

Car assembly

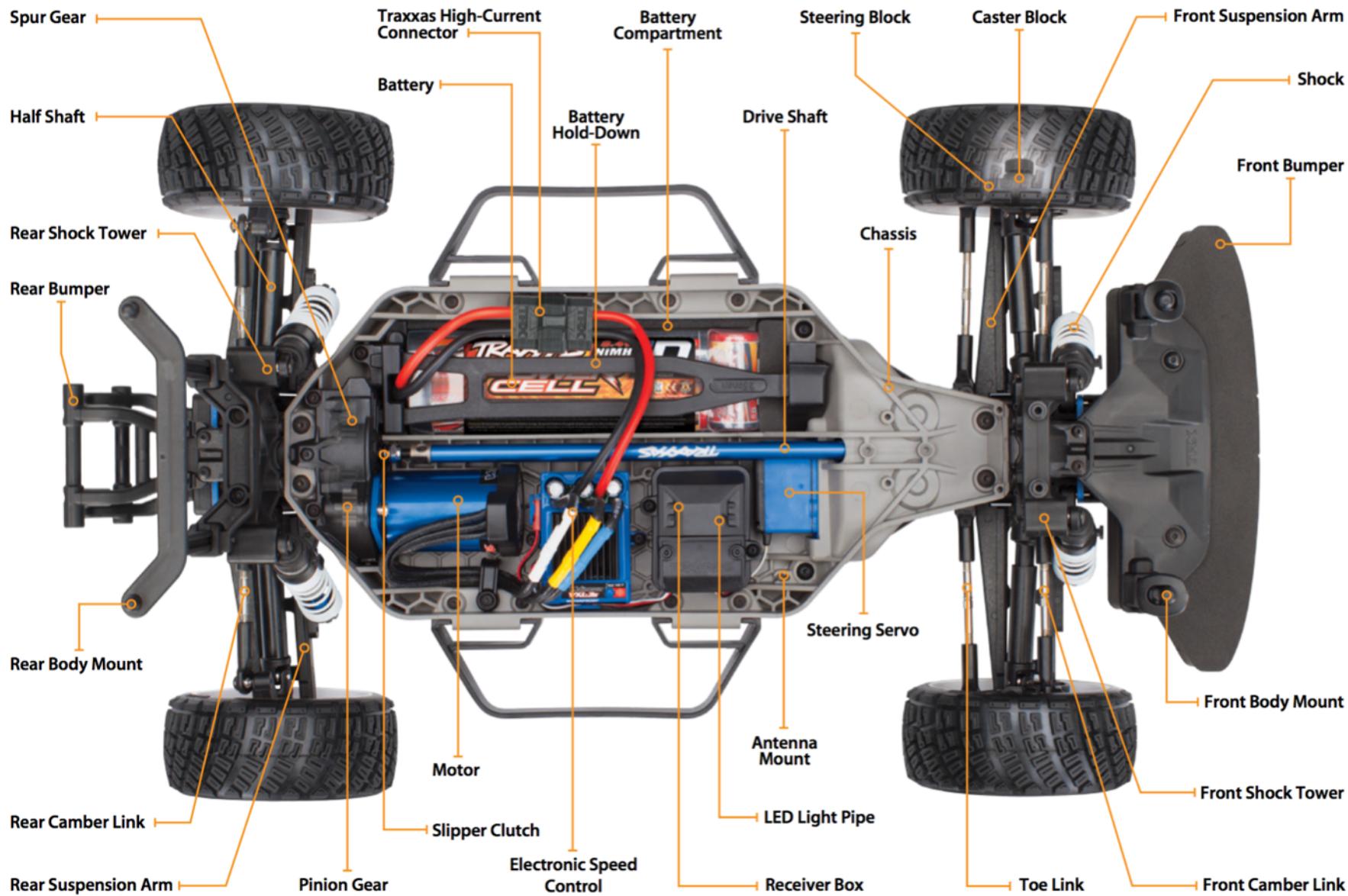
Overview:

