

# HIMAWARI

## Dual-axis Sun Tracking System

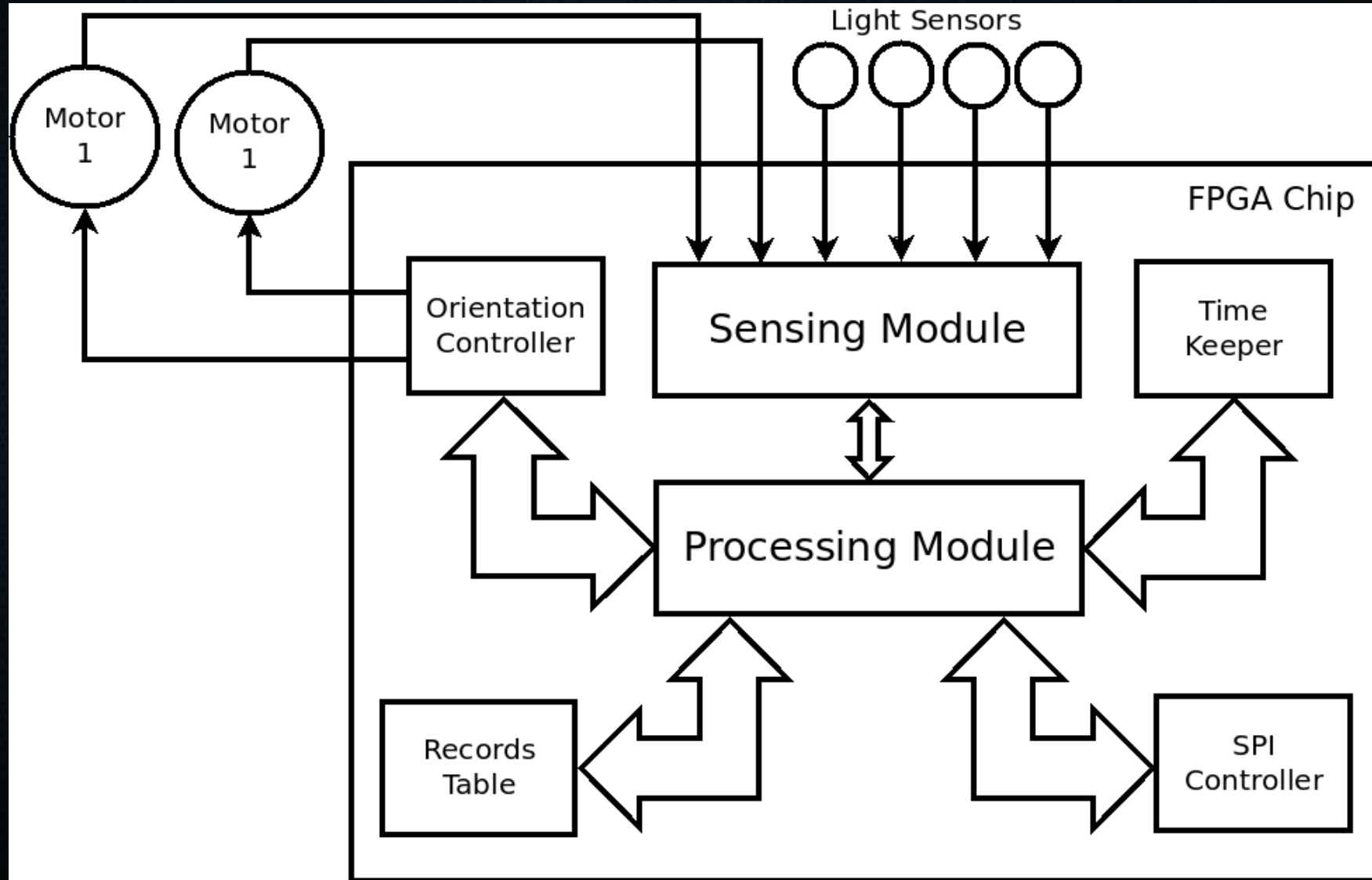
- Design Approach
- Design Architecture
- Tracking Algorithm
- Questions

