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### **e-CAM50\_CUIMX8**



## **Lens Datasheet**

**Revision 1.0**



15<sup>th</sup> Dec 2020

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## 1 Revision History

<b>Rev</b>	<b>Date</b>	<b>Description</b>	<b>Author</b>
1.0	15-Dec-2020	Initial draft	Application Engineering Team



## 2 Introduction

The e-CAM50\_CUIMX8 board is a camera module designed and developed by e-con Systems, a leading Embedded Product Design Services Company which specializes in the advanced camera solutions. e-CAM50\_CUIMX8 is 5 MP custom lens camera module based on 1/2.5" AR0521 CMOS image sensor from ON Semiconductor®. It is a color camera that supports uncompressed UYVY format. The e-CAM50\_CUIMX8 board is provided with S-mount (also known as M12 board lens) lens holder. The S-mount is the small form-factor lens mounts for board cameras.

e-CAM50\_CUIMX8 can be directly interfaced to the Toradex® Apalis iMX8 development kit.

This document describes the optical specification of lens used in e-CAM50\_CUIMX8.

The supported platforms for e-CAM50\_CUIMX8 are given below

camera	Platforms
e-CAM50_CUIMX8	Apalis iMX8QM SoM with Ixora carrier board
	Verdin iMX8M-Mini SoM with verdin carrier board

**Table 1: Supported Platforms of e-CAM50\_CUIMX8**

## 3 Disclaimer

e-con Systems reserves the right to edit or modify this document without any prior intimation or whatsoever.

## 4 Description

The lens used in e-CAM50\_CUIMX8 is a high resolution, 1/2.3" format, and wide-angle lens. It provides a maximum field of view (FOV) of 140.5 degrees with 1/2.5" format AR0521 CMOS image sensor.

## 5 Optical Specifications

The optical specifications of lens are listed in following table.

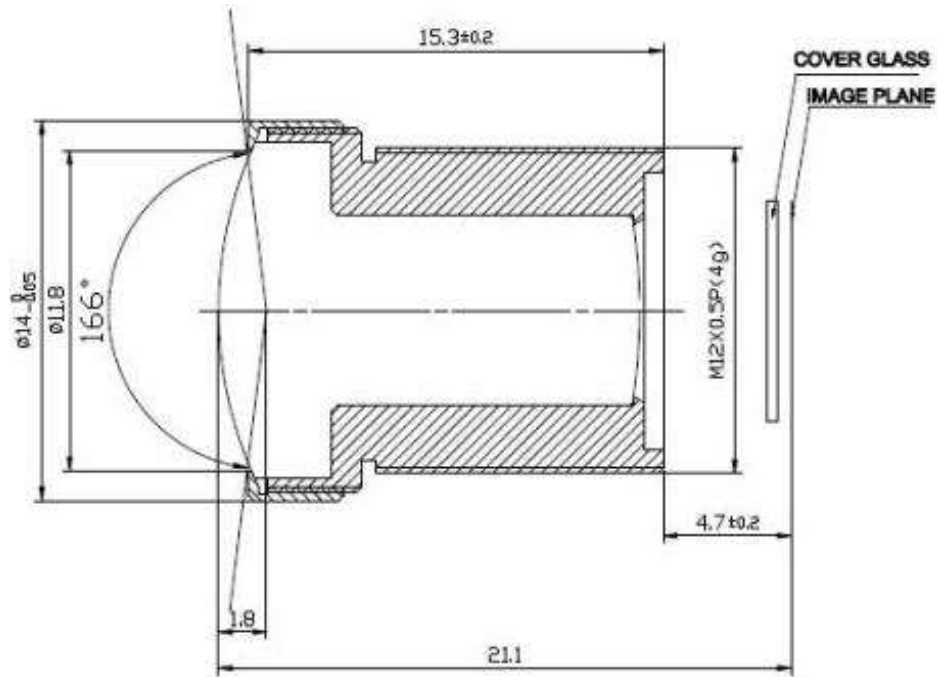


Description	Specification
Image Format	1/2.3" (1/2.5" for AR0521)
Focal Length	3.0 mm
Aperture (F/#)	2.8
FOV	140.5°(D), 110°(H), 82°(V) (with 1/2.5" AR0521)
Distortion	< 35 %
Chief Ray Angle	< 16.5°
Lens Barrel Thread	M12 x 0.5

**Table 2: Optical Specifications of Lens**

## 6 Mechanical Dimensions

The mechanical dimensions of lens used in e-CAM50\_CUIMX8 is shown below.



**Figure 1: Lens Mechanical Dimensions**

**Note:** All dimensions are in mm.



## Support

### Contact Us

If you need any support on e-CAM50\_CUIMX8 product, please contact us using the Live Chat option available on our website - <https://www.e-consystems.com/>

### Creating a Ticket

If you need to create a ticket for any type of issue, please visit the ticketing page on our website - <https://www.e-consystems.com/create-ticket.asp>

### RMA

To know about our Return Material Authorization (RMA) policy, please visit the RMA Policy page on our website - <https://www.e-consystems.com/RMA-Policy.asp>

### General Product Warranty Terms

To know about our General Product Warranty Terms, please visit the General Warranty Terms page on our website - <https://www.e-consystems.com/warranty.asp>

