



# **OA-II VEH COM System Design**

**DR00003**

Rev: A01  
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# 1 Introduction

## 1.1 Scope

This document is describe a design for the OA-II VEH Computing and Operation Module.

## 1.2 Purpose

The goal for the design is to build a system that allow real time operation and multimedia processing happen in the same time during the flight.

# 2 Revision History

Rev#	Editor	Delta	Date
A01	Jinzhi Cai	Initialize	2019-7-19

Table 1: Summary of Revision History

## **3 Requirement Analysis**

### **3.1 Failure Recovery**

### **3.2 Realtime Operating System**

### **3.3 Additional Sensor Fusion**

## **4 Current Controller Analysis**

**4.1 Arduino**

**4.2 STM32 Serise**

**4.3 Market SoC System**

**4.4 FPGA Soft Core Processor**

**4.5 SoC FPGA**

## **5 Recommend System Design**