



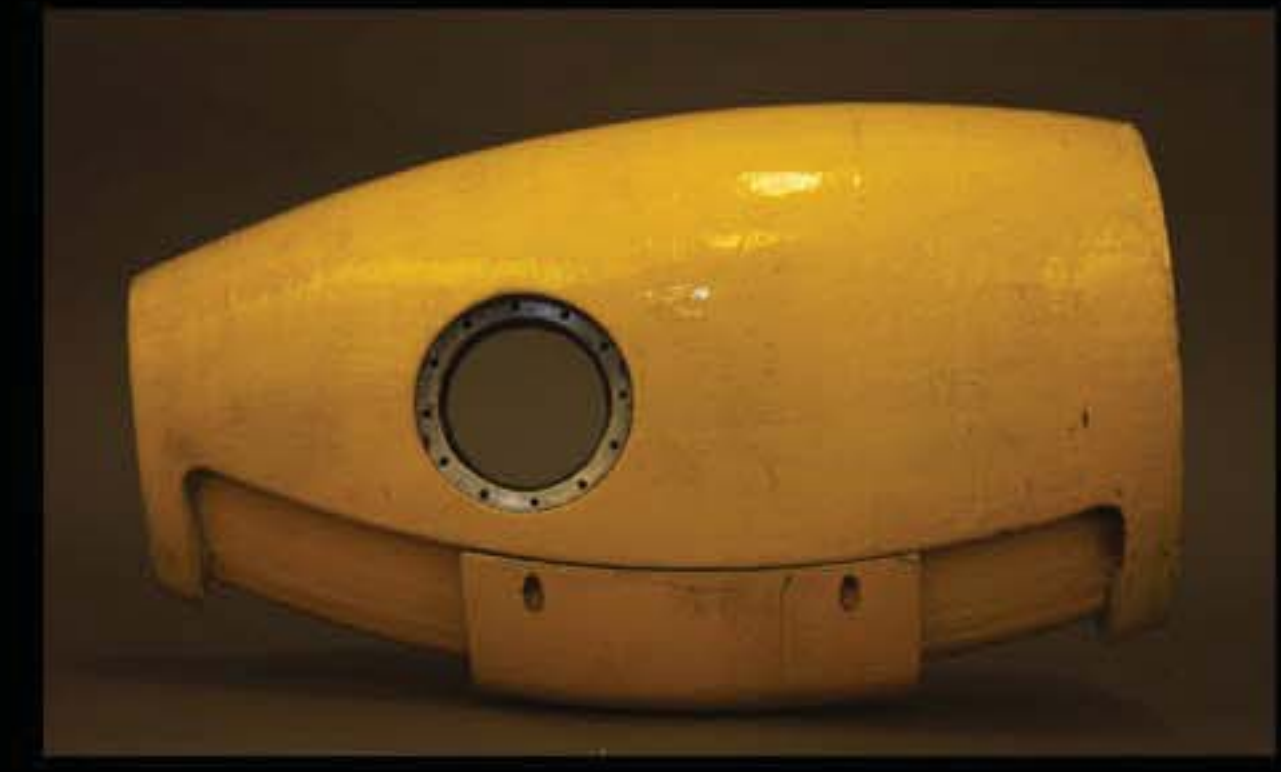
CREATING A ROBOTIC TUNA



Aluminum Face
Seals with
Buna-N Lining



Hull Design Based
Upon Measurements
From a Real Tuna and
Designed Towards
Modularity, Usability,
and Robustness