Perception
Planning
Control

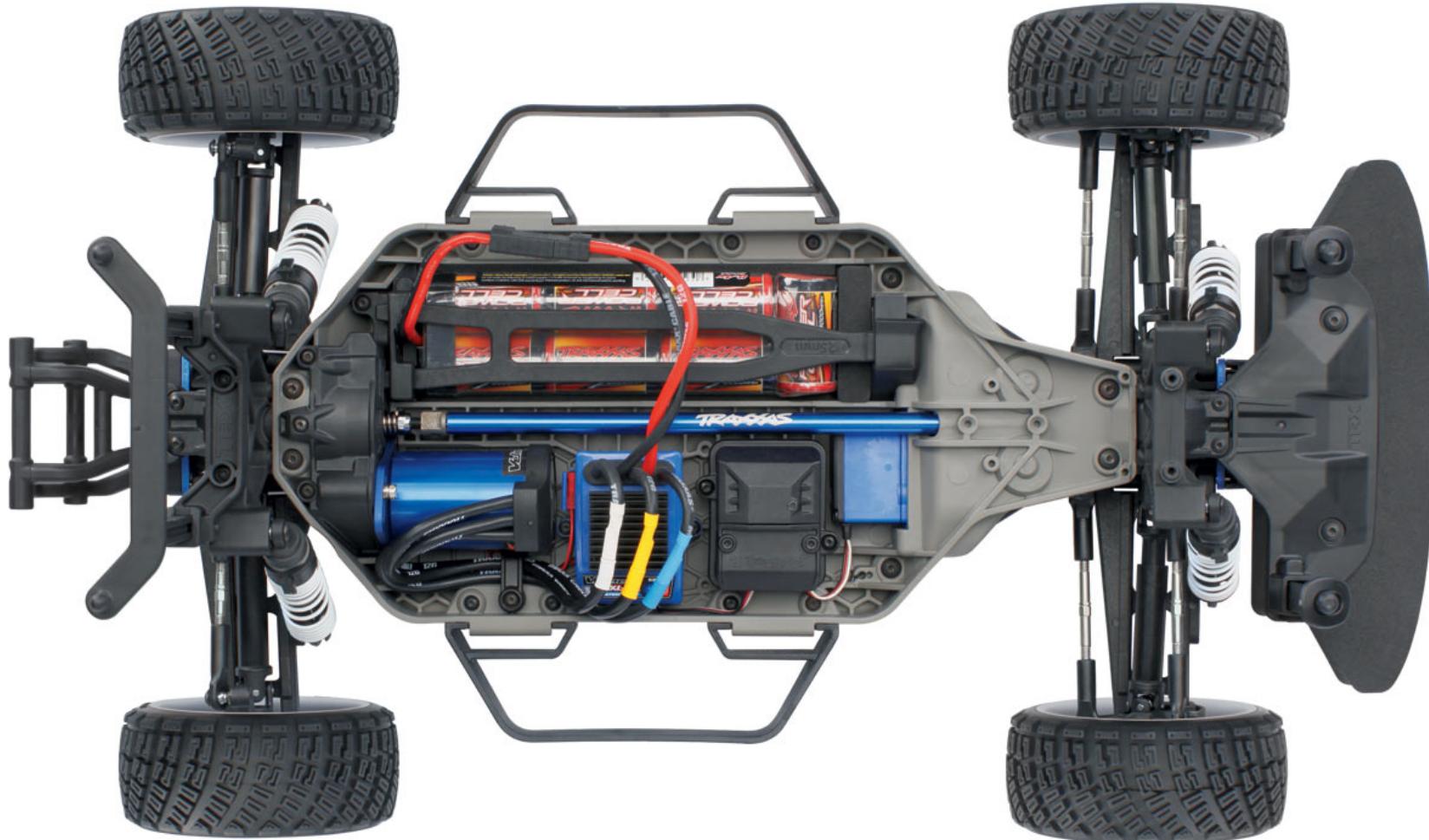
Robot Operating System

Practice Session 1:
Driving using Keyboard controls

