

Datasheet Zinc3265 PCIe

Zinc3265 PCIe

65.4 Megapixel, Small, Rugged,
Low Power with Large Feature Set

Innovative Approach

Zinc3265 PCIe is an ultra-thin high speed, low-cost, low-power Global shutter CMOS camera with a Gen 3 PCIe interface supporting up to 4 lanes over Samtec high speed connector/cable which supports 65.4 Megapixel high quality video at rates up to 50.0 fps.

Intelligent Design

With an extremely compact form factor, the **Zinc3265 PCIe** fits into small spaces. The superior sensor performance provides high quality images with great dynamic range, low noise and excellent low-light vision capabilities.

Key Features:

- 65.4 Megapixel up to 50.0 fps
- Monochrome and Color sensor variation
- Up to 15 W power at full rate
- Full image processing feature set
- PCI Express Gen 3 standard compliant
- Gen<i>Cam compliant
- Up to 4 PCI Express links
- F, M42, EF or Active EF lens mounts available
- Commercial and Industrial grade options
- Full EMVA1288 report
- Full built-in self-test (BIT)
- Full built-in voltage testing
- Customization as per user requirements

Applications:

- Flat Panel Inspection
- PCB Inspection
- Security & Surveillance
- UAV
- Machine Vision
- Robotics
- Microscopy & Medical Imaging
- Space

TECHNICAL DATA

General	
Pixel Size	3.2 μm x 3.2 μm
Resolution	9344 (H) x 7000 (V)
Sensor Size	37.4 mm diagonal
Sensor	Gpixel GMAX3265
Sensor Type	CMOS
Output Interface	PCI Express Gen 3
Supported Interface rates	Gen 1, Gen 2 or Gen 3
Interface Connector	Samtec
Number of Connectors	4
Output Resolution	8, 10 or 12 bit
Maximum Frame Rate	High Speed Version <ul style="list-style-type: none"> • 50 fps @8 bit resolution • 40 fps @10 bit resolution Normal Speed Version <ul style="list-style-type: none"> • 31 fps @8 bit resolution • 31 fps @10 bit resolution • 31 fps @12 bit resolution
Tap Geometry	1X-1Y
Image Acquisition	Continuous / Triggered
Camera Control	Gen<i>Cam
Electronic Shutter	Global
Monochrome / Color	Monochrome or Color
Temporal Noise	<2.3 e- at 25 °C
Full Well Charge	10900 e-
Dynamic Range	>65 dB at 520 nm
Signal-to-Noise Ratio (SNR max)	38.1 dB at 520 nm
Quantum Efficiency (QE)	>65.3% at 520 nm
Shortest Exposure	13.35 μs
IR Filter (optional)	<ul style="list-style-type: none"> • UV cut below 400 nm • IR cut above 700 nm
Exposure control	Automatic/Manual
Gain control	Automatic/Manual
Color Control	<ul style="list-style-type: none"> • RGB offsets • Auto / Manual White balance • LUT
Image enhancement	<ul style="list-style-type: none"> • Defect pixel correction • Gain (Analog / Digital) • Auto / Manual black level • Binning • Auto Exposure / Gain • Flat field / Fixed pattern noise correction

Additional on camera processing	<ul style="list-style-type: none"> • ROI • Image flip • Frame counter • Operational Time Counter • Binning
Power Input	• External 10 V - 28 V input
Power Consumption	<15 W at 24 V DC
Configuration software	Gen<i>Cam Standard software
Synchronization	Protocol/External I/O Trigger
Exposure Strobe output	Yes

Mechanical	
Dimensions (including lens mount)	62 mm x 62 mm x 44.4 mm (2.4" x 2.4" x 1.7")
Weight (without lens)	450 g (15.9 oz)
Lens Mount	F, M42, EF or Active EF
Sensor Alignment	Active
Ingress Protection	Optional IP67 (with protective lens tube)

Environmental Conditions	
Operating ambient air temperature	Commercial : 0°C to +50°C (32°F to +122°F) Industrial : -40.0°C to +70°C (-40°F to +158°F)
Operating ambient air humidity	10% to 90% RH non-condensing
Storage ambient air temperature	Commercial : 0°C to +55°C (32°F to +131°F) Industrial : -40.0°C to +75°C (-40°F to +167°F)
Storage ambient air humidity	10% to 90% RH non-condensing
Operational Shock	Tested per MIL-STD-810G Method 516.6, 3-axis Shock 75G
Operational Vibration	Tested per MIL-STD-810G Method 514.6, 3-axis Vibration Category 20
MTBF	1,600,000 hrs @ 50C (Telecordia)

Certifications	
Electromagnetic - EMC standards	<ul style="list-style-type: none"> • The European Council EMC Directive 2004/108/EC • The Unites States FCC rule 47 CFR 15
EMC - Emission	<ul style="list-style-type: none"> • EN 55022:2010 Class B • FCC 47 Part 15 Class B
EMC - Immunity	<ul style="list-style-type: none"> • EN 55024:2010 Class B • EN 61000-4-3 • EN 61000-4-4 • EN 61000-4-6
Flammability	PCB compliant with UL 94 V-0
RoHS	Compliant with the European Union Directive 2011/65/EU (RoHS2)
REACH	Compliant with the European Union Regulation No 1907/2006

WEEE

Must be disposed of separately from normal household waste and must be recycled according to local regulations

Zinc3265HSM-SF

Speed
– Normal Speed
HS – High Speed

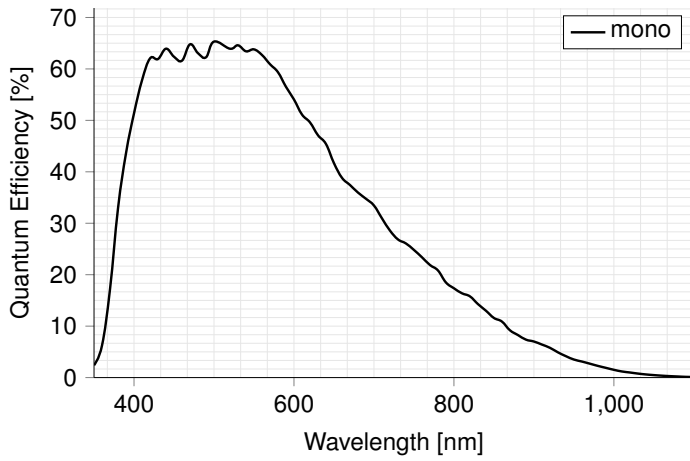
Color options
M – Monochrome
I – Mono with IR Filter
N – Color w/o IR Filter
C – Color

Grade
S – Commercial
R – Industrial

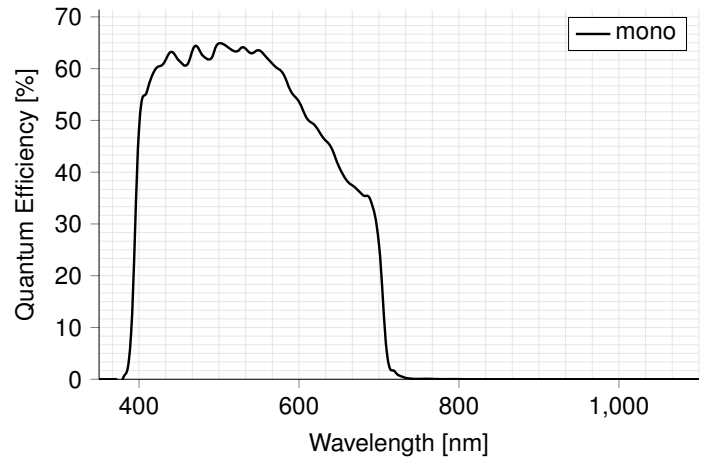
Lens mount
F – Nikon F-Mount
M – M42-Mount
E – Canon EOS-Mount
B – Active Canon Mount

SPECTRAL RESPONSE

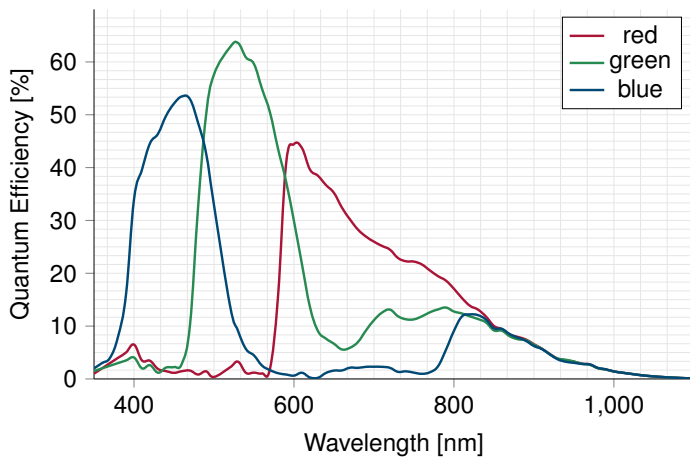
Monochrome



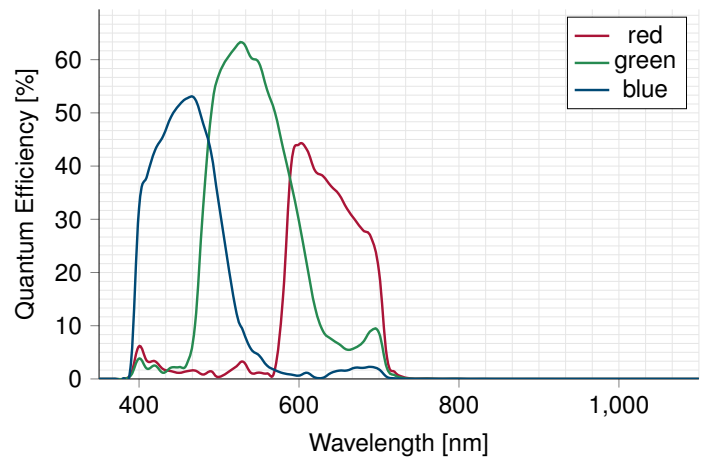
Monochrome with IR Cut Filter



Color



Color with IR Cut Filter



COMPATIBILITY

KAYA Instruments creates and maintains compatibility and interfaces for the most common and advanced vision image processing libraries and applications. Major support is available for **MVTec Halcon**, **National Instruments' LabVIEW** and **MathWorks' MATLAB**.

Supported vision standards:



Supported vision libraries:



Supported operating systems:



Please check our website for an up-to-date list of other supported libraries and software package.

International Distributor



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KAYA Instruments

Please feel free to contact our sales team for pricing, availability, documentation or customization at our e-mails – we will be happy to provide assistance and consultation.

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