

RoboApp

CS 4560

Team RoboApp
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RoboCat

- EE Design Project
- Quadruped robot
- Servo motors

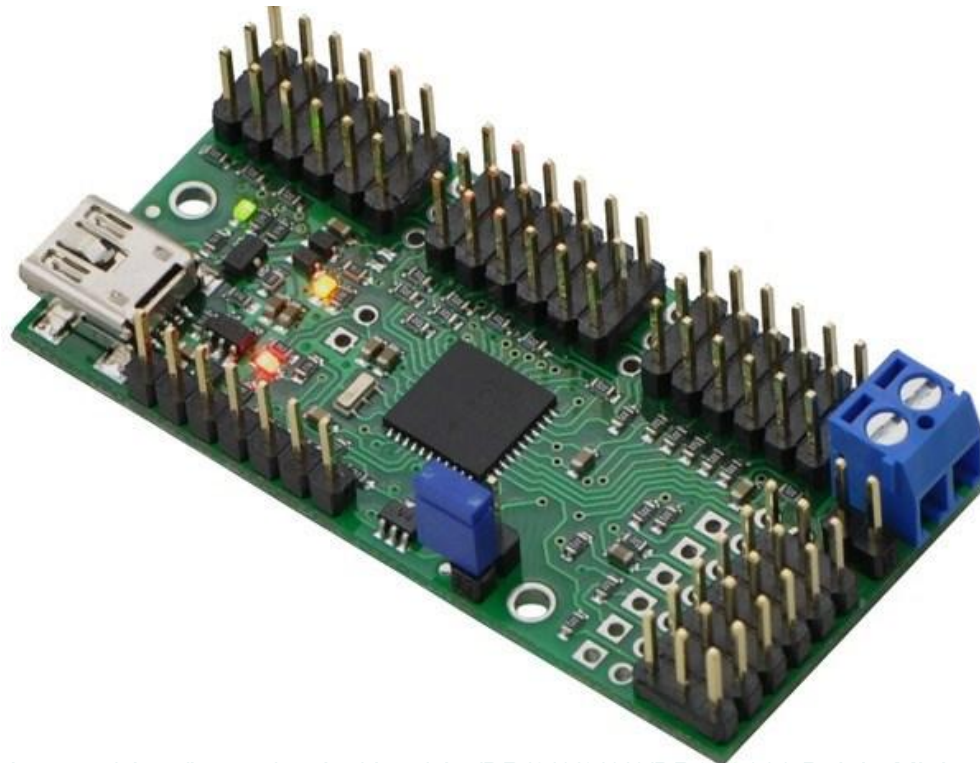


Features

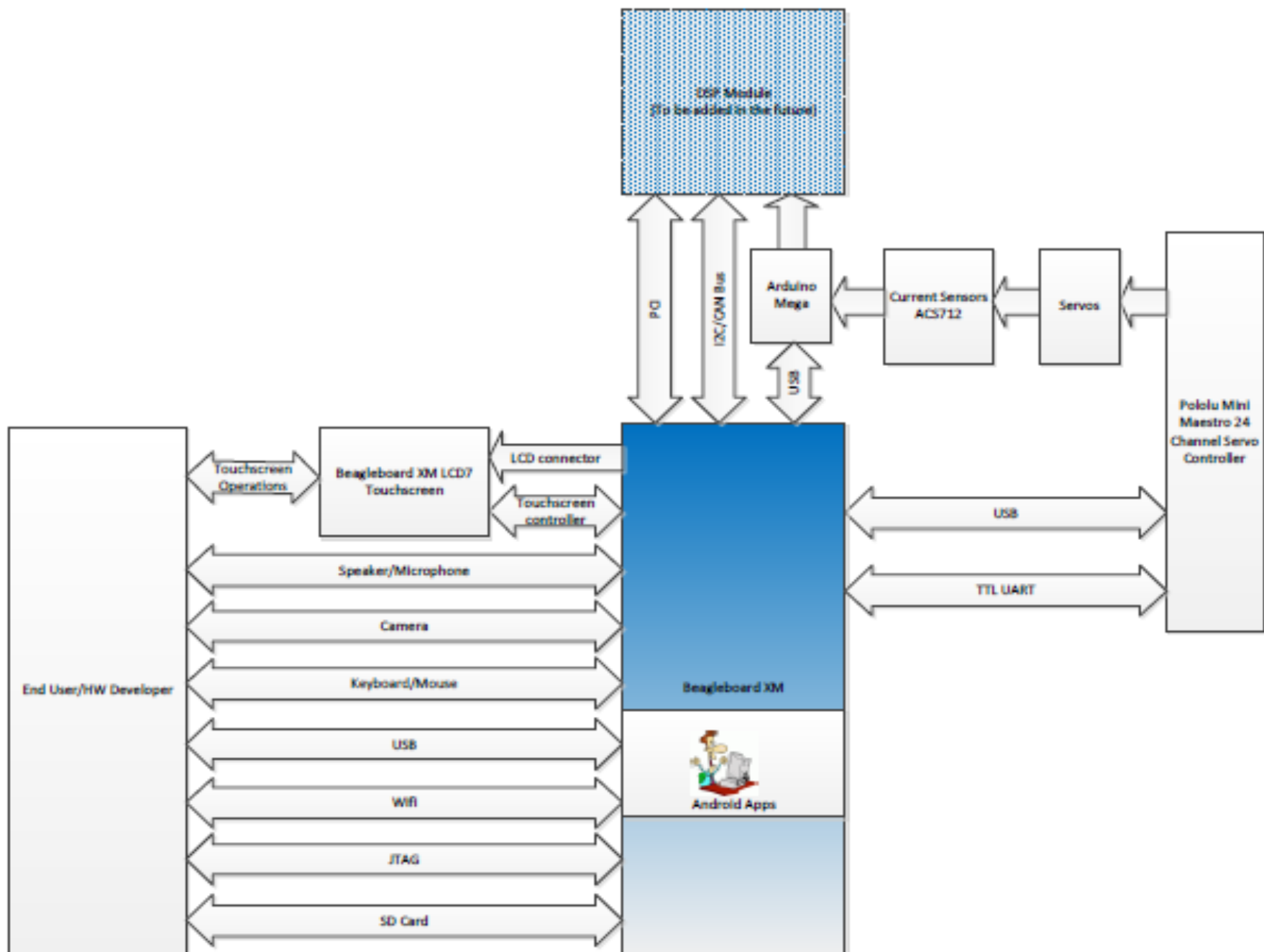
- Servo motor position setting and saving
- Audio file recording and playing
- Multi-touch actions mapped to audio files and gait files