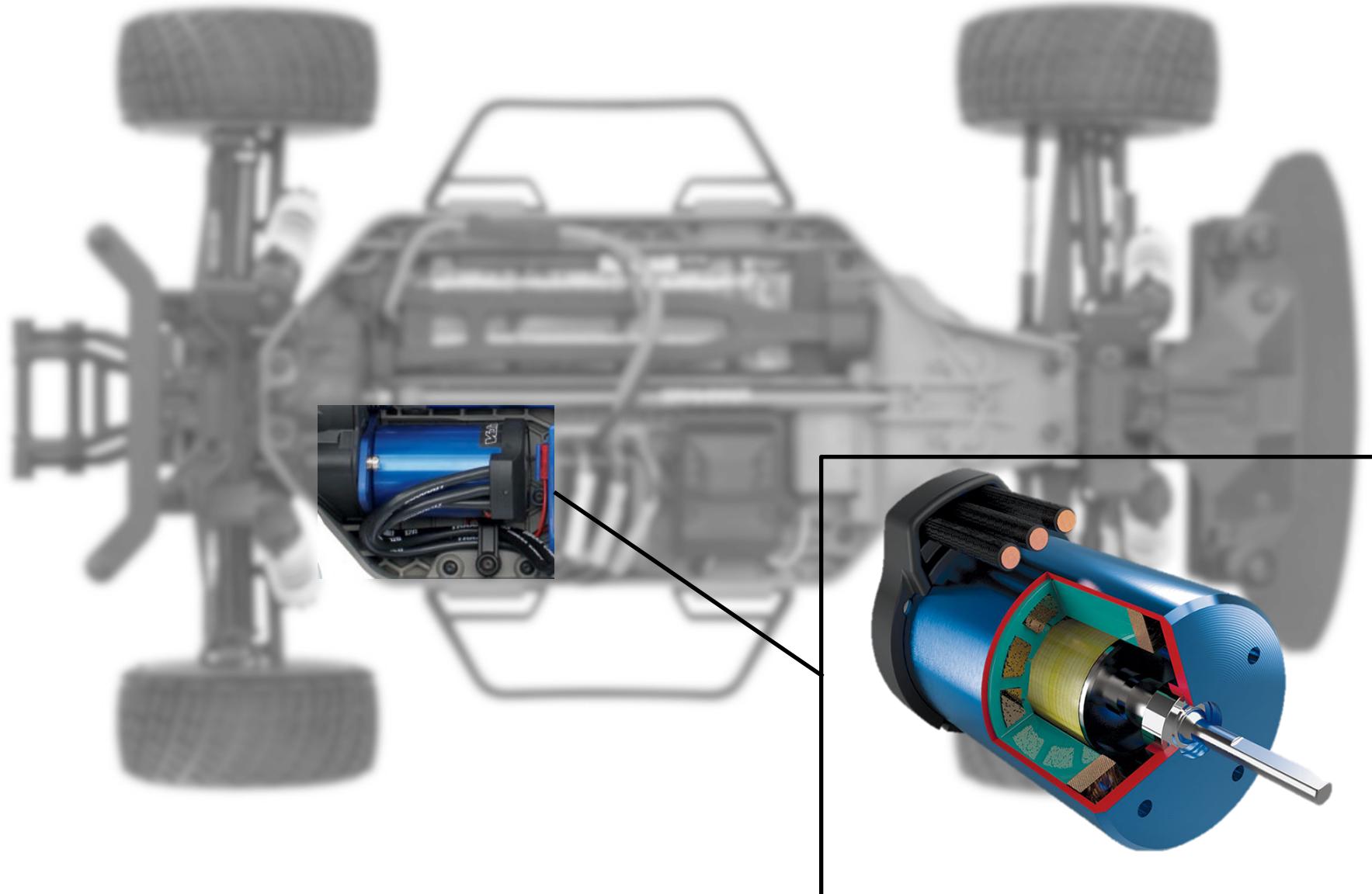
Traxxas 1/10 scale RC race car



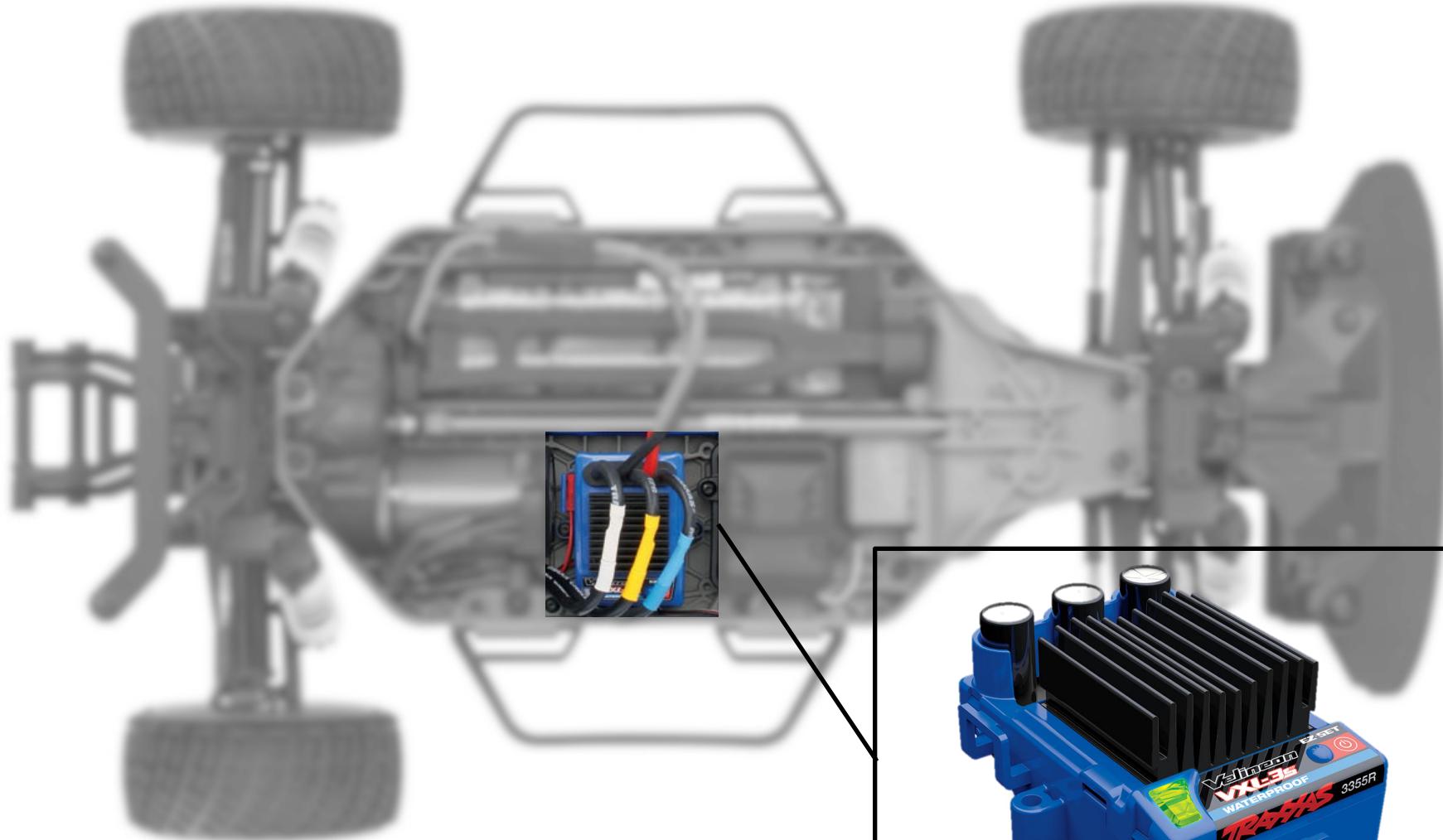
Traxxas 1/10 scale RC race car