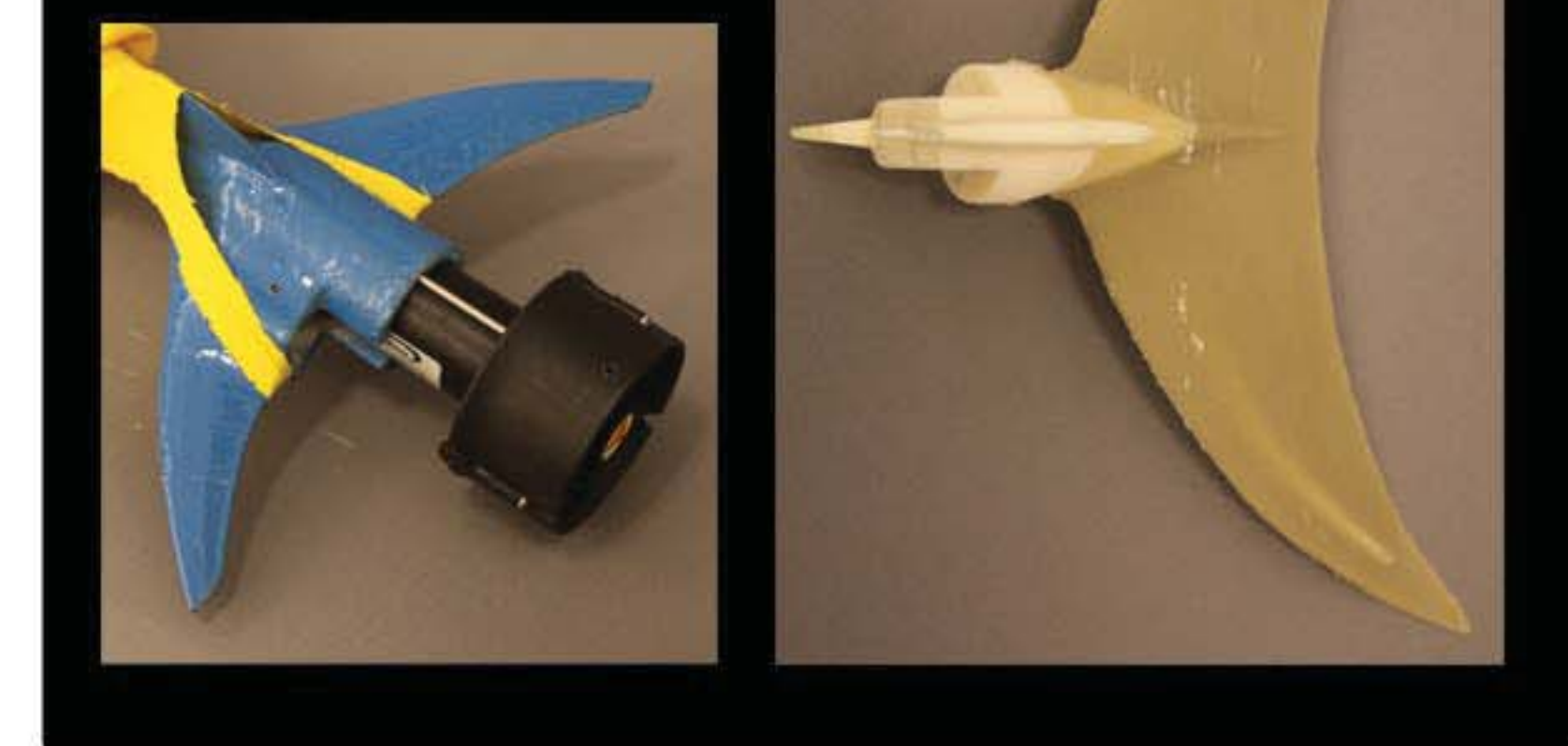
ABS Plastic Skin Support Structure with Flexible
Polyurethane Foam Covered with Lycra Skin



Modular External Ballast Filled
with Tin-Bismuth Alloy, Fine
Tuning
Through
Steel Ball
Bearings

