

TN-09-146: Obtaining the Revision Number and CRA Value Introduction

Technical Note

MT9P012 Obtaining the Revision Number and CRA Value for the MT9P012

Introduction

This technical note outlines the procedures to obtain the revision number and the chief ray angle (CRA) degree for the MT9P012 CMOS digital image sensor through a two-wire serial READ operation of designated register bit fields.

How to Read the Sensor Revision Number

Follow the steps below to obtain the revision number of the image sensor:

- 1. Set the register bit field R0x301A[5] = 1.
- 2. Read the register bit fields R0x31FE[3:0].
- 3. Convert the binary number to decimal to obtain customer revision. For example, binary value "0010" = sensor revision 2.

How to Read the Sensor CRA

Follow the steps below to obtain the CRA value of the image sensor:

- 1. Set the register bit field R0x301A[5] = 1.
- 2. Read the register bit fields R0x31FE [6:4].
- 3. Determine the CRA value according to Table 1.

Table 1: CRA Values

Binary Value of R0x31FE[6:4]	CRA Value
000	Reserved
001	6°
010	15°
011	22.7°
100	25.0

Conclusion

This technical note provides instructions for obtaining the silicon revision and the CRA value of the MT9P012 CMOS digital image sensor. For further information and assistance on these or other features, refer to www.micron.com/imaging.



TN-09-146: Obtaining the Revision Number and CRA Value Revision History

Revision History	
Rev. A	
 Initial release 	



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