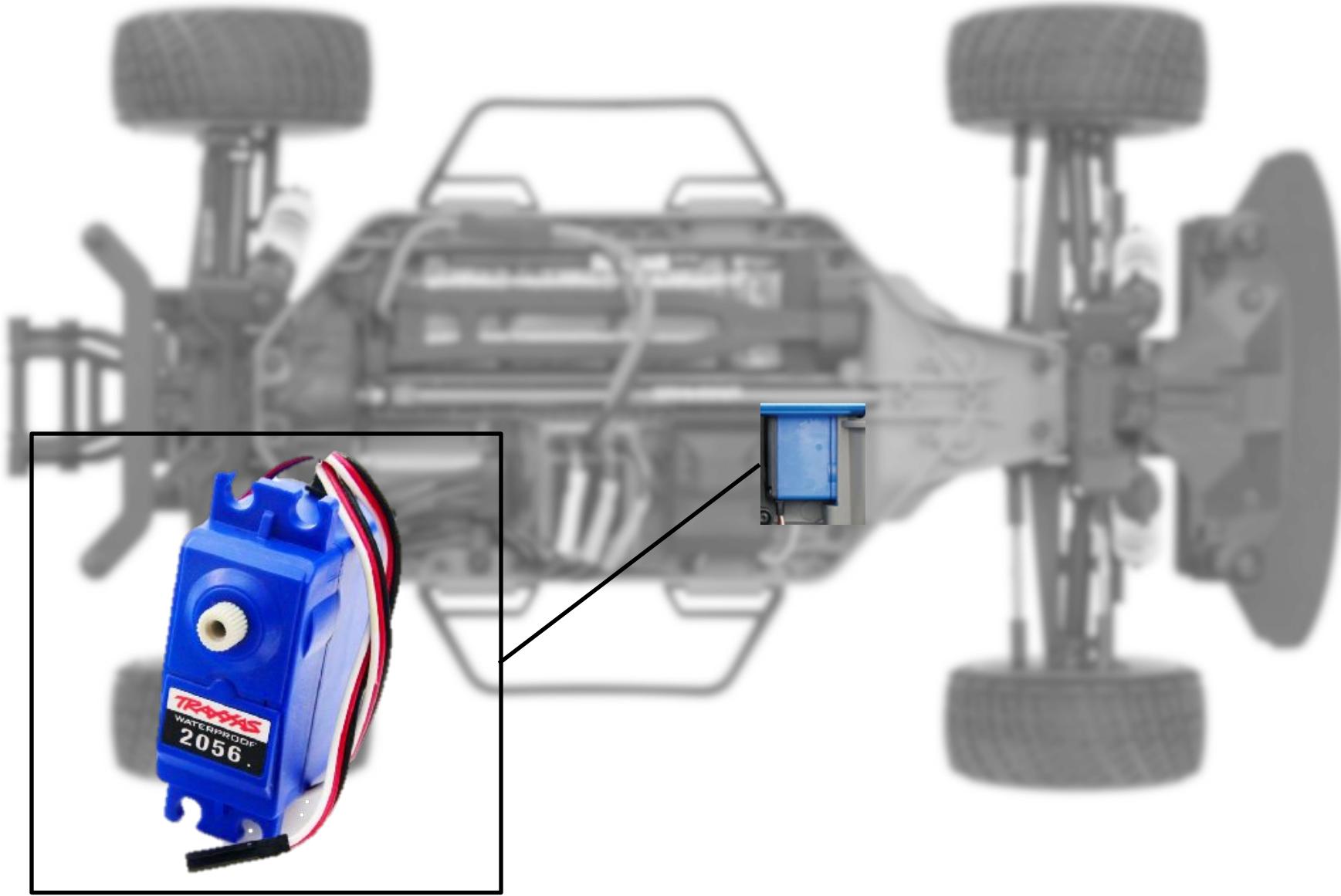
Brushless DC motor



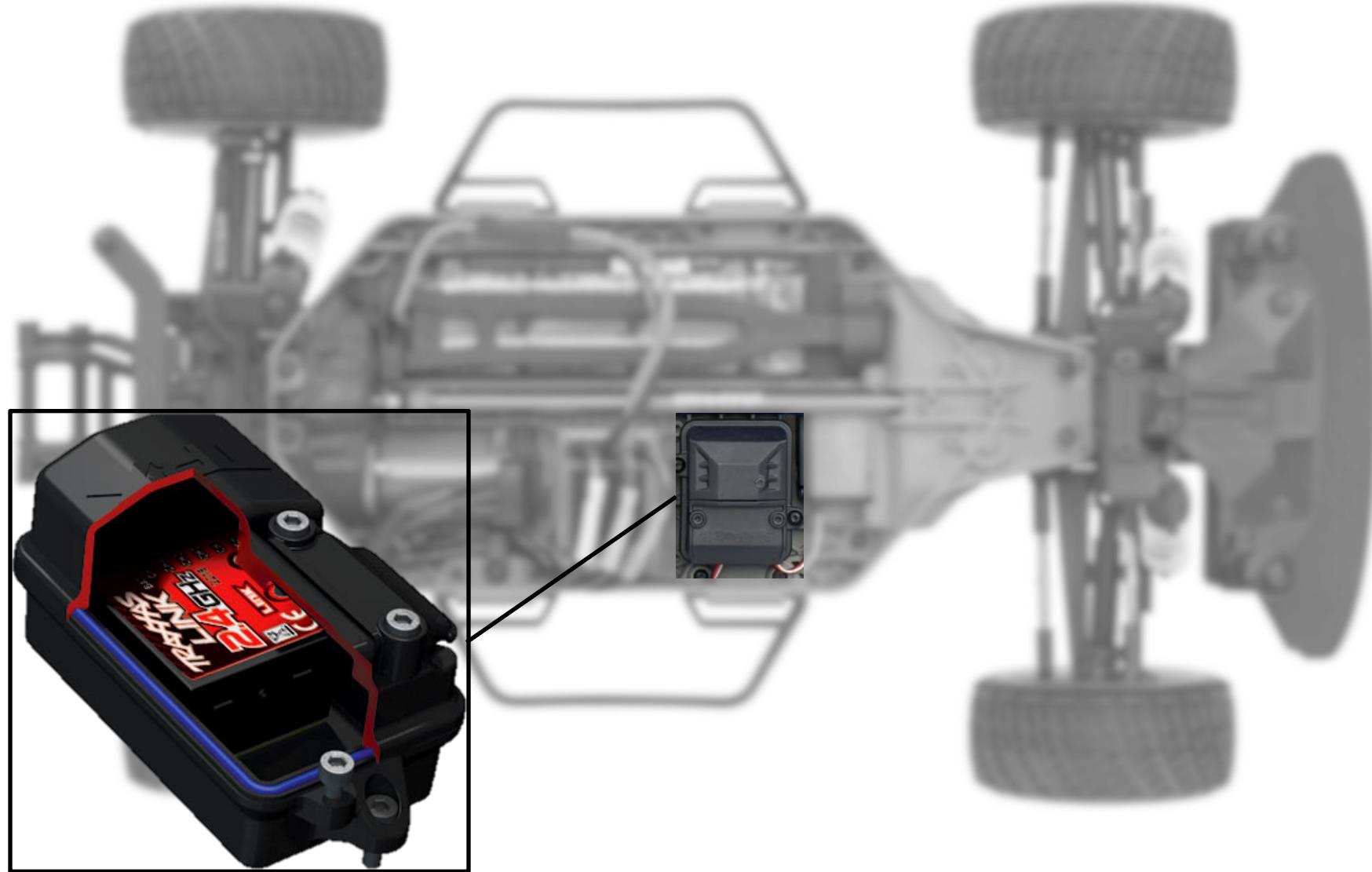
Electronic Speed Control (ESC)



