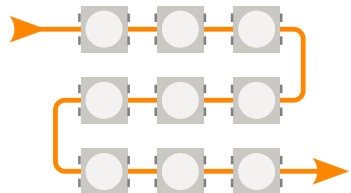# LED connection for scan direction
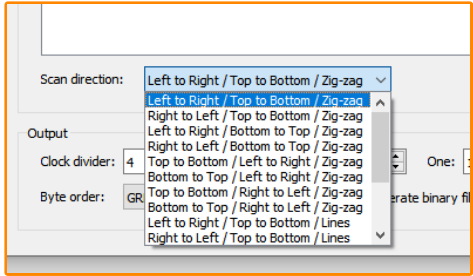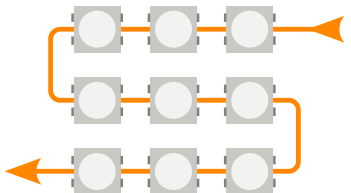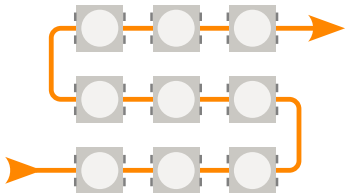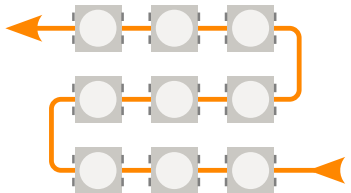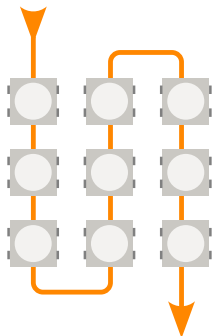

Left to Right / Top to Bottom / Zig-zag

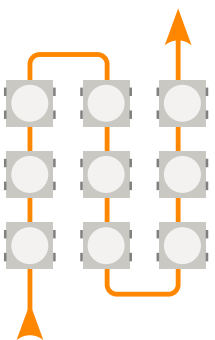Right to Left / Top to Bottom / Zig-zag

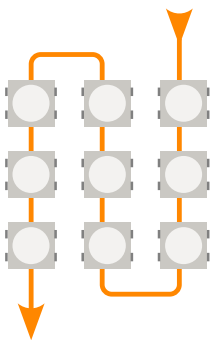Left to Right / Bottom to Top / Zig-zag
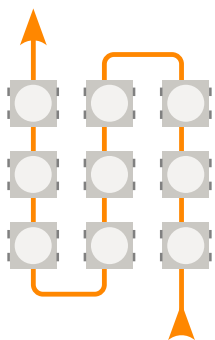
Right to Left / Bottom to Top / Zig-zag

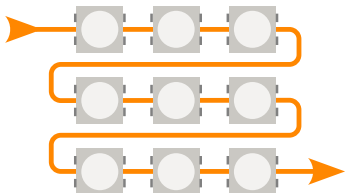Top to Bottom / Left to Right / Zig-zag
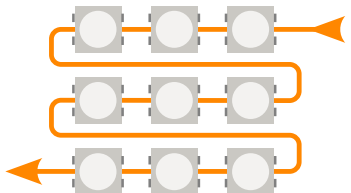
Bottom to Top / Left to Right / Zig-zag

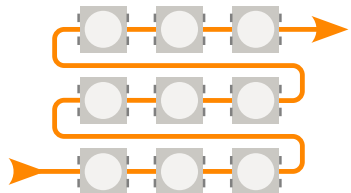Top to Bottom / Right to Left / Zig-zag

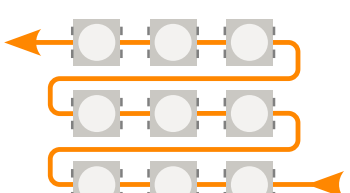Bottom to Top / Right to Left / Zig-zag
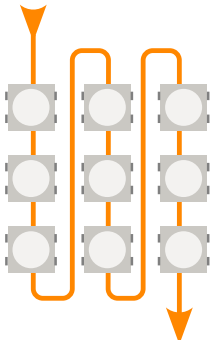
Left to Right / Top to Bottom / Lines

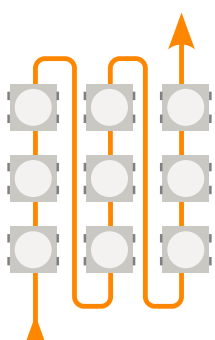Right to Left / Top to Bottom / Lines

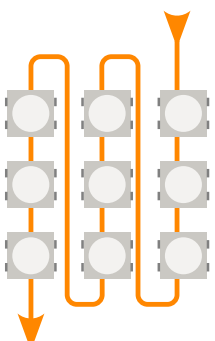Left to Right / Bottom to Top / Lines
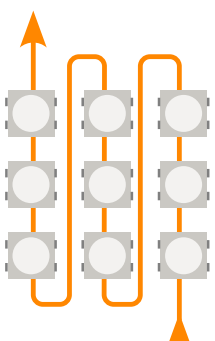
Right to Left / Bottom to Top / Lines

Top to Bottom / Left to Right / Lines

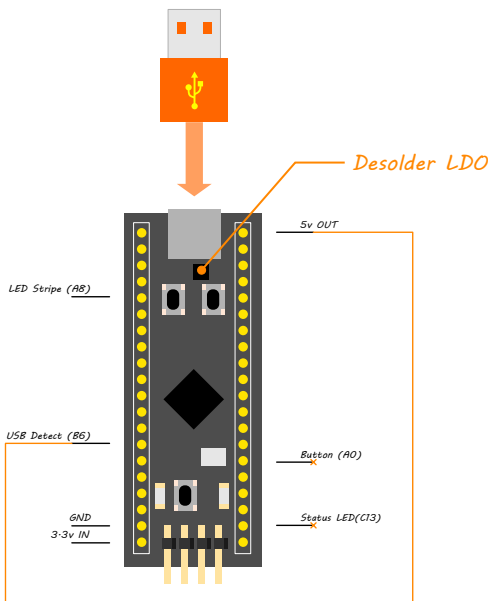Bottom to Top / Left to Right / Lines

Top to Bottom / Right to Left / Lines

Bottom to Top / Right to Left / Lines

MCU Pinout

Desolder LDO

5v OUT

LED Stripe (A8)

USB Detect (B6)

GND
3-3v IN

Button (A0)

Status LED(C13)

- STM32F401CCU6 Black Pill
- For USB MSC Version solder W25Qxx Flash IC on bottom

Button ⊥○———○⊳ GND