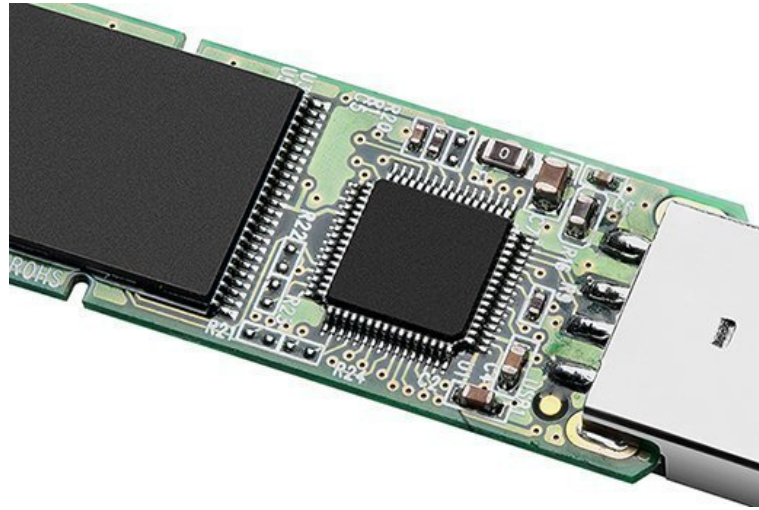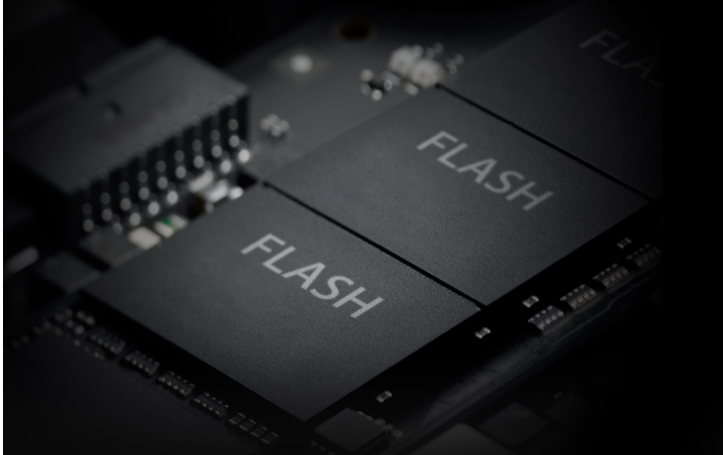
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Outline

- Introduction to Flash

- Simple Operations on Flash: Read, Write and Erase

- Soldering

Flash Memory

Flash Memory with Type W25Q80 (8M-bit)

Basic Erasable Units:

Page: 256-Byte

Sector: 16-page (4KB)

Block: 16-Sector (64KB)

Operation: Write

a. void FlashStartWrite(uint32_t page); (give the starting address to write data in flash)
b. void FlashStoreByte(uint8_t input); (write one-byte data)
c. void FlashEndAction(); (tell flash the current action "write" is finished)
d. boolean CheckForFinish(); (ensure the flash is ready for another action)

Operation: Read

a. **void FlashStartRead(uint32_t page); (give the starting address to read data from flash)**

b. **uint8_t FlashReadByte(); (read data)**

c. **void FlashEndAction(); (tell flash the current action "read" is finished)**

Operation: Erase

a. void DeleteAll();(eraser the whole flash)