

Monochrome Addendum

MT9P031

For more information, refer to the data sheet on Aptina Imaging's Web site: www.apertina.com

Introduction

This document describes the spectral characteristics of the MT9P031 image sensor. This document supplements Aptina Imaging's MT9P031 data sheet (Revision C, 9/07) with the spectral characteristics specific to the monochrome version. The standard 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 data sheet.

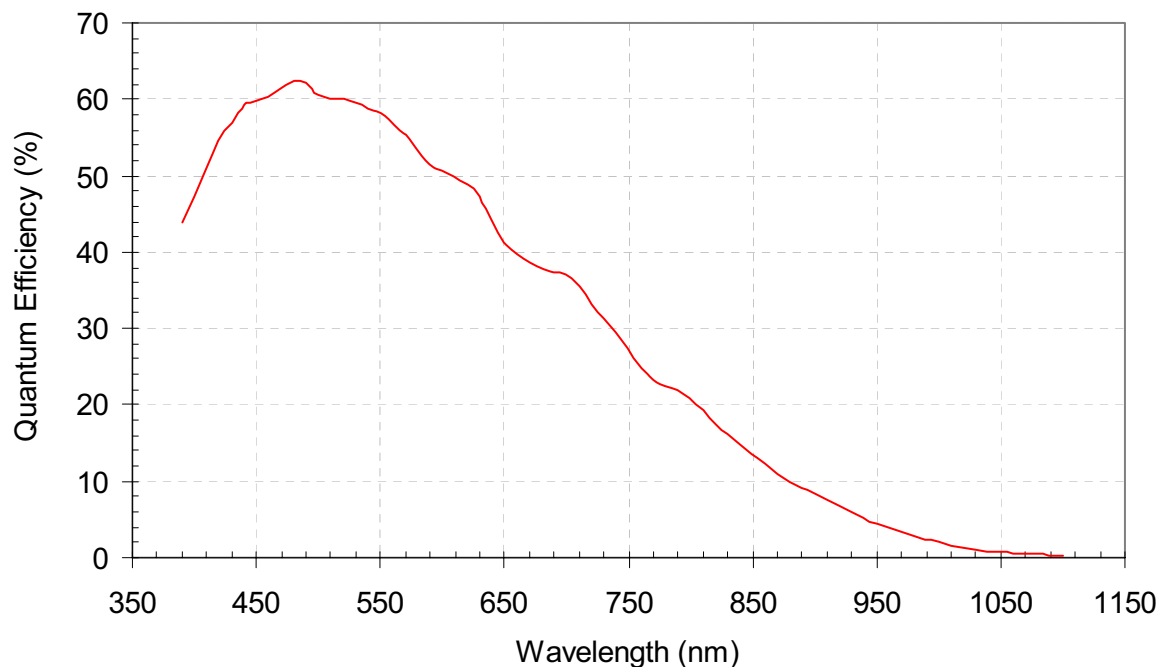
The data discussed in this document applies to the following part numbers.

MT9P031I12STM ES	Sample
MT9P031I12STM	Monochrome Production Version
MT9P031I12STM D ES	Monochrome Demo Kit
MT9P031I12STM H ES	Monochrome Demo Headboard

Monochrome Spectral Characteristics

Figure 1 specifies the quantum efficiency of the sensor core based on wavelength. The curve is based on response in a packaged part.

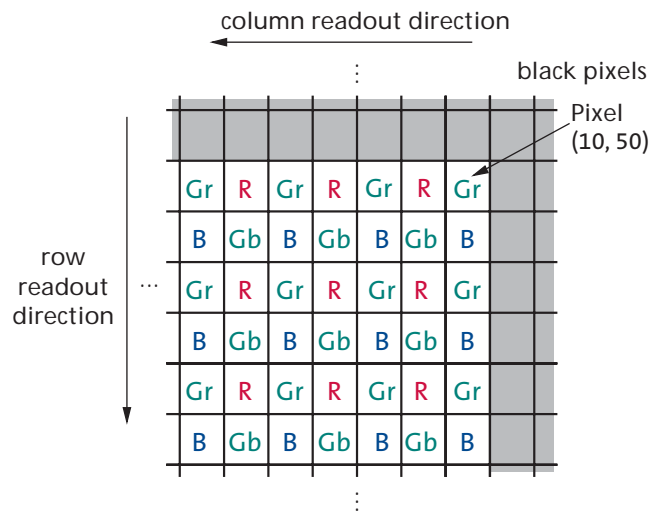
Figure 1: Monochrome Quantum Efficiency



Monochrome Gain Register Settings

For the monochrome version of the MTP031 all pixels are equivalent. However, the sensor maintains the separate gain adjustment registers from the color part. Thus care needs to be taken when setting analog and digital gain to either use Global Gain register, R0x35, or to set all of the separate color gain registers R0x2B through R0x2E. Figure 2 shows the color channel mapping for the gain registers.

Figure 2: Color Channel Mapping for Gain Registers





Revision History

Rev. B	2/10
• Updated to Aptina template	
Rev. A	5/08
• Initial release	

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