



1/4.5-Inch 1.6Mp Digital Image Sensor

MT9M002

Silicon Revision 2 Errata

Refer to the MT9M002 data sheet at www.micron/imaging

Introduction

This errata summarizes known issues to date for Micron's MT9M002 Silicon Revision 2 (Rev2). This errata is provided for customer information at this time. Any permanent changes will be incorporated into the next revision of the data sheet.

Table 1: Known Issues and Workarounds

Issue #	Title Description Workaround	Details
1	Title	Required initial settings.
	Description	Power-on default values for some registers are not optimized.
	Workaround	Host must load register values from Table 2. This issue will be addressed in revision 3.
2	Title	Unreliable operation of sensor at EXTCLK above 16.5 MHz.
	Description	The Rev2 silicon sometimes has problems with PLL initialization after RESET, its maximum EXTCLK frequency needs to be limited to 16.5 MHz.
	Workaround	Lower the EXTCLK maximum frequency to 16.5 MHz from 49.5 MHz. Refer "MT9M002: PLL Setup and Control addendum" for details.

Table 2: Required Register Settings for Optimized Performance

Register Address	Register Data
R0x41	0x0000
R0x42	0x0003
R0x43	0x0003
R0x7F	0x0000



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Table 3: Frequency Parameters

Symbol	Parameter	Condition	Min	Typ	Max	Unit
[†] EXTCLK	Input clock frequency	PLL enabled	8	–	16.5	MHz
[†] VCO	VCO Frequency	$\sup{†}\text{EXTCLK} * \text{PLL_m_factor} / (\text{PLL_n_divider} + 1)$	320	–	693	MHz



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Advance: This data sheet contains initial descriptions of products still under development.



MT9M002: 1/4.5-Inch 1.6Mp Digital Image Sensor ERRATA Revision History

Revision History

Rev. D		11/13/2007
	• Added VCO frequency to Table 3, Frequency Parameters, on page 2, changed title	
Rev. C		8/20/2007
	• Added issue two in Table 1, Known Issues and Workarounds, on page 1	
	• Added Table 3, Frequency Parameters, on page 2	
Rev. B		5/23/2007
	• Updated Table 2, Required Register Settings for Optimized Performance, on page 1	
Rev. A		04/25/2007
	• Initial release	