Amendment 1:2016 to
SMPTE ST 2081-1:2015

SMPTE STANDARD

6 Gb/s Signal/Data Serial Interface — Electrical — Amendment 1

Table of Contents

Foreword

SMPTE (the Society of Motion Picture and Television Engineers) is an internationally-recognized standards developing organization. Headquartered and incorporated in the United States of America, SMPTE has members in over 80 countries on six continents. SMPTE's Engineering Documents, including Standards, Recommended Practices, and Engineering Guidelines, are prepared by SMPTE's Technology Committees. Participation in these Committees is open to all with a bona fide interest in their work. SMPTE cooperates closely with other standards-developing organizations, including ISO, IEC and ITU.

SMPTE Engineering Documents are drafted in accordance with the rules given in its Standards Operations Manual.

Amendment 1 to SMPTE ST 2081-1:2015 was prepared by Technology Committee 32NF.

Intellectual Property

At the time of publication no notice had been received by SMPTE claiming patent rights essential to the implementation of this Engineering Document. However, attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. SMPTE shall not be held responsible for identifying any or all such patent rights.

Approved
October 17, 2016

1 Scope

The purpose of this amendment is to change the Timing Jitter specification for the interface to correctly reflect the requirements and capabilities of 6G-SDI equipment. It also corrects arithmetic errors in the alignment jitter specification where the time representation of 0.3UI is inaccurately calculated in the standard.

Change instructions are shown in *italics*. Inserted text is shown thus. Deleted text is shown ~~thus~~.

2 Amendment of Section 5 Coaxial Cable Interface

In Table 1 – Jitter Specifications change the table as follows:

Table 1 – Jitter Specifications

f1	10Hz	Timing Jitter lower band edge
f3	100kHz	Alignment Jitter lower band edge
f4	> 1/10th the clock rate (>594MHz)	Upper band edge
A1	~~2UI (336psec)~~ 4 UI (674ps)	Timing jitter expressed
A2	0.3 UI ~~(56psec)~~ (50.6ps)	Alignment jitter (UI = unit interval. 1 UI = 168 ps~~ec~~). Note 1
Test Signal	Color bar test signal	Note 2

Notes:

1 This should be considered an absolute maximum requirement. An alignment jitter specification of 0.2 UI or better is strongly recommended

2 Color bars are chosen as a non-stressing test signal for jitter measurements. Use of a stressing signal with long runs of zeros or ones could give misleading results

3 See SMPTE RP 184 for definition of terms