



# ERRATA SHEET

## DS26519

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### Revision A2 Errata

The errata listed below describe situations where DS26519 revision A2 components perform differently than expected or differently than described in the data sheet. Maxim Integrated Products, Inc., intends to correct these errata in subsequent die revisions.

This errata sheet only applies to DS26519 revision A2 components. Revision A2 components are branded on the topside of the package with a six-digit code in the form yywwA2, where yy and ww are two-digit numbers representing the year and work week of manufacture, respectively. To obtain an errata sheet on another DS26519 die revision, visit our website at [www.maxim-ic.com/errata](http://www.maxim-ic.com/errata).

#### 1) RECEIVE LOOP CODES STATUS BITS

##### Description:

Receive loop code status bits do not work in the DS26519 rev A2. The following are the incorrect bits:

BIT LOCATION	BIT NAME	BIT DESCRIPTION
RRTS3.0	LUP	Loop Up Code Detected Condition
RRTS3.1	LDN	Loop Down Code Detected Condition
RRTS3.2	LSP	Spare Code Detected Condition
RLS3.0	LUPD	Loop Up Code Detected Condition Detect
RLS3.1	LDND	Loop Down Code Detected Condition Detect
RLS3.2	LSPD	Spare Code Detected Condition Detect
RLS3.4	LUPC	Loop Up Code Detected Condition Clear
RLS3.5	LDNC	Loop Down Code Detected Condition Clear
RLS3.6	LSPC	Spare Code Detected Condition Clear

##### Workaround:

Use the internal BERT to detect loop codes. Configure the internal BERT to detect a repetitive pattern for the loop code. Map all the receive data bits to the internal BERT (unframed mode). Loop code is detected when the BERT pattern matches and the BERT bit error rate is less than 10%.

Transmit loop codes work correctly.

#### 2) AUTOMATIC RAI INSERTION

##### Description:

When automatic RAI insertion is enabled, the RAI is not automatically inserted if CRC4 multiframe synchronization cannot be found within 128ms of FAS synchronization (if CRC4 is enabled).

##### Workaround:

Monitor the CRC4 sync counter bits (RRTS7[7:3]) in register E1RRTS7 (Receive Real-Time Status Register 7–E1 Mode). If CSC count value exceeds 16, manually transmit the RAI alarm via the alarm bit

# DS26519

## REV A2 ERRATA

(E1TNAF.5) in the Transmit Nonalign Frame Register (E1TNAF). If CRC4 sync is found, stop the alarm via the E1TNAF alarm bit.

### 3) RECEIVE FRAMER SOFT RESET

**Description:**

The receive framer soft reset bit (SFTRST bit 1 in the RMMR register) does not work.

**Workaround:**

Disable the port using the frame enable bit (FRM\_EN bit 7 in the RMMR register). Write 00 to all addresses in the framer span. Then write FF to latched status addresses in framer span.

### 4) TRANSMIT FRAMER SOFT RESET

**Description:**

The transmit framer soft reset bit (SFTRST bit 1 in the TMMR register) does not work.

**Workaround:**

Disable the port using the frame enable bit (FRM\_EN bit 7 in the TMMR register). Write 00 to all addresses in the framer span. Then write FF to latched status addresses in framer span.

### 5) RECEIVE ESTORE SLIP LATCHED STATUS BIT RSLIP

**Description:**

The receive estore slip latched status bit, RSLIP (located in bit 5 in register RLS4), is not latched.

**Workaround:**

The RSLIP bit is an OR of the RESEM (RLS4.6) and RESF (RLS4.7) bits, which are latched status bits. Clear RESEM and RESF to clear RSLIP.

### 6) TRANSMIT ESTORE SLIP LATCHED STATUS BIT TSLIP

**Description:**

The transmit estore slip latched status bit, TSLIP (located in bit 5 in register TLS1), is not latched.

**Workaround:**

The TSLIP bit is an OR of the TESEM (TLS1.6) and TESF (TLS1.7) bits, which are latched status bits. Clear TESEM and TESF to clear TSLIP.

### 7) RRTS7 READ ISSUE

**Description:**

When switched from T1 to E1 without using hardware reset, RRTS7 reads an ORed output of E1 RRTS7, T1 RFDL.

**Work Around:**

Use global soft reset when switching from T1 to E1.

**8) E1 RECEIVE MULTIFRAME LATCHED STATUS CAS MODE**

**Description:**

The E1 receive signaling registers (RS1–RS16) are updated 10 $\mu$ s after the RMF bit is set.

**Workaround:**

Wait at least 10 $\mu$ s after the RMF bit detect before reading the RS1–RS16 registers.

**9) E1 RECEIVE MULTIFRAME LATCHED STATUS CSS MODE**

**Description:**

The E1 RMF (RLS4.0) latched status bit in CCS mode is sometimes set on the multiframe boundary, and again one frame after the multiframe boundary. The RS1–RS16 registers in CCS mode are updated one frame after the multiframe boundary.

**Workaround:**

Wait at least 250 $\mu$ s after detecting RMF before clearing the latched status bit and reading RS1–16 registers.