Servo motor for steering



Radio receiver



Battery pack



Sensor Integration



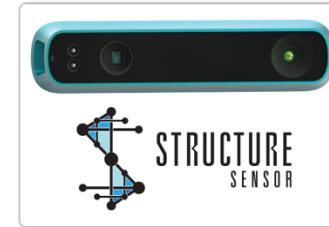
LiDAR



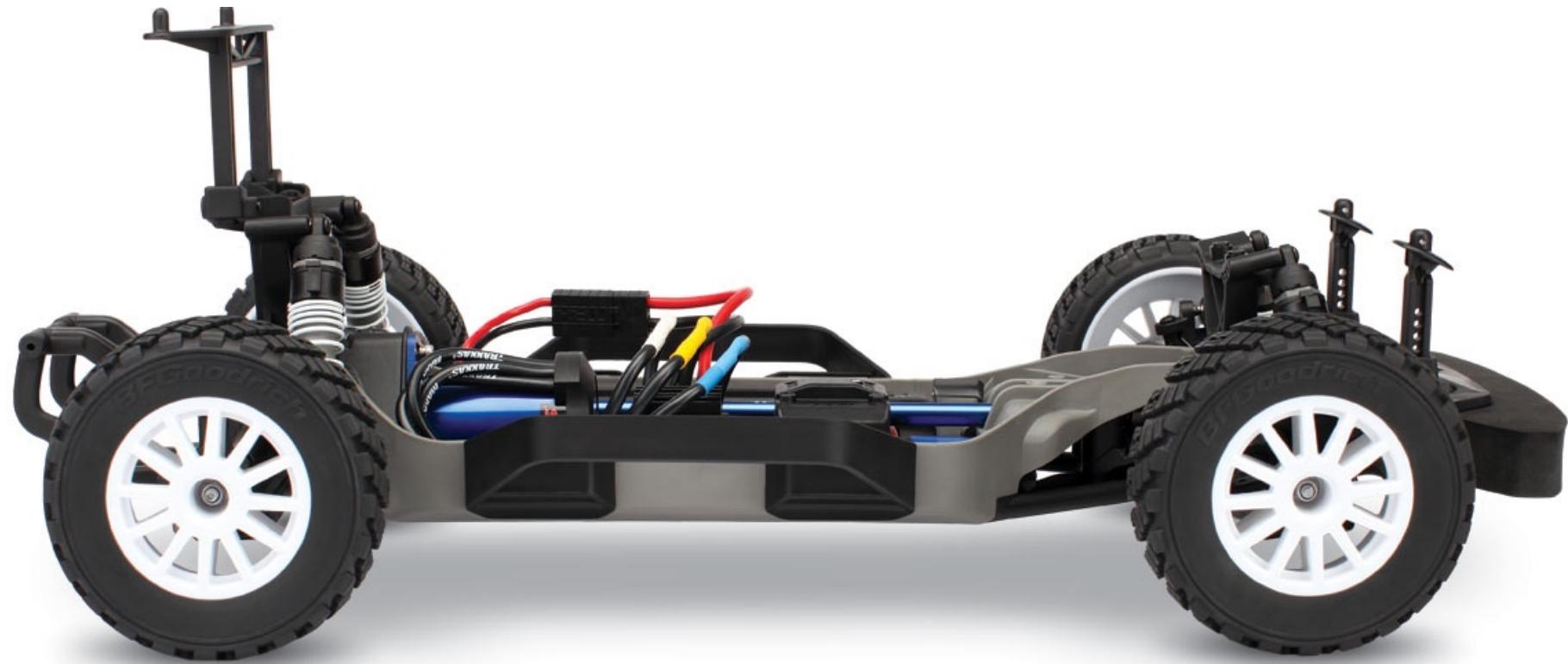
Camera



IMU



IR Depth Cameras



Sensor Integration



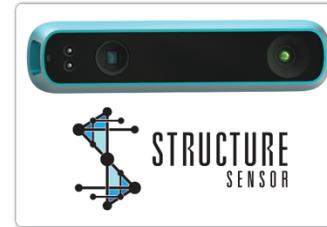
