



DSC11XX/DSA11XX

DSC11xx and DSA11xx Family Silicon Errata

The DSC11xx and DSA11xx devices that you have received conform functionally to the current device data sheets:

- DSC1101/21, revision DS20005613D (2020)
- DSC1102/22, revision DS20006254A (2019)
- DSC1103, revision DS20005745C (2019)
- DSC1104, revision DS20005870B (2019)
- DSA1101/21/05/25, revision DS20005890C (2021)
- DSA1103/23, revision DS20005891B (2022)
- DSA1104/24, revision DS20005894A (2019)

except for the anomaly described in this document.

Normal Operation

The product set DSC1101/1102/1103/1104/1105 and DSA1101/1103/1104/1105 normally provide the oscillator output clock when the input pin EN is brought high; the products enter an output standby (low-power) mode when EN is brought low (while V_{DD} is still supplied). When EN is brought high once again, the output should restart and generate the output clock at the correct frequency.

Problem Description

Output may fail or generate an incorrect clock frequency at the output when EN has been brought back to a high state.

Condition Under Which the Problem May Occur

The problem is intermittent and can affect only the devices listed above. It will occur only if the following conditions are met:

1. EN is driven separately from V_{DD} .
2. There is a time lag between the application of V_{DD} and EN being driven high from low.

This intermittent restart failure is dependent upon the length of time for which EN is held low, and also the ramp rate of taking EN high. The problem has been found to occur at room temperature.

Users Have the Following Choices

- Use the device with EN connected directly to V_{DD} . In this case, the product will reliably restart when power and EN are cycled.
- If a separate low-power state is required, those devices that tri-state the outputs (DSC1121/1122/1123/1124 and DSA1121/1123/1124/1125) will work reliably.
- If a separate low-power state with very low quiescent current (μA) is needed, we recommend the DSC12x1, DSA12x1, DSC12x2, DSA12x2, DSC12x3, DSA12x3, DSC12x4, and DSA12x4, which do not have this anomaly.

DSC11XX/DSA11XX

APPENDIX A: REVISION HISTORY

Rev. A Document (November 2021)

- Initial release of this document.

Rev. B Document (March 2023)

- Added DSA (automotive) related documents to the errata.

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