### **LUCID MOTORS**

## **Automotive**

**ADS/Software/Advanced Sensors** 

#### **ALTEN ADDED VALUE**

Led architecture design

Extensive electrical simulations and recommendations

Deep understanding of components used and use cases

#### **KEY TOOLS & TECHNOLOGIES**

MS Office, Jira, Confluence, OrCAD, LTspice, Maxim GMSL GUI, LabVIEW, CATIA, and thermal, electrical, and mechanical simulation tools

#### **KEY DATA**

Team Size: 7 Engineers
Time: Since 2022
Location: San Francisco, CA
Time and Materials Package

# CAMERA DISTRIBUTION BOX (CDB)

#### **OVERVIEW**

In 2022, Lucid Motors announced its SUV, Gravity. As a way to reuse sensors and provide multiple feature variants of the car, the exclusive ADAS features share some of the cameras with the base model. This is done by splitting the video feed using the camera distribution box (CDB).

#### **PROJECT DETAILS**

- Performed end-to-end development of ECU from concept to production
- Designed architecture, logic, power, schematic, layout, and enclosure design
- Performed extensive testing such as functional, thermal, vibration, voltage, humidity, EMC, ESD, and EOL
- Developed test equipment and test scripts
- Supported software developers with documentation and test scripts

