Team 6 – Updated Software Block Diagram of Active Window System
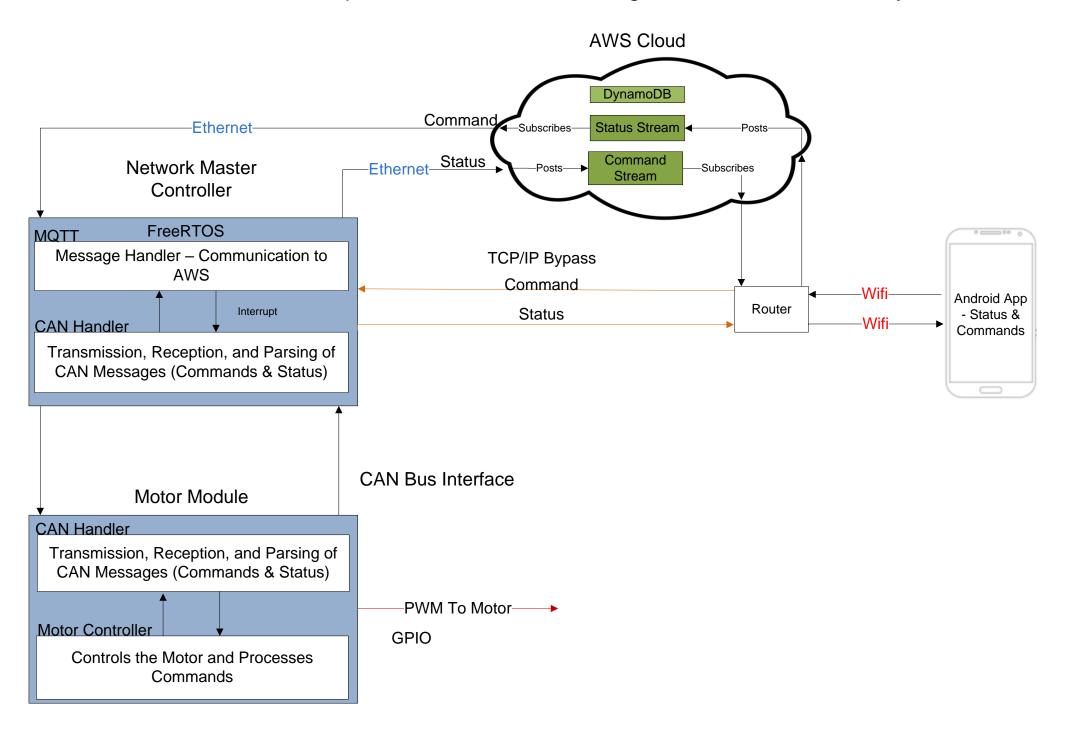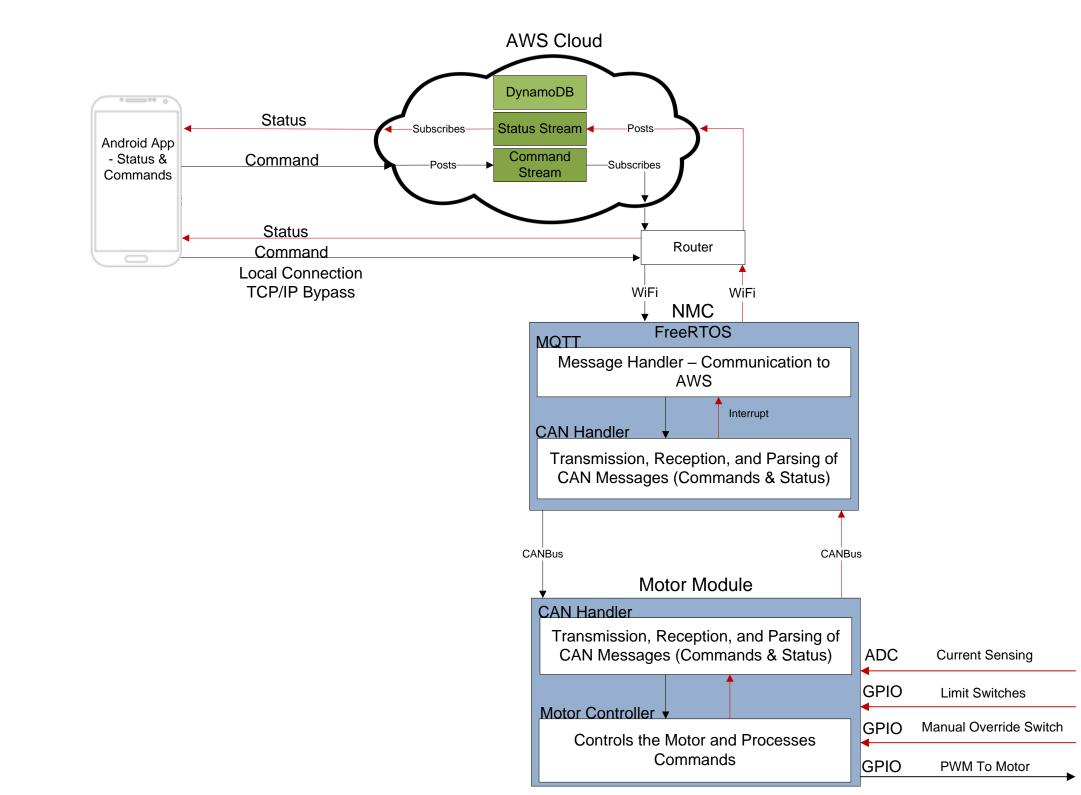
AWS Cloud

DynamoDB

Status Stream

Command Stream

Android App - Status & Commands

Status

Command

Subscribes

Posts

Posts

Subscribes

Status

Command

Local Connection
TCP/IP Bypass

Router

WiFi

WiFi

NMC

FreeRTOS

MQTT

Message Handler – Communication to AWS

Interrupt

CAN Handler

Transmission, Reception, and Parsing of CAN Messages (Commands & Status)

CANBus

CANBus

Motor Module

CAN Handler

Transmission, Reception, and Parsing of CAN Messages (Commands & Status)

ADC

Current Sensing

GPIO

Limit Switches

Motor Controller

GPIO

Manual Override Switch

Controls the Motor and Processes Commands

GPIO

PWM To Motor

Legend

Command

Feedback/Status