NOTE 13.10.2014

- Andriox Industry - Motor Control
    - Date: until end of 1.Semester
- Cisco CCNA/NP
    - Date: School Year 2014/2015
- Bioinformatic: Matlab, Java Android, mySQL
    - Date: starting in 2015 Spring

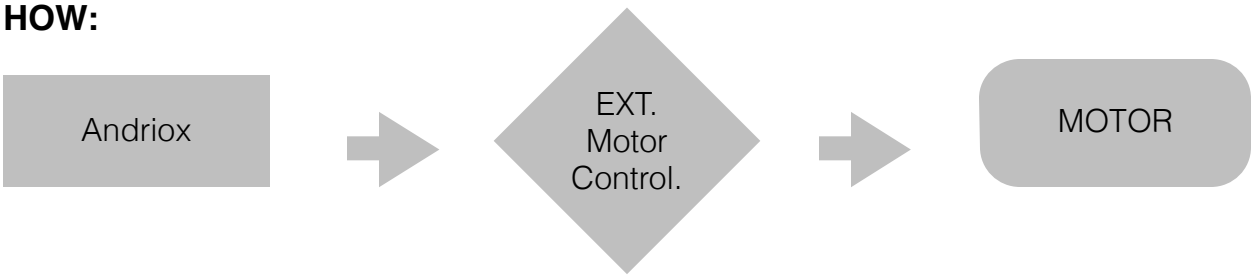
Androix Industry

- Task: Controlling an actual Industry motor using Androix Controller
- Time/Date: Until January 2015, ca. 3 Month

HARDWARE:

- 1x NEMA 23 Bipolar Stepper Motor - QSH5718-76-28-189
- 1x NEMA 34 Bipolar Stepper Motor - QSH8618-96-55-700

HOW:



External Motor Controller - 3 Ways:

- Using Existing Controller (How?Documentation?)
- Buy a Controller (Price?)
- DIY (How?)

Using Existing Controller

Existiing Controller Modle: L289N Motor driver
Max continues Current: 1.5A

—> Not able to supply both Motor:
NEMA23 need 12v/24v 2.8A(per Coal)
NEMA 34 need 24V/48V 5.5A(per Coal)

Finding Controller:

NEMA23,(2.8A):

In consider:

->A4988 Pololu stepper Motor Driver 1.5A

[Advantages: Price < 10Euro, easy to use, good documentation]

[Disadvantages: Driving current is too low]

->DRV 8825 Stepper Motor Driver 2A(with cooling)

[Advantages: “High” Current, Price < 15Euro, easy to use, good documentation]

[Disadvantages: Driving current is still too low]

->SainSmart CNC Router Single Axis 3A TB6560

[Advantages: “High” Current, Price < 20 Euro]

[Disadvantages: Big]

Final Decision:

->SainSmart CNC Router Single Axis 3A TB6560

[Reason: The only one, which is able to drive the NEMA23 motor continuously]

NEMA34,(5.5A):

In consider:

->Powerlolu stepper Motor Driver (Up to 10A)

[Advantages: Extreme “High” Current - even without cooling]

[Disadvantages: Expensive ~45 Euro, less Documentation]

->SainSmart CNC Router Single Axis 3A TB6560

[Advantages: “High” Current, Price < 20 Euro]

[Disadvantages: Big]

Final Decision:

->Powerlolu stepper Motor Driver (Up to 10A)

[Reason: The only one, which is able to drive the NEMA34 motor continuously]