PM5342

SPECTRA-155

SONET/SDH PAYLOAD EXTRACTOR/ALIGNER

DATASHEET ERRATA

ISSUE 1 : JULY 1999

REVISION HISTORY

Issue No.	Issue Date	Details of Change
1	July 1999	This document contains changes to the datasheet revision 4 to add the specification of power-up ramp rate requirement at low temperature

CONTENTS

1 ISSUE 1 ERRATA

This issue 1 errata notifies that changes have been made to the issue 4 of the PMC-970133 data sheet. The issue 4 datasheet and issue 1 errata supersede all prior editions and versions.

2 SPECTRA-155 DATASHEET DISCREPANCIES

Legend

1. unaltered text is unchanged to add context to changes

2. new material is bold and Italicized

~~3. obsolete material is struck out~~

4. comments specific to this document are in italics

5. A vertical bar in left margin indicates that this is a new item which was not present in the previous issue of this document.

2.1 Title Page - Incorrect Document Issue Number

The title page shows the datasheet to be issue 5. The datasheet is issue 4. The issue number is correctly shown in the header of the datasheet

3 POWER-UP RAMP RATE REQUIREMENT AT LOW TEMPERATURE

Description

The power supply voltage (VDD[29:0], TAVD[3:1], RAVD[4:1], QAVD[3:1]) require a minimum voltage ramp rate during up power up. If the power ramp is too slow the SPECTRA-155 will be unable to lock to received data. The required ramp rate is a strong function of temperature, as shown in Table 1.

Table 1 Maximum Power Supply Voltage Power-up Ramp Time vs. Temperature

$T_{ambient}$ (°C)	Maximum Ramp Time Requirement (10% to 90% voltage ramp)
25	50ms
0	1ms
-40	1µs

Upon incorrect power-up ramp at low temperature, some devices may not lock to reference clock (RROOLV=1 in register 40h) and to data (RDOOLV=1 in register 40h). In this condition, the reference clock output (RCLK pin L17 and RXC L20) may be DC or very low frequency.

Devices that are not powered up correctly will recover normal operation when the ambient temperature rises. Once operating normally, a device will continue to operate normally over the full rated temperature range.

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