LiDAR



Camera



IMU



IR Depth Cameras



Wi-fi Telemetry



Onboard Computer

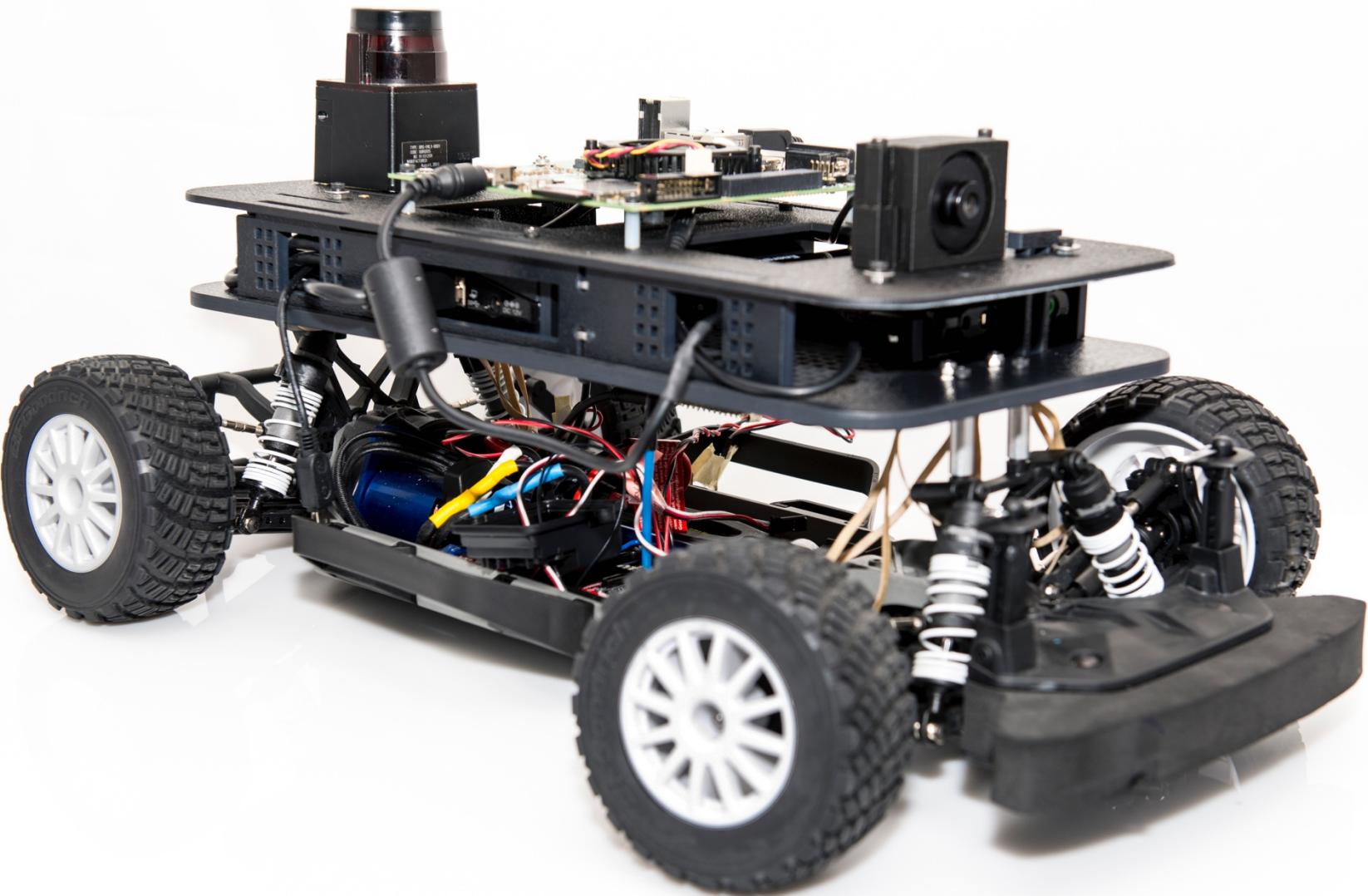


Motor
Controller

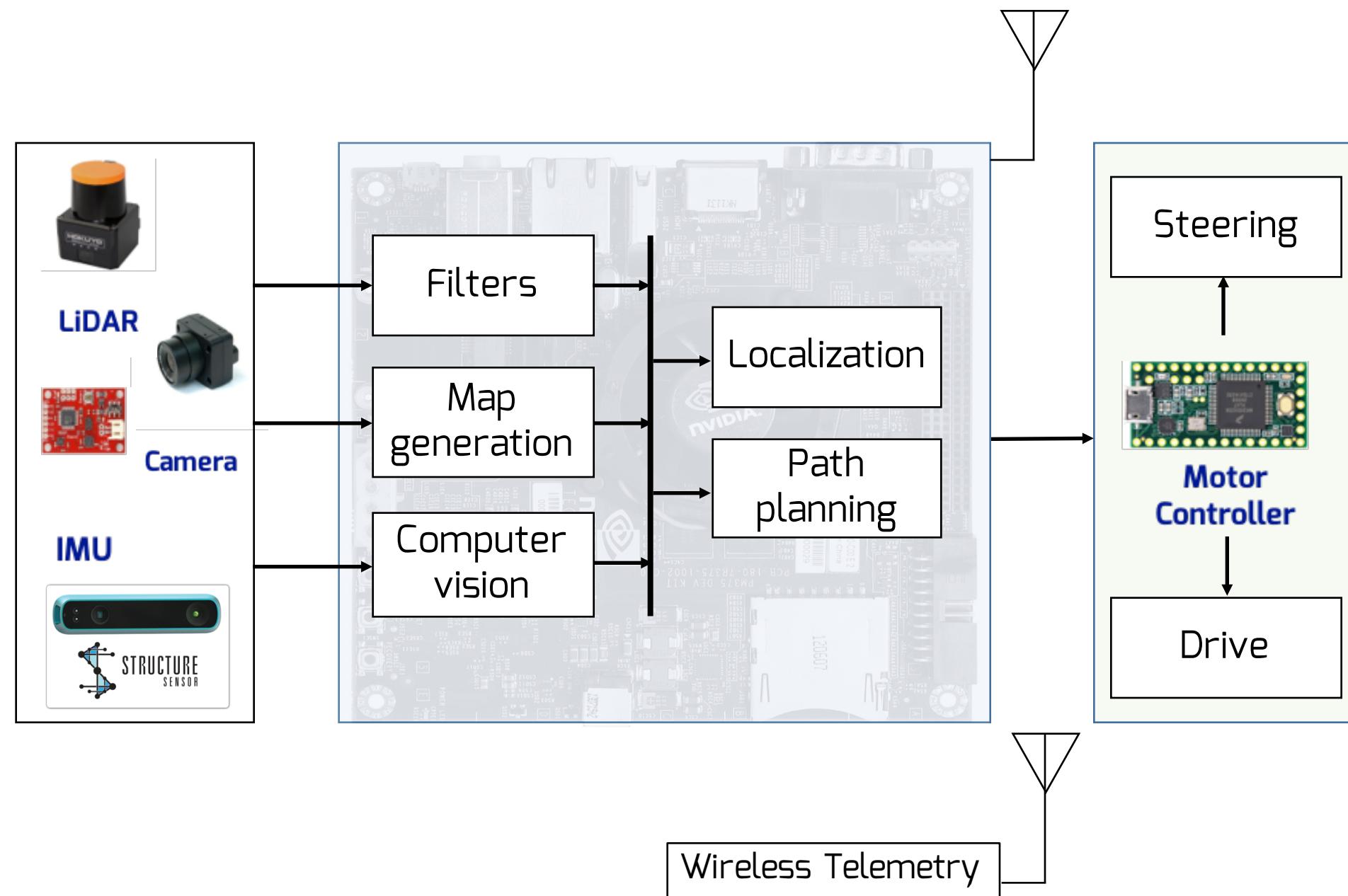


Battery

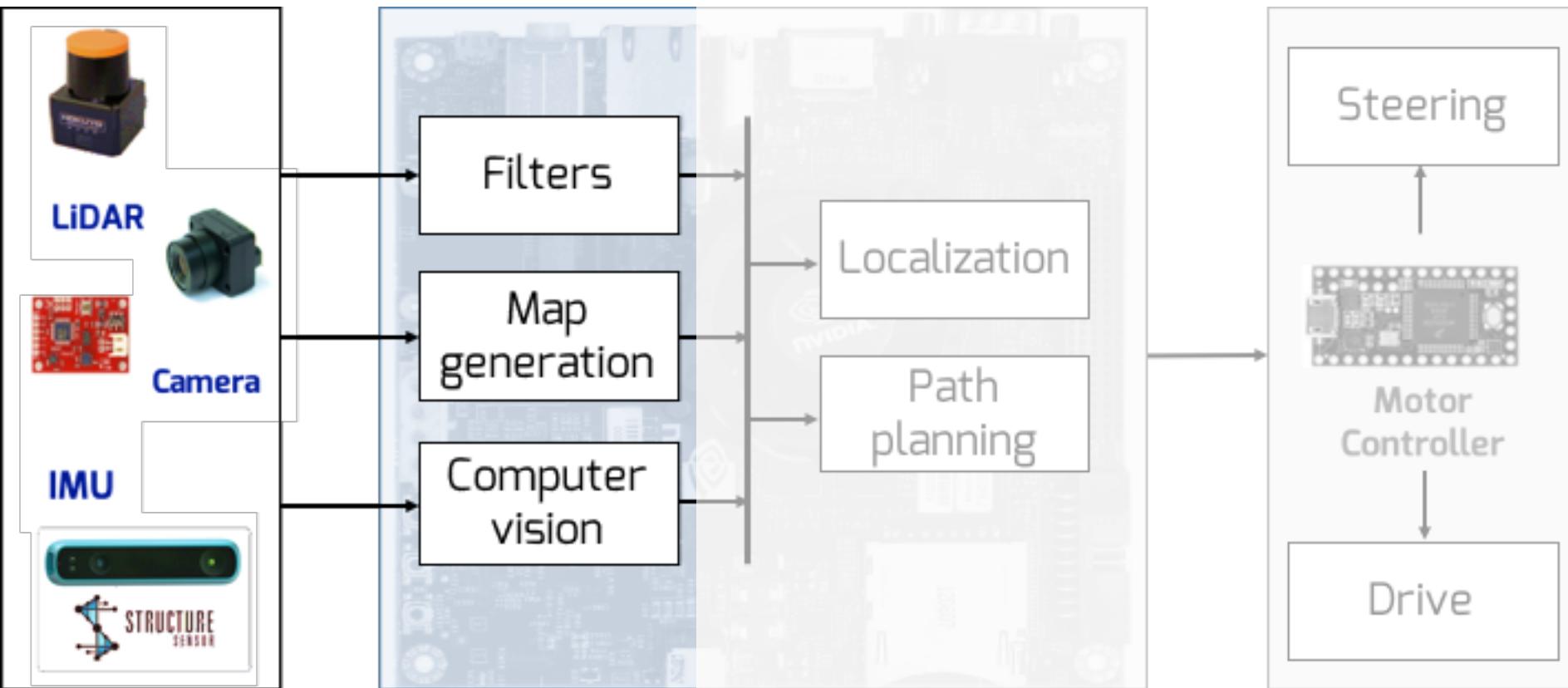
Ready to race ! Not quite..



