

# C4080



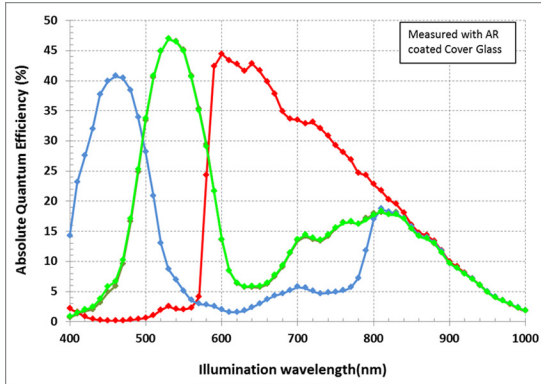
**IMPERX:** Technically superior products, full tech support, rapid-response customer care. Cheetah adds many new features, extended dynamic range, dual video output and enhanced image quality. Each easy to use Cheetah is supported by IMPERX professionals.

**INTERFACES AVAILABLE:**

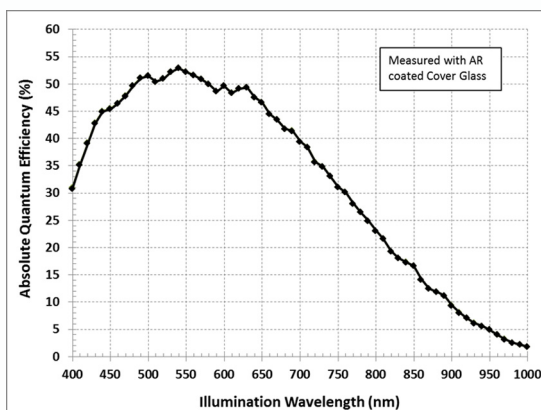
- Standard Resolution
- Maximum Resolution
- Sensor
- Sensor Format
- Pixel Size
- NIR Sensitivity
- Shutter
- Blooming Suppression
- Column/Row Noise Correction
- Digitization
- Frame Rate
- Clock Rate
- Dynamic Range
- Extended Dynamic Range (XDR)
- Output Format
- Analog Gain Control
- Digital Gain
- White Balance
- Shutter Speed
- Exposure Control
- Regions of Interest (ROI)
- Averaging Decimation
- Sub-sampling Decimation
- Dual Video Capability
- Dual Video Frame Switching
- Auto Dual Frame Switching
- Frame A/B Settings

- Camera Link® Full (CLF), CoaXPress (CXP)
- 4000 x 3000
- 4016 x 3016
- KAC-12040, CMOS
- 18.8 mm (H) x 14.1 mm (V), 23.5 mm diag, 4/3" optical
- 4.7 µm
- 850nm: 15%, 950nm: 5%
- Global shutter (GS), rolling shutter (RS)
- >10,000 Vsat, Black Sun Suppