Snakegame

with 30 LEDs Charlyplexing methode

Interne snakegame workshops

Ma 5 juli; Uitleg HW & solderen   -> Roland
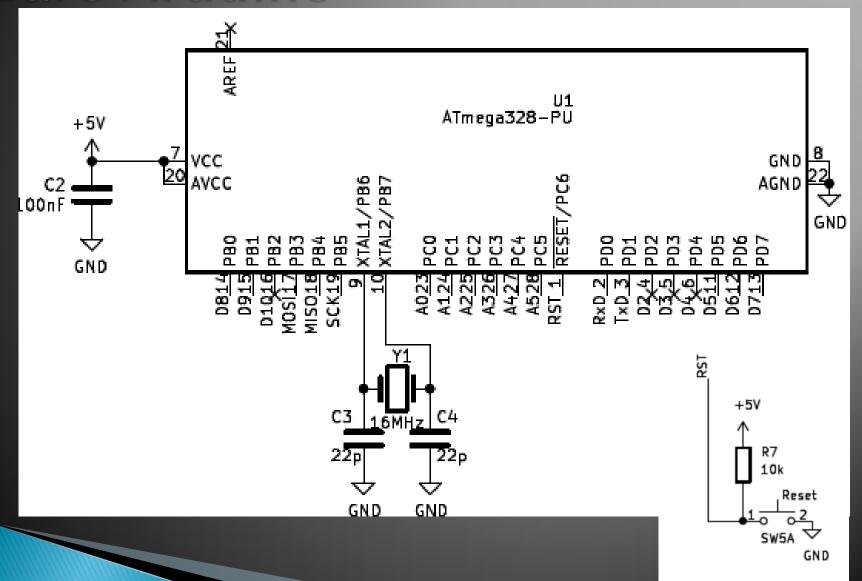
Ma 19 juli; Uitleg SW principe
                & Arduino IDE   -> Jacko

Ma 2 aug; Zelf applicatie maken &
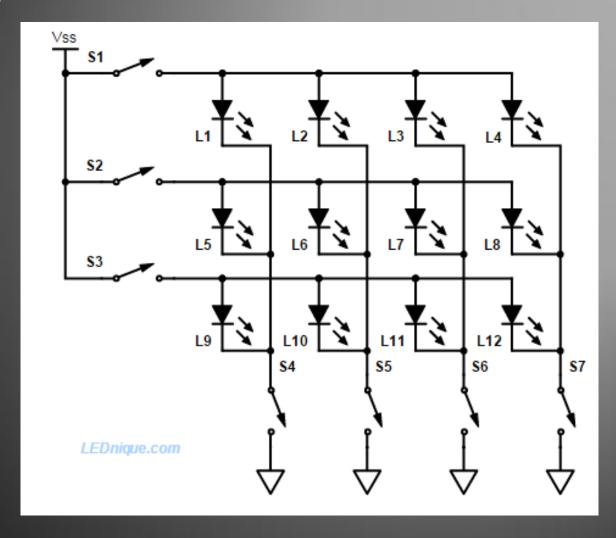   Nadenken hoe externe workshops

Snakegame HW

▸ Items:

1. Bare Arduino
2. Leds control; Charlyplexing
3. Buttons & Piezo speaker
4. Programming interfaces
   ◦ ICSP; in-circuit serial programming
     Used for programming bootloader
   ◦ Serial ; Needs a FTDI USB->TTL board
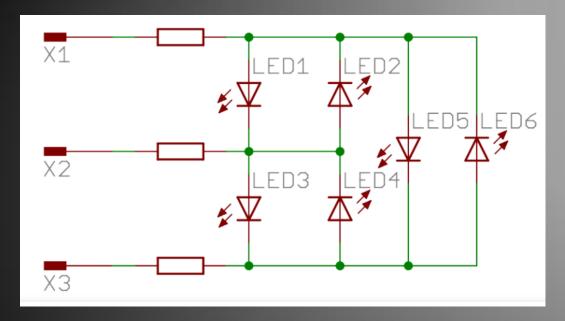   Used for uploading sketches
5. Power Supply
6. PCB