Murtadha Al-Saeedi

# Design Approach

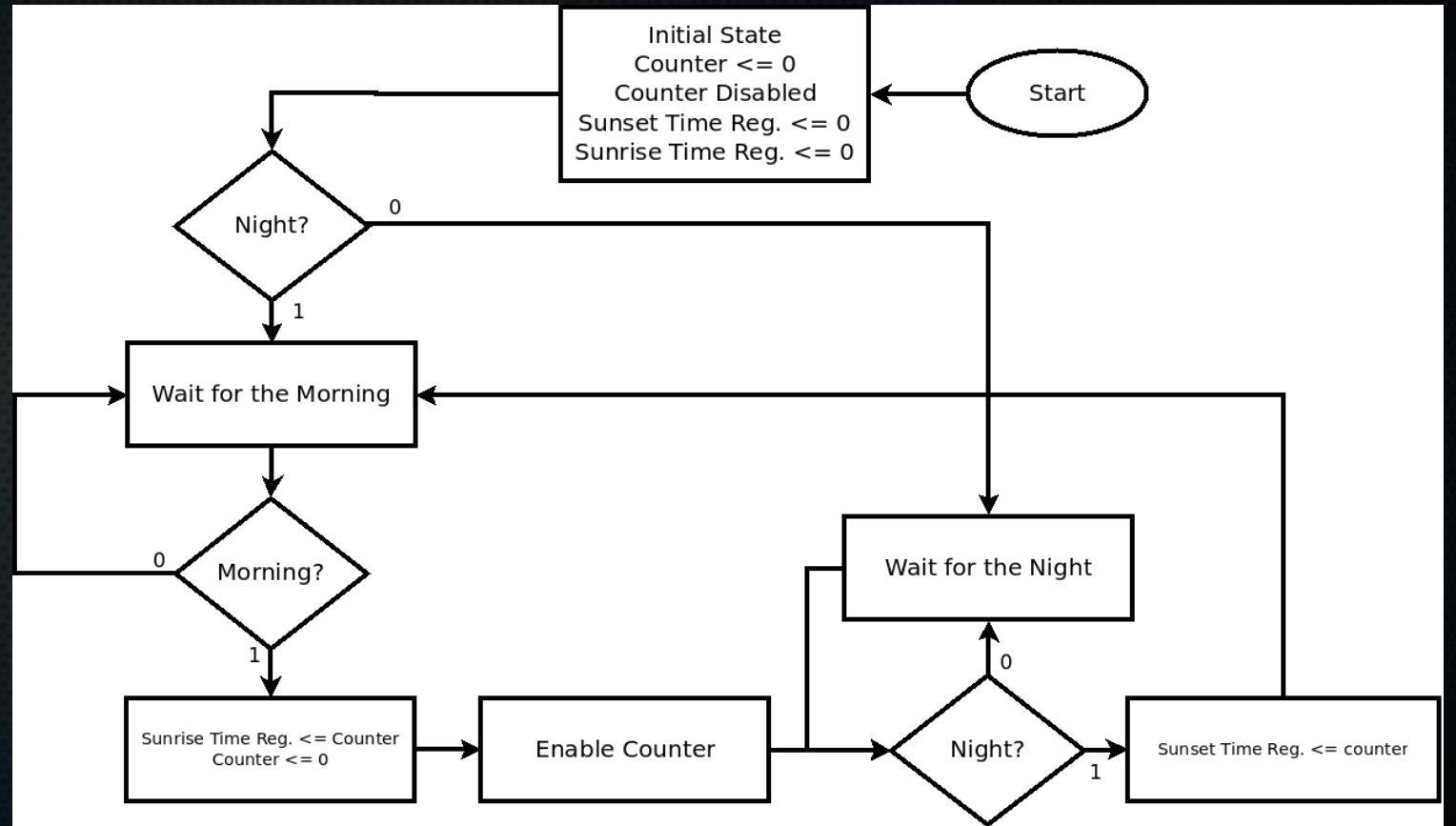
- Dual Axis.
- Heavily FPGA based: Altera MAX10
- Tracking the sun using light sensors and by keeping track of the time of the day.
- Moving the solar panel using servo motors with analog feedback signal.
- Driving motors by FPGA.

# Design Architecture



# Tracking Algorithm

Hour	Minute	Position X	Position Y
1	00	106	154
1	15	110	160
1	30	115	160
....	....	....	...



# Questions

Thanks!