

MT9P001: 1/2.5-Inch 5Mp CMOS Digital Image Sensor Introduction

# 1/2.5-Inch 5Mp CMOS Digital Image Sensor

## MT9P001 Data Sheet Addendum

Refer to the latest data sheet on Micron's Web site: www.micron.com/imaging

#### Introduction

This document supplements Micron's MT9P001 CMOS digital image sensor data sheet (Rev. F, production, 11/06) with the CRA (chief ray angle) curve specification. The standard CMOS image sensor data sheet should be referenced for a complete description of this 1/2.5-inch 5Mp CMOS digital image sensor. The specifications contained in this addendum supersede the specifications listed in the referenced CMOS digital image sensor data sheet.

## **CRA Specification**

The sensor micro lens is shifted to accommodate different incident angles of incoming light based on the position within the image array as shown in Figure 1.

Figure 1: CRA versus Image Height

	Image	Image Height	
CRA versus. Image Height Plot	(%)	(mm)	CRA (Deg)
	0	0	0
MTODOO4 CDA Daving	5	0.178	0.96
MT9P001 CRA Design	10	0.356	1.94
14	15	0.535	2.91
	20	0.713	3.87
12	25	0.891	4.80
	30	1.069	5.71
10	35	1.247	6.59
	40	1.426	7.42
	45	1.604	8.21
CRA (deg)	50	1.782	8.93
₹ 6	55	1.960	9.60
	60	2.138	10.18
4	65	2.317	10.67
	70	2.495	11.06
	75	2.673	11.31
2	80	2.851	11.40
	85	3.029	11.31
0 10 20 30 40 50 60 70 80 90 100 110	90	3.208	10.99
Image Height (%)	95	3.386	10.42
	100	3.564	9.53



### MT9P001: 1/2.5-Inch 5Mp CMOS Digital Image Sensor Revision History

<b>Revision History</b>	
Rev. A	
•	Initial release



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This data sheet contains minimum and maximum limits specified over the complete power supply and temperature range for production devices. Although considered final, these specifications are subject to change, as further product development and data characterization sometimes occur.