



Silicon Anomaly List

ADuC7032-8L

This anomaly list describes the known bugs, anomalies, and workarounds for the ADuC7032-8L integrated precision battery sensor. The anomalies listed apply to all ADuC7032-8L packaged material branded as follows:

First Line ADuC7032

Second Line BSTZ96 8L

Analog Devices, Inc. is committed, through future silicon revisions, to continuously improving silicon functionality. Analog Devices tries to ensure that these future silicon revisions remain compatible with your present software/systems by implementing the recommended workarounds outlined here.

ADuC7032-8L FUNCTIONALITY ISSUES

| Silicon Revision Identifier | Kernel Revision Identifier | Chip Marking | Silicon Status | Anomaly Sheet | No. of Reported Anomalies |
|-----------------------------|----------------------------|-----------------------|----------------|---------------|---------------------------|
| 8L | A60 | ADuC7032 BSTZ96 8L | Release | Rev. 0 | 2 |

ADuC7032-8L PERFORMANCE ISSUES

| Silicon Revision Identifier | Kernel Revision Identifier | Chip Marking | Silicon Status | Anomaly Sheet | No. of Reported Anomalies |
|-----------------------------|----------------------------|-----------------------|----------------|---------------|---------------------------|
| 8L | A60 | ADuC7032 BSTZ96 8L | Release | Rev. 0 | 2 |

Rev. 0

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ADuC7032-8L

ANOMALIES

ADuC7032-8L Functionality Issues

1. LIN Communication with VDD > 31 V [er001]:

| | |
|------------------------|--|
| Background: | The ADuC7032-8L is specified for operation up to 40 V. |
| Issue: | If the LIN communication occurs with VDD > 31 V, the ADuC7032-8L resets. |
| Workaround: | Pending. |
| Related Issues: | None. |

2. LIN Short-Circuit Recognition [er002]:

| | |
|------------------------|--|
| Background: | The ADuC7032-8L features LIN short-circuit protection. In the event of a short circuit on the LIN bus, an interrupt is generated. HVCFG1[2] allows users to enable/disable this interrupt. It is enabled by default. |
| Issue: | If the LIN is shorted to VDD with a resistance lower than 120 Ω , LIN can oscillate over temperature and supply and a short may not be detected. |
| Workaround: | Pending. |
| Related Issues: | None. |

ANOMALIES**ADuC7032-8L Performance Issues****1. ESD [pr001]:**

| | |
|------------------------|--|
| Background: | The ADuC7032-8L is intended to be classified for HBM ESD ratings of 2 kV and FICDM ESD rating of 500 V. |
| Issue: | For silicon branded 8L, HBM ESD is specified to 800 V and FICDM ESD is specified to 400 V and 750 V for the corner pins. |
| Workaround: | Pending. |
| Related Issues: | None. |

2. WU Pin Latch-Up [pr002]:

| | |
|--------------------|---|
| Background: | The latch-up condition on the WU pin should follow the AECQ100 specification and should be able to sink up to -100 mA at 125°C. |
| Issue: | The WU pin fails the AECQ100 specification. |
| Workaround: | It is recommended to use a protection diode such as BAS52, as shown in Figure 1, to avoid destructive damage to the part. |

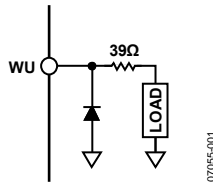


Figure 1. Protection Diode on WU Pin

Related Issues: None.

ADuC7032-8L

SECTION 1. ADuC7032-8L FUNCTIONALITY ISSUES

| Reference Number | Description | Status |
|------------------|-----------------------------------|--------|
| er001 | LIN communication with VDD > 31 V | Open |
| er002 | LIN short-circuit recognition | Open |

SECTION 2. ADuC7032-8L PERFORMANCE ISSUES

| Reference Number | Description | Status |
|------------------|-----------------|--------|
| pr001 | ESD | Open |
| pr002 | WU pin latch-up | Open |