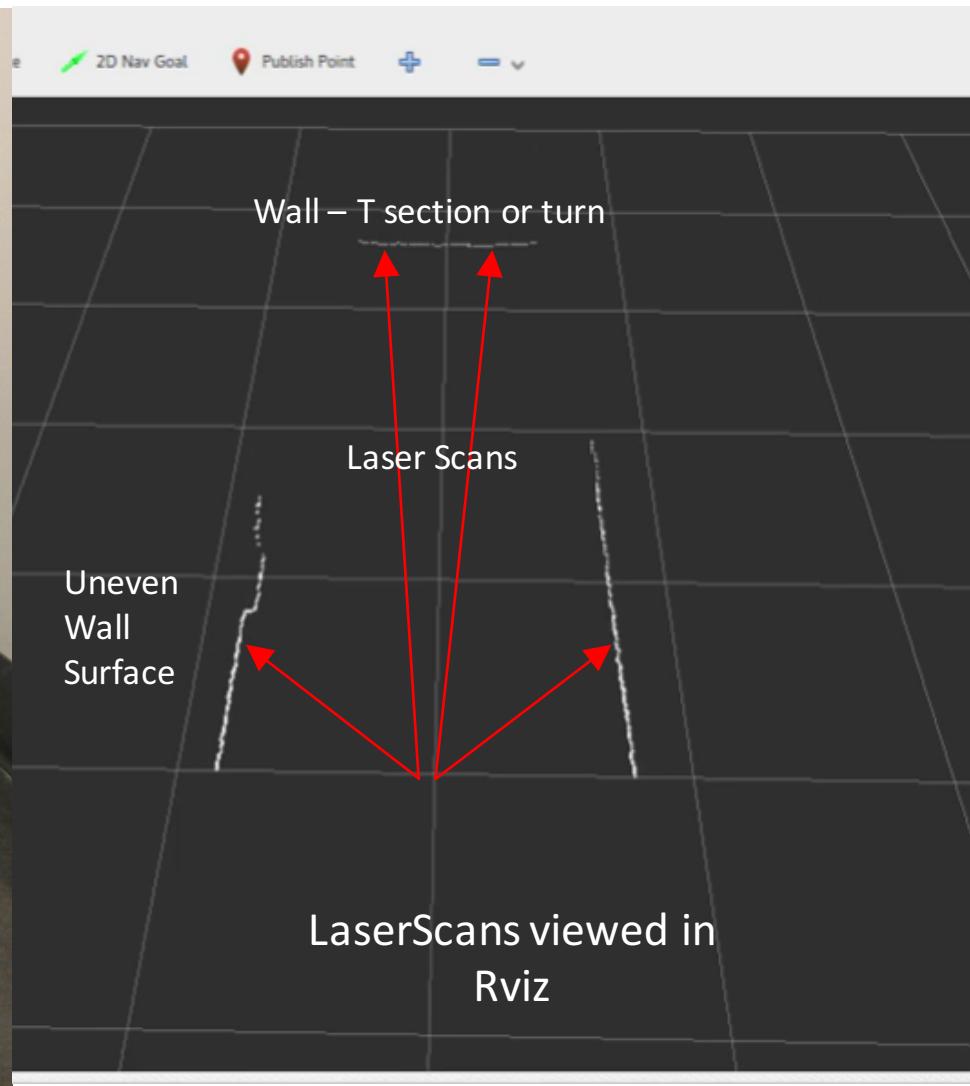
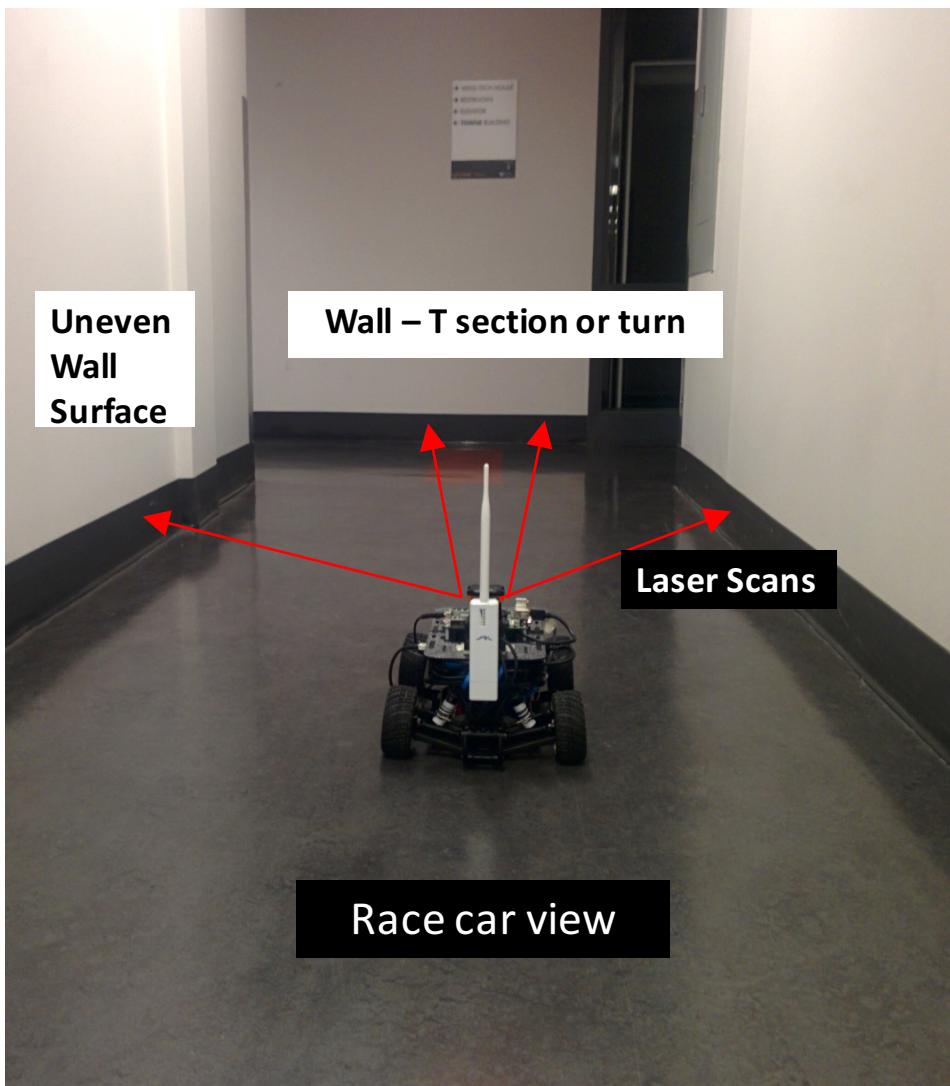
System Architecture