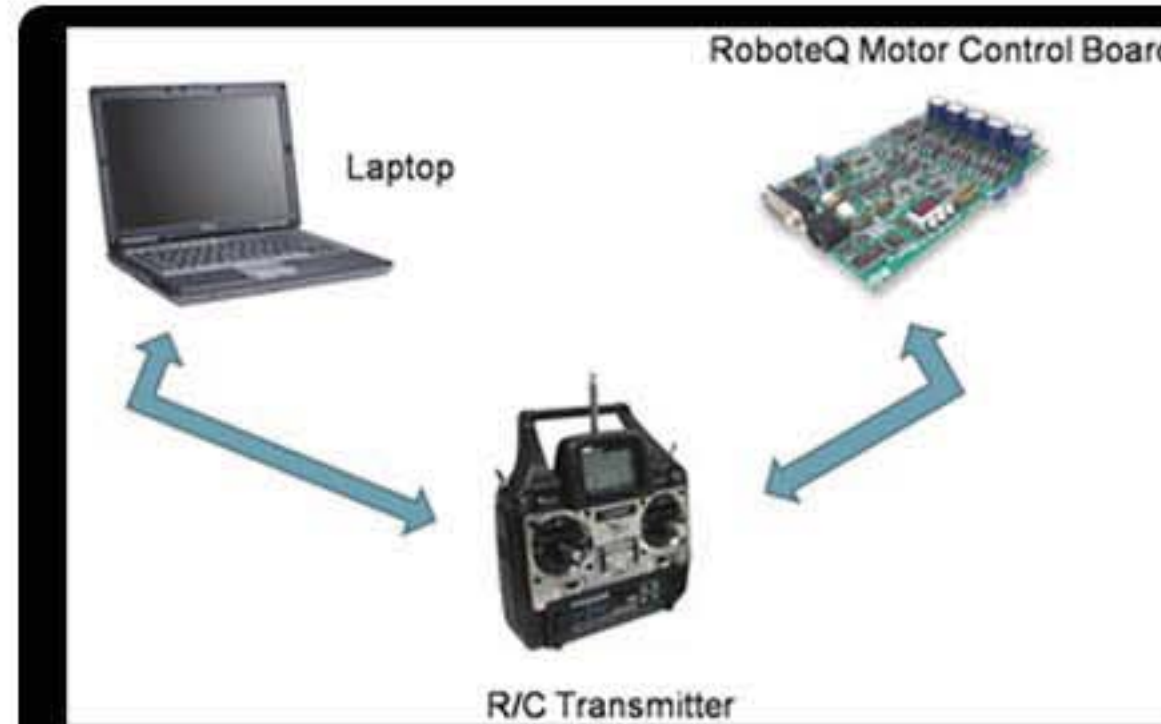


Two Caudal Fin
Designs:
- Static with Thruster
- Flexible with
Castable Urethane

