
Week 8 Progress Report

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Tasks

- [Issue #157](#): RTOS optimization
 - [Issue #158](#): Ground Station Parachute Manual override
 - [Issue #159](#): Write telemetry data to flash memory during flight
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RTOS optimization

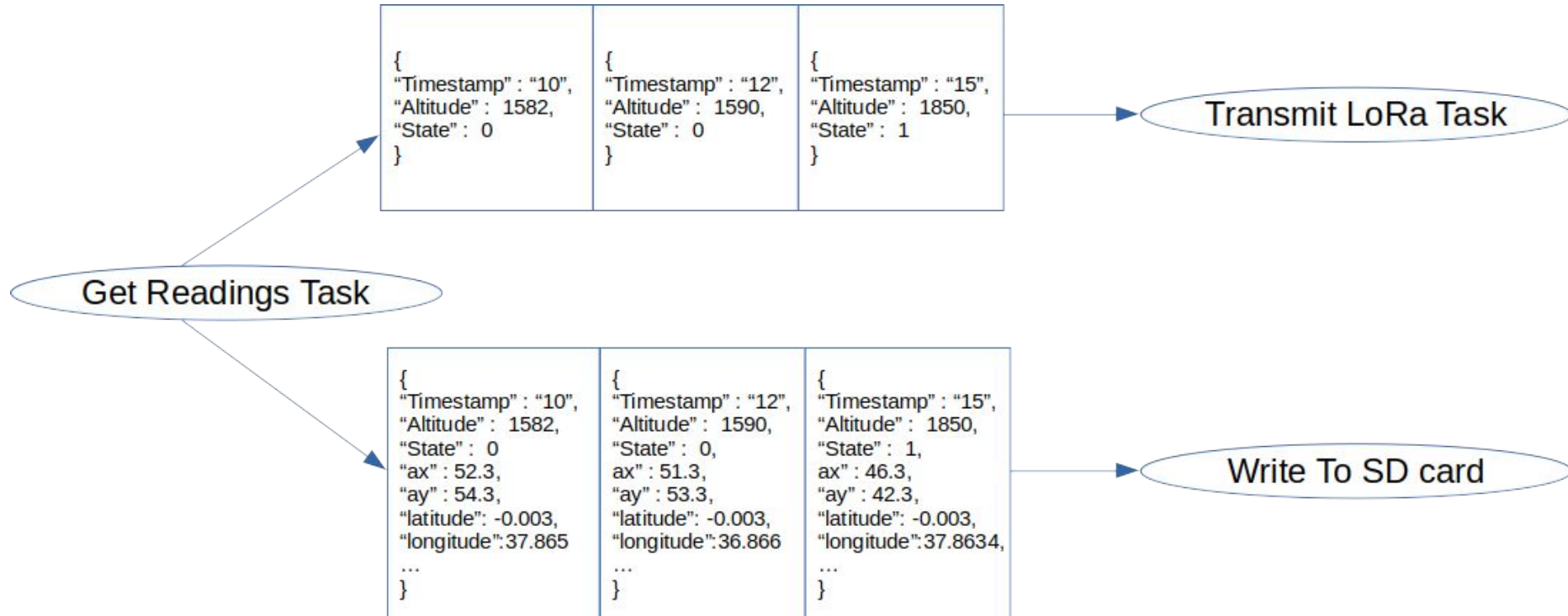
2 queues instead of 1

Reduced number of data points being sent over LoRa

LoRa - we are sending timestamp, altitude and state

SD card/SPI flash memory - timestamp, altitude, raw and filtered gyro and acceleration values, state, gps latitude and longitude

RTOS Queues



Ground station Manual Override

Rocket watches out for data packets from ground station

Update state to deploy parachute if it fails

Update ground state to start sending gps data

Write Data to SPI flash memory

ESP32 has 4MB non-volatile flash memory

Write to flash memory incase SD card fails like in test flight

Tasks Next week

- [Issue #160](#): Test GPS inside fibre glass body tube
 - Test software on breadboard
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