



DS3146/DS3148/DS31412 6-/8-/12-Channel DS3/E3 Framers

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REVISION A1 ERRATA

The errata listed below describe situations where DS3146/DS3148/DS31412 revision A1 components perform differently than expected or differently than described in the data sheet. Dallas Semiconductor intends to correct these errata in subsequent die revisions.

This errata sheet only applies to DS3146/DS3148/DS31412 revision A1 components. Revision A1 components are branded on the top side of the package with a six-digit code in the form yywwA1, where yy and ww are two-digit numbers representing the year and work-week of manufacture, respectively. To obtain an errata sheet on another DS3146/DS3148/DS31412 die revision, visit our website at www.maxim-ic.com/errata.

1. DS3 AIS ANOMALIES

Description:

Activating or deactivating transmit AIS (T3E3CR1:TAIS) in DS3 mode may cause the insertion of a bipolar violation and may cause the generation of erroneous P-bits in one or both of the next two M-frames.

These anomalies are caused by transitions into and out of DS3 AIS. The framer transmits DS3 AIS with no errors starting two M-frames after AIS activation, and transmits normal traffic with no errors starting two M-frames after AIS deactivation.

Work Around:

None.

2. RECEIVER AIS, RAI, AND T3IDLE STATUS BITS DO NOT CLEAR DURING OOF

Description:

Any of the T3E3SR:AIS, T3E3SR:RAI or T3E3SR:T3IDLE real-time status bits that are already set to 1 when the framer declares out-of-frame (and sets the T3E3SR:OOF status bit), will remain set throughout the OOF interval. After the DS3 framer resynchronizes to the framing information in the incoming data stream, the status bits are allowed to clear. This erratum only occurs in DS3 mode, not in E3 mode.

Work Around:

If the OOF status bit is set, ignore the AIS, RAI, and T3IDLE status bits.