Board

Pololu Mini Maestro 24



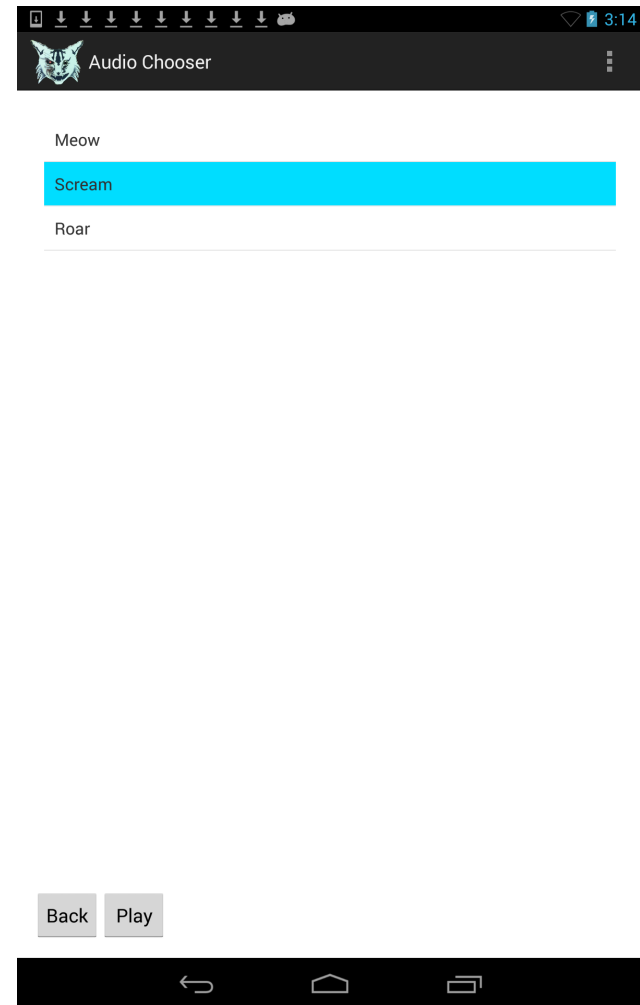
<https://www.bananarobotics.com/shop/image/cache/data/sku/BR/0/1/0/1/1/BR010111-Pololu-Mini-Maestro-24-Channel-Servo-Controller/Pololu-Mini-Maestro-24-Channel-Servo-Controller-600x600.jpg>



Use cases

Playing audio

- Click Play Audio File
- Select an audio file to be played
- Click Play



Use Cases

Controlling and recording Servo Positions

- Use sliders to adjust positions of servos to control the position of the RoboCat's legs
- Can record a sequence of servo positions
- Can replay and save to a file the recorded sequence of servo positions

Use Cases

Controlling with Multi-Touch

- Map multi-touch commands
- Enter multi-touch activity
- Perform actions

HW DEV		END USER	MULTI-TOUCH
Multi-Touch Operation	Command to Perform		
One Up		None Selected	Select
One Right		None Selected	Select
One Left		None Selected	Select
One Down		None Selected	Select
Two Up		None Selected	Select
Two Down		None Selected	Select
Pinch		None Selected	Select
Expand		None Selected	Select

Testing

- Automated Testing
- GUI Testing
- Hardware testing

Demo

Begin Demo