

MCP39F501 Silicon Errata and Data Sheet Clarification

The MCP39F501 parts you have received conform functionally to the Device Data Sheet (DS20005256A), except for the anomalies described in this document.

Note: This document summarizes all silicon errata issues from all revisions of silicon for system version 0xDA07.

Silicon Errata Issues

1. Module: Single-Wire Transmission Mode, Data Sheet Section 4.9

The checksum for the single-wire mode is calculated incorrectly. The header byte is transmitted as described in the data sheet [0xAB, 0xCD, 0xEF], however, when calculating the checksum the device uses [0xAB, 0xAB, 0xAB] as the first three bytes.

Workaround

When calculating the checksum, use 0xAB as the first three bytes in the packet.

Affected System Versions

Part Number	System Version
MCP39F501	0xDA07

Data Sheet Clarifications

The following typographic corrections and clarifications are to be noted for the latest version of the device data sheet (DS2000556A):

Note: Corrections are shown in **bold**. Where possible, the original bold text formatting has been removed for clarity.

2. Module: Device Address, Data Sheet Section 4.4

This section describes the default address of the device as 0x4C. This is a typographic error, the default address of the device is 0x4D.

The default address and default register value is **0x4D**. If the device is in Multiple Device mode (MODE/DIR = 0 at POR), pins A1 and A0 will override bits 0 and 1 and initial possible addresses include 0x4C, 0x4D, 0x4E and 0x4F depending on the state of these pins.

TABLE 1: SINGLE-WIRE TRANSMISSION FRAME

#	Byte
1	HEADERBYTE (0xAB)
2	HEADERBYTE2 (0xAB)
3	HEADERBYTE3 (0xAB)
4	CURRENT RMS – Byte 0
5	CURRENT RMS – Byte 1
6	CURRENT RMS – Byte 2
7	CURRENT RMS – Byte 3
8	VOLTAGE RMS – Byte 0
9	VOLTAGE RMS – Byte 1
10	ACTIVE POWER – Byte 0
11	ACTIVE POWER – Byte 1
12	ACTIVE POWER – Byte 2
13	ACTIVE POWER – Byte 3
14	LINE FREQUENCY – Byte 0
15	LINE FREQUENCY – Byte 1
16	CHECKSUM

Note 1: For custom single-wire transmission packets, contact a Microchip sales office.

APPENDIX A: DOCUMENT REVISION HISTORY

Rev A Document (11/2015)

- Initial release of this document.

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