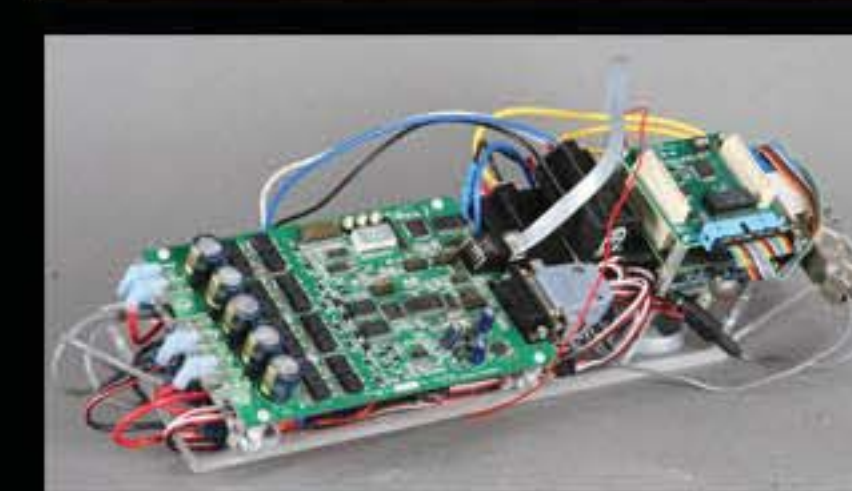
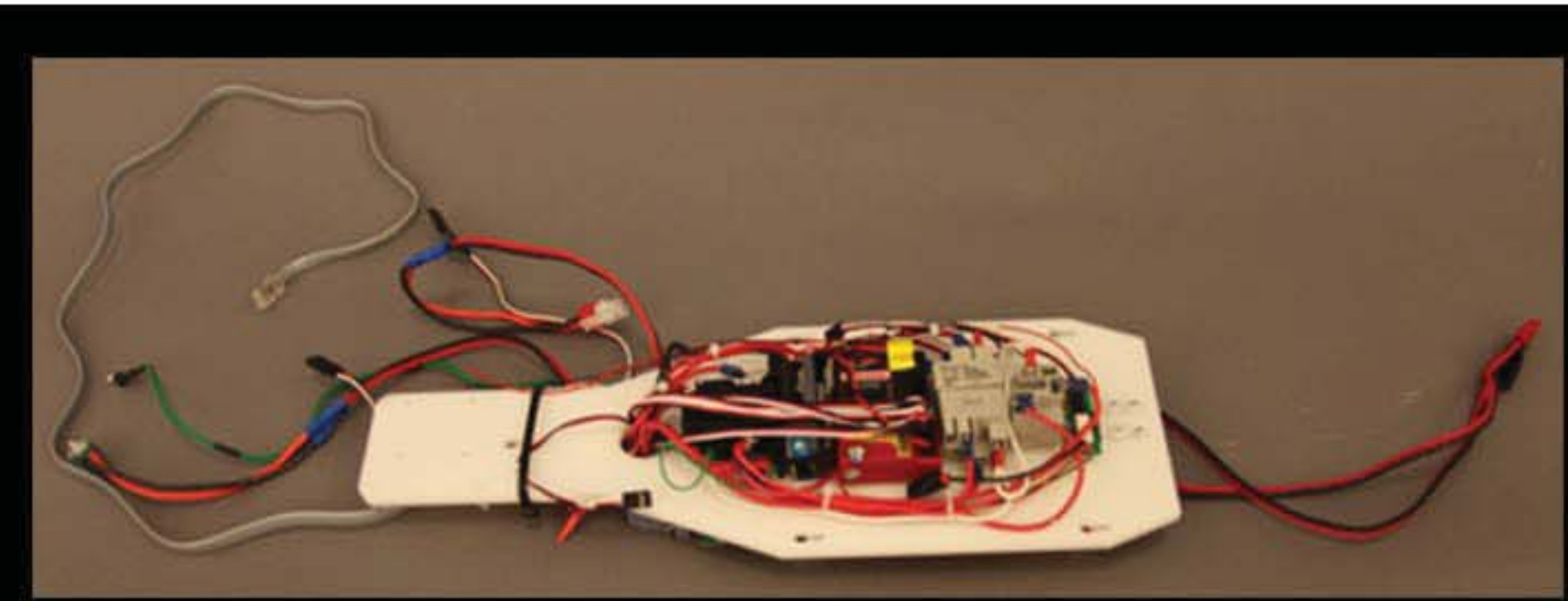
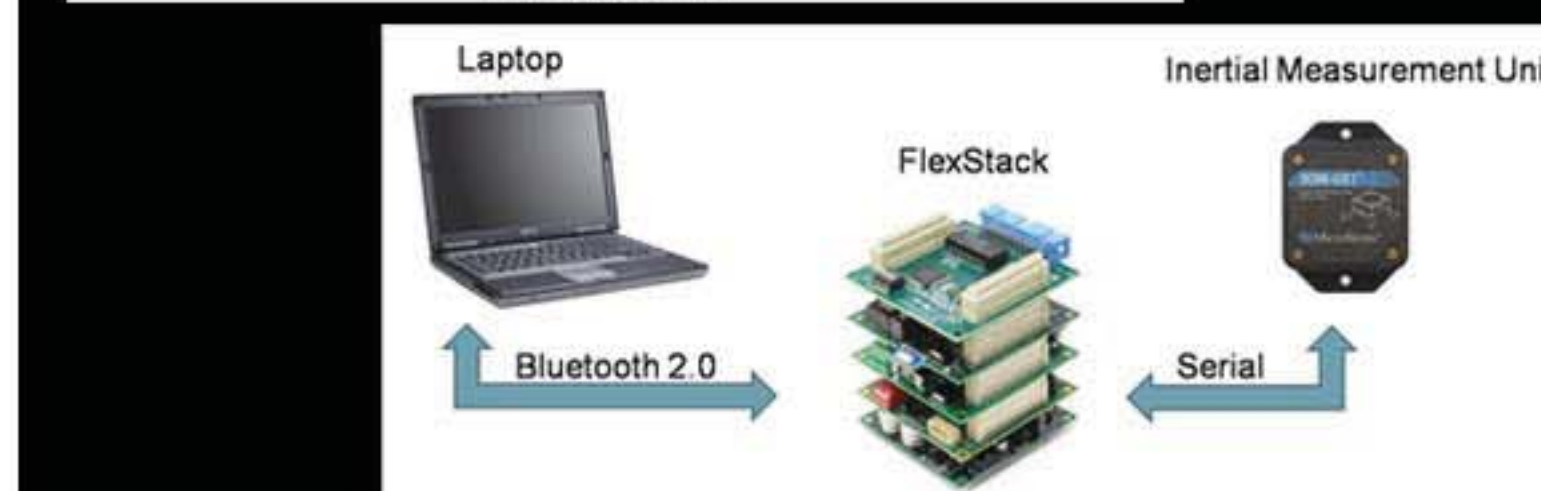


