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## Multiple Power Supply IC

### Introduction

This errata sheet describes functional limitations of the L9396 - Multiple Power Supply IC device.  
The reference documentation is reported in the [Section 2 Reference documents](#).

# 1 Limitation list

Table 1. Limitation list

Category/ Function	Functional limitation Description	
SPI CRC calculation	<p>The CRC sent through SDO is affected by a systematic wrong treatment of the internal CRC calculator circuit output.</p> <p>Let's consider a CRC calculated at <math>T = 29 \times TSCLK</math>; <math>CRC = \{c,b,a\}</math></p> <p>CRC sent is:</p> <p><math>CRC = a,a + c,a + b + c \rightarrow WRONG</math></p> <p>Correct CRC should be:</p> <p><math>CRC = b + c, a + b + c, a + c \rightarrow CORRECT</math></p>	
	Expected SDO CRC:	Actual SDO CRC:
	0	0
	1	2
	2	5
	3	7
	4	4
	5	6
	6	1
	7	3
FAULT, FSN	FSN pin does not react to CRC SPI error fault source.	
	FSN, SPI ERROR tolerance timer does not work.	
VPREREG	Buck overcurrent diagnostic flag in SUPPLY_CONTROL_1 register cannot be cleared until the regulator current goes below a specific threshold (300 mA in case of low overcurrent threshold selected).	

## 2 Reference documents

Table 2. Reference documents

Doc Name	Title	Revision
DS12539	Automotive multiple power supply IC	4
AN5702	L9396 Configuration and layout	1

## Revision history

**Table 3. Document revision history**

Date	Version	Changes
23-Sep-2021	1	Initial release.

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