Bare Arduino

Multiplexed LED matrix
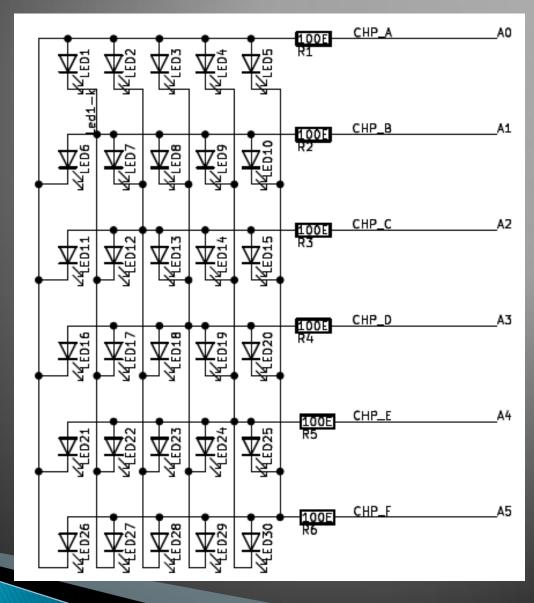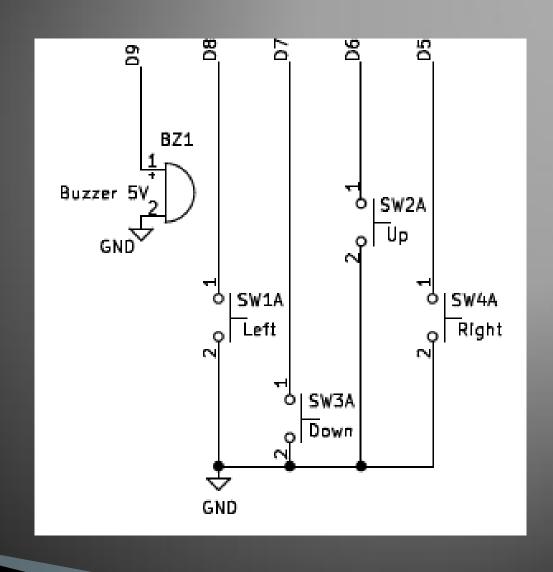
Charlyplexed LED matrix
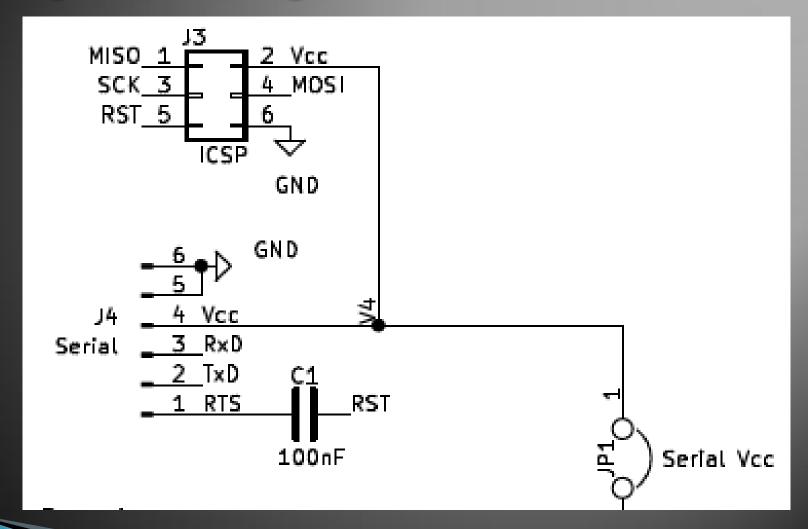