Pectoral Fin Actuated by Servo
and Pneumatic Vane Motor

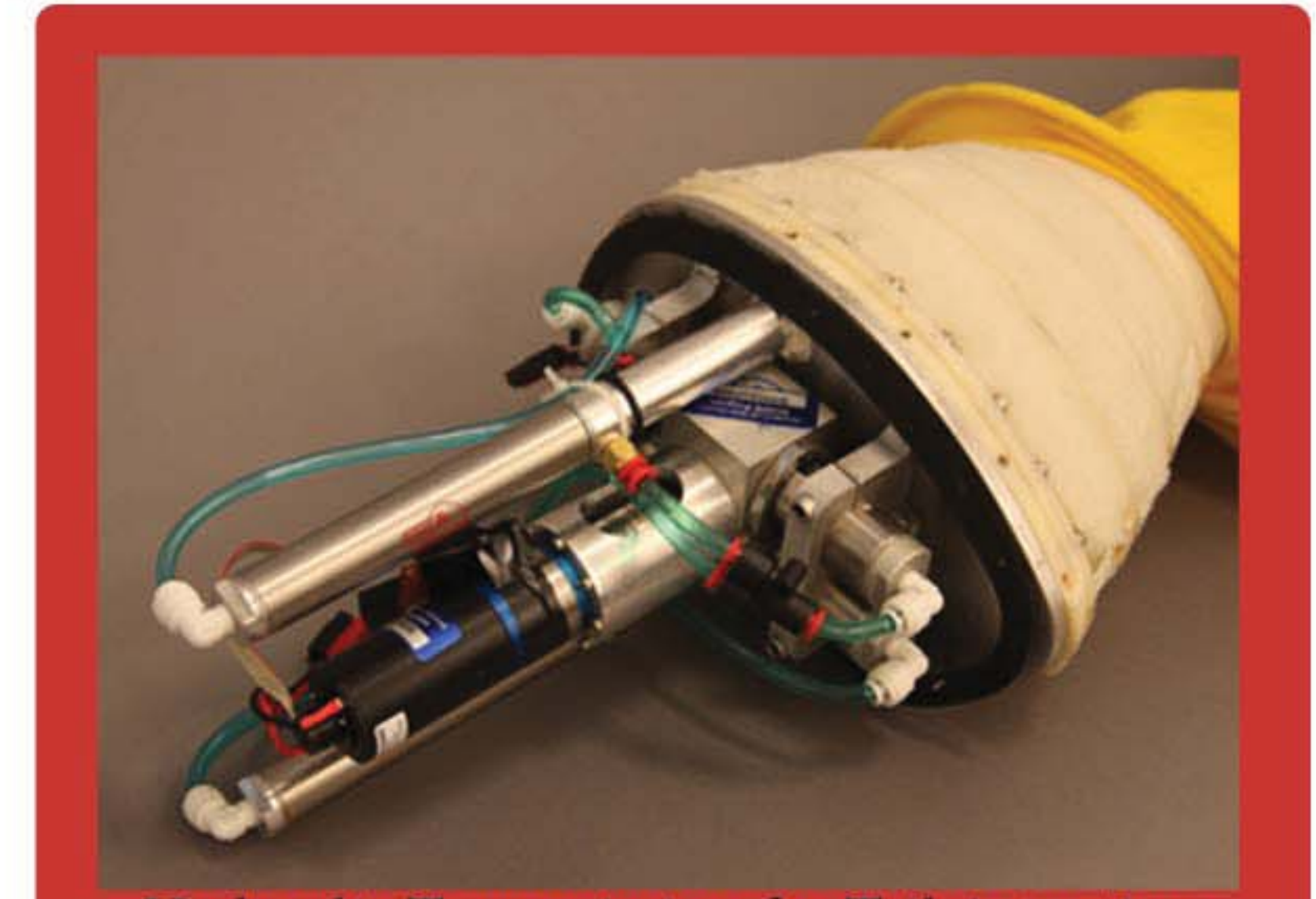
Removable Dorsal Fin Functions
as Emergency Stop



Two Software
Components:
- Laptop Remote
Control
- Onboard IMU
Data-Logging



RoboteQ motor Control
Board Interfaces with
Pectoral Fin Servos, Tail
Actuator, and Thruster



Hydraulic Transmission for Tail Actuation