

MCP19118/19 Silicon Errata and Data Sheet Clarification

The MCP19118/19 family devices that you have received conform functionally to the current Device Data Sheet (DS20005350A), except for the anomalies described in this document.

The silicon issues discussed in the following pages are for silicon revisions with the device and Revision IDs listed in [Table 1](#).

Note: This document summarizes all silicon errata issues from all revisions of silicon, previous as well as current. Only the issues indicated in the last column of [Table 2](#) apply to the current silicon.

The silicon revision level can be identified using the current version of MPLAB® IDE and Microchip's programmers and debugger tools available at the Microchip corporate website (www.microchip.com).

For example, to identify the silicon revision level using MPLAB IDE in conjunction with MPLAB ICD 3 or PICKIT™3 programmer/debugger:

1. Using the appropriate interface, connect the device to the MPLAB ICD 3 or PICKIT 3 programmer/debuggers.
2. From the main menu in MPLAB IDE, select *Configure>Select Device*, and then select the target part number in the dialog box.
3. Select the MPLAB hardware tool (*Debugger>Select Tool*).
4. Click *Device>Connect* to connect the device. Depending on the development tool used, the part number and Device Revision ID value are displayed in the Output window.

Note: For more information on identifying the silicon revision level, contact your local Microchip sales office.

The device and Revision ID values for the MCP19118/19 silicon revisions are shown in [Table 1](#).

TABLE 1: SILICON DEVREV VALUES

Part Number	Device ID ⁽¹⁾	Revision ID for Silicon Revision
		3
MCP19118	10 1110 100x xxxx	0 0011
MCP19119	10 1110 101x xxxx	0 0011

Note 1: The Device IDs (DEVID and DEVREV) are located at memory location 2006h. They are shown in hexadecimal in the format (DEVID DEVREV).

The silicon issues are summarized in [Table 2](#).

TABLE 2: SILICON ISSUE SUMMARY

Module	Feature	Item Number	Issue Summary	Affected Revision	
				2	3
Overcurrent	Overcurrent Threshold	1.1	Overcurrent Threshold Variation	X	X

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Silicon Errata Issues

Note: This document summarizes all silicon errata issues from all revisions of silicon, previous as well as current.

1. Module: Overcurrent

The overcurrent thresholds maybe different than those listed in the MCP19118/19 data sheet.

Work-Around

None.

Affected Silicon Revisions

2	3						
X	X						

Data Sheet Clarifications

The following typographical corrections and clarifications are to be noted for the latest version of the device data sheet (DS20005350A):

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

1. Module: Electrical Characteristics

Corrections to Section 4.2 Electrical Characteristics, parameter Overcurrent Mid-Scale Threshold and Overcurrent Step Size are highlighted in [Table 3](#).

TABLE 3: ELECTRICAL CHARACTERISTICS

Parameter	Sym.	Min.	Typ.	Max.	Units	Conditions
Overcurrent						
Overcurrent Minimum Threshold	OC _{MIN}	—	160	—	mV	
Overcurrent Maximum Threshold	OC _{MAX}	—	620	—	mV	
Overcurrent Mid-Scale Threshold	OC _{MID}	240	400	900	mV	
Overcurrent Step Size	OC _{STEP-SIZE}	10	15	40	mV	
Adjustable OC Leading Edge Blanking Minimum Set Point	LEB _{MIN}	—	114	—	ns	
Adjustable OC Leading Edge Blanking Maximum Set Point	LEB _{MAX}	—	780	—	ns	

2. Module: TIMER2 Correction

Correction to the TIMER2 prescaler counter being cleared. There is no Brown-out Reset so the TIMER2 prescaler counter is cleared when:

- A write to TMR2 occurs
- A write to T2CON occurs
- Any device Reset occurs (Power-on Reset, $\overline{\text{MCLR}}$ Reset or Watchdog Timer Reset)

Note: TMR2 is not cleared when T2CON is written.

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APPENDIX A: DOCUMENT REVISION HISTORY

Rev. A Document (11/2017)

- Initial release of this document.

Rev. B Document (12/2017)

- Updated the Overcurrent Step Size value in the Electrical Characteristics table.

Note the following details of the code protection feature on Microchip devices:

- Microchip products meet the specification contained in their particular Microchip Data Sheet.
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Corporate Office
2355 West Chandler Blvd.
Chandler, AZ 85224-6199
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UK - Wokingham
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Fax: 44-118-921-5820