
24XX256 Rev. A0 Silicon Errata Sheet

The 24XX256 parts you have received conform functionally to the Device Data Sheet (**DS21203**), except for the anomalies described below.

The anomalies are only found in the 24XX256 devices designed on Microchip's "150K" technology and does not affect older technology products. These 150K devices are currently available in 8-lead SOIC (SN) and TSSOP (ST) packages. (The older technology parts are not available in these packages.)

All the problems listed here will be addressed in future revisions of the 24XX256 silicon.

1. Module: Memory

A read immediately after a write may provide the wrong data.

If a read of any location is performed within one second after a write of any location, the leading bit (MSb) will read as a logic "1" under the following conditions. (All three must be true):

- Serial Clock (SCL) > 200 kHz
- Device voltage (Vcc) < 4.5V
- Device Temperature < 25°C

Work around

Using *any* of the following work-arounds will eliminate the issue:

- Clock the device (SCL) < 200 kHz
- Increase device voltage (VCC) > 4.5V
- Wait more than one second after a write before reading.

2. Module: Interface Logic (I²C™)

A stop command may not return the device to a low current standby condition.

If a stop command is attempted during the 6th, 7th, or 8th bits of the control byte, the stop command will be accepted by the device, however, higher than expected standby current (10 μA - 100 μA) will occur.

Work around

Do not provide a stop command during the 6th, 7th, or 8th bit of the control byte.

3. Interface Logic (I²C)

The device may power-up in a mode other than standby mode, resulting in a higher than expected current (10 μA - 100 μA). All other device operations are not affected.

Work around

The following command sequence will set the latch and return the device into standby mode. This sequence needs to be provided only once after power-up.

Command Sequence = S1010xxxxAP

Where:

- S = start bit
- x = don't care
- A = device acknowledge
- P = stop bit

24XX256

Clarification/Corrections to the Data Sheet

In the Device Data Sheet (DS21203), the following clarifications and corrections should be noted.

None

REVISION HISTORY

Rev A Document

First Revision of this document.

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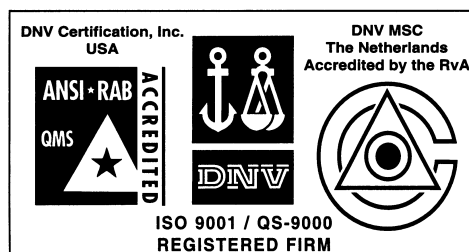
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