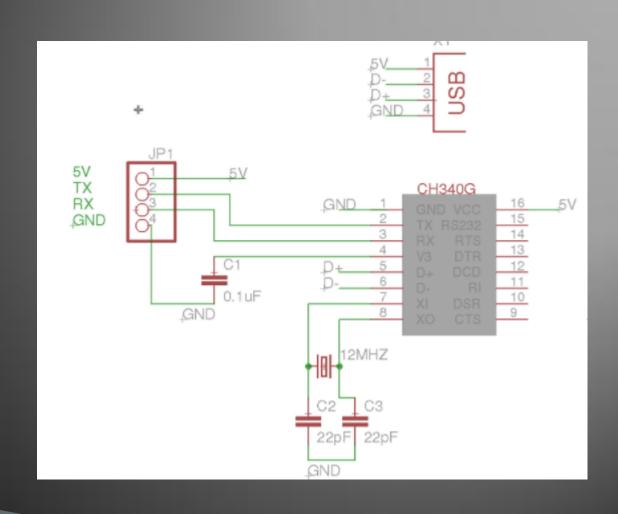See; Charlyplexing LED matrix

#Leds = N*(N−1)
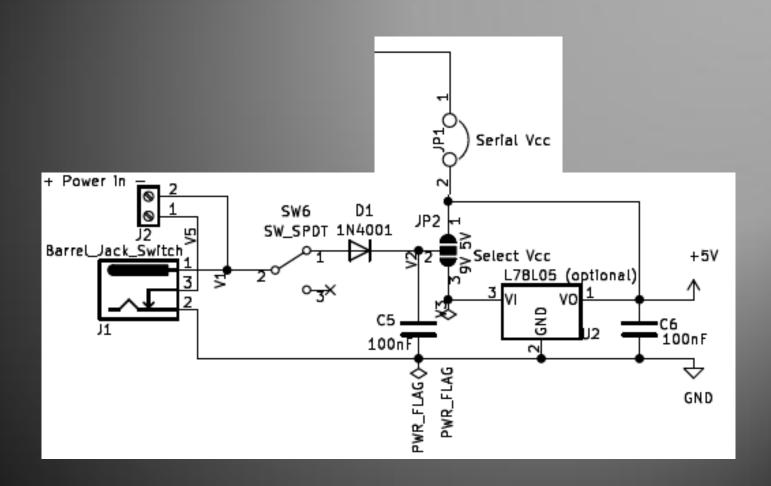
Charlyplexed LED matrix
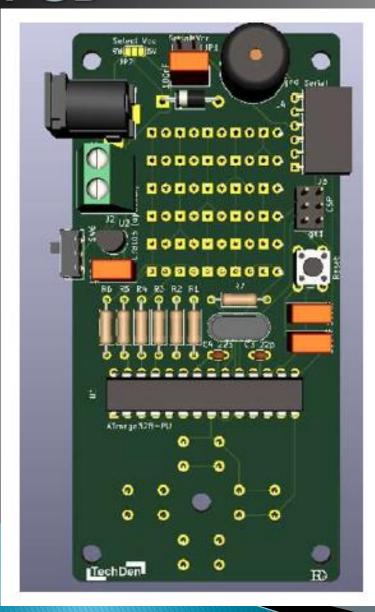
Buttons & Piezo speaker

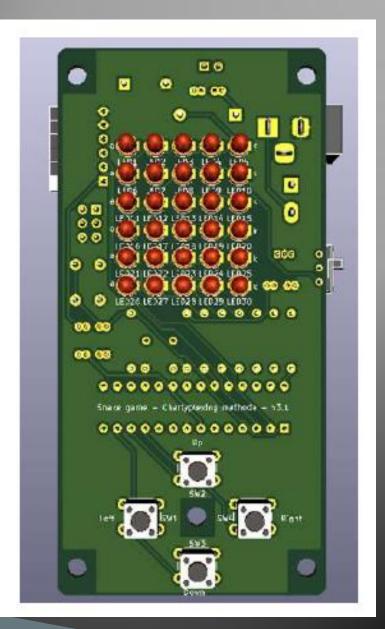# Programming Interfaces

External FTDI Board

Power supply

PCB

Case voorbeeld

▸ Demo

Check

- LEDs & 4 Buttons op achterzijde van PCB!!
- Polariteit leds & diode
- Positie ATMEGA328
- Jumpers Power supply
- Positie FTDI boardje

ATMEGA328 is reeds voorzien van bootloader & DEMO sketch