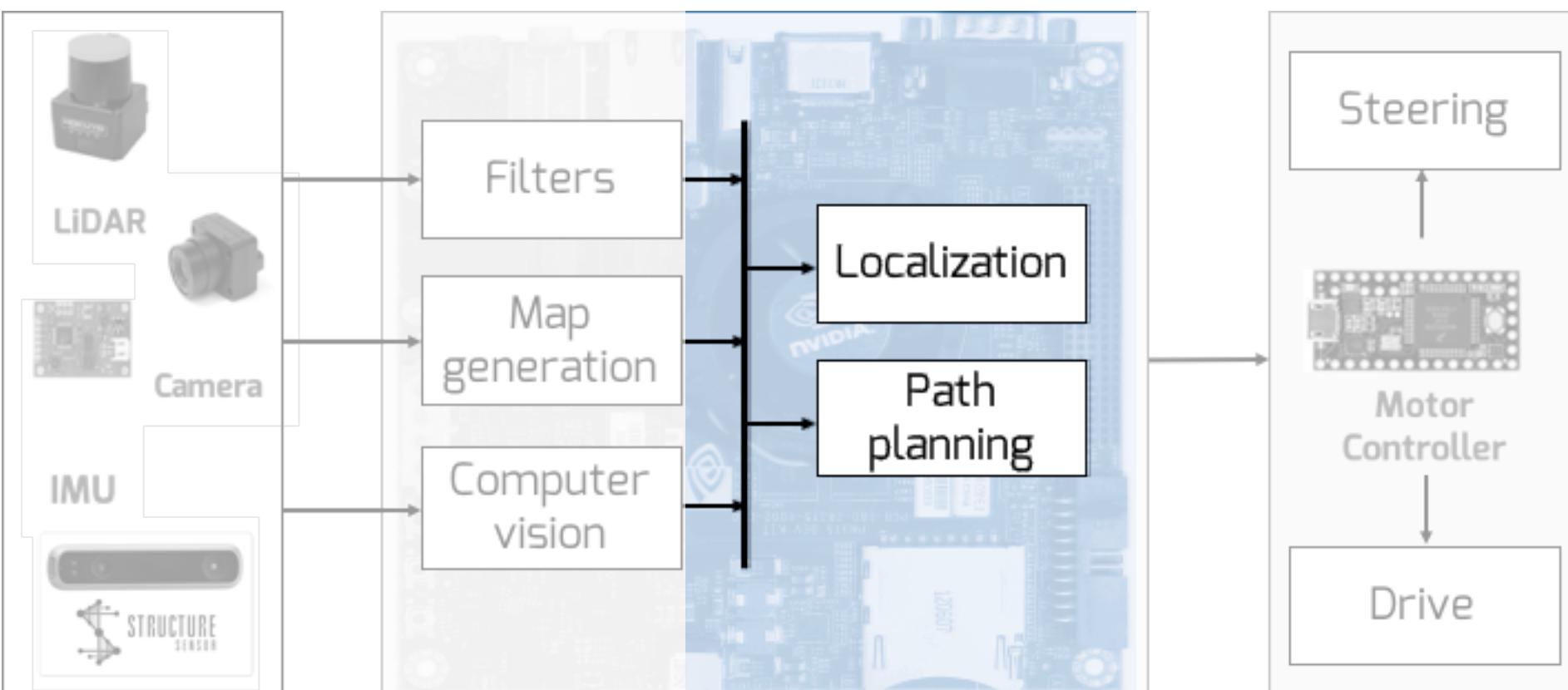
Perception



Perception



Planning

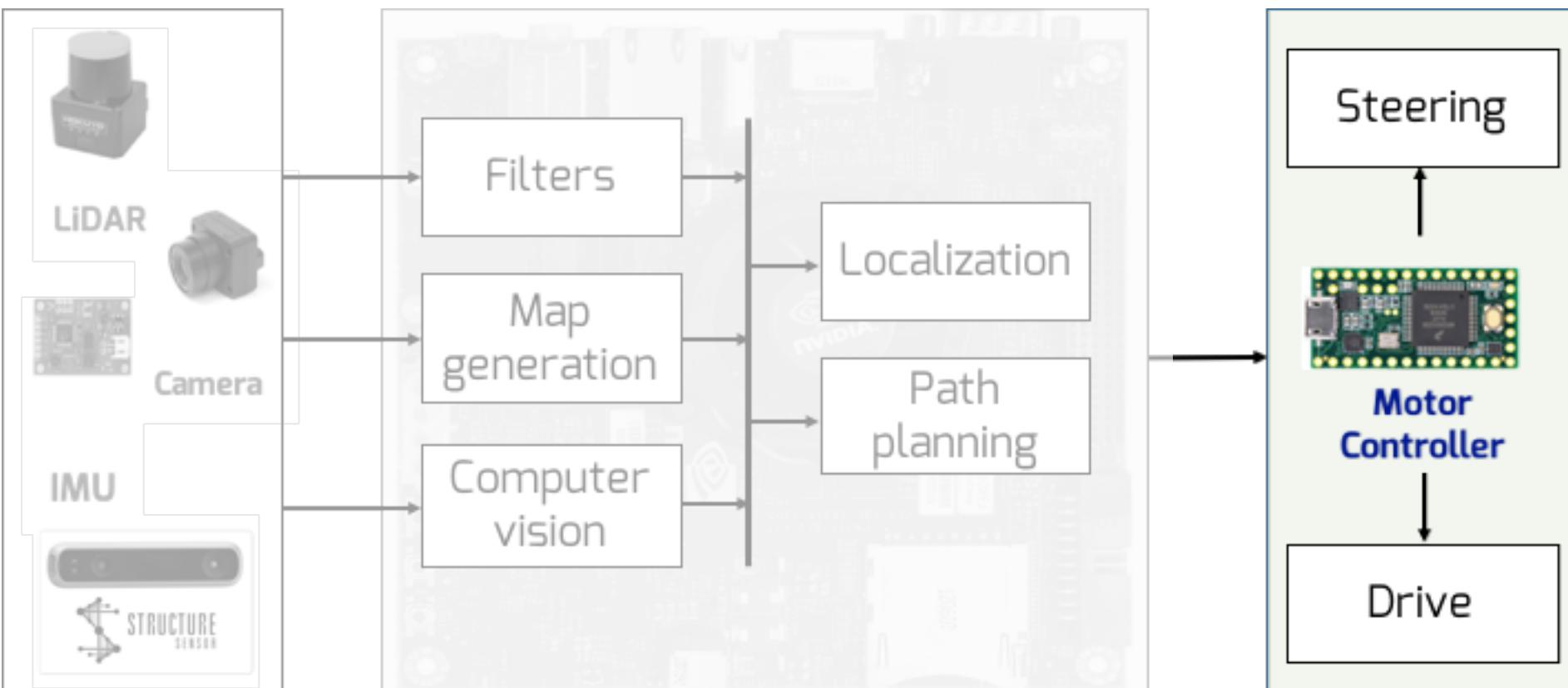


Planning



Cost Maps path planning

Control



System Architecture

