OA-II Backplane Bus System Design

DR00001

Rev: A01

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2019–07–15

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1 Introduction

1.1 Scope

This document analyze the requirement for OA-II VEH system data transmission, and current bus technology in the field, come up with a system design to fullfill the need of OA-II VEH system.

1.2 Purpose

The goal for the OA-II backplane bus system is constructure a high speed, high compatibility, and high robustness backplane data transmission system.

2 Revision History

Rev#	Editor	Delta	Date
A01	Jinzhi Cai	Initialize	2019-7-15

Table 1: Summary of Revision History

3 BUS System Requirement

3.1 Hardware Requirement

3.2 Software Requirement

4 Current Bus Analyze

4.1 I2C

4.2 SPI

4.3 UART

4.4 CAN

4.5 PCIe

4.6 RocketIO

4.7 RapidIO

5 OA-II BUS Hardware Structure

6 OA-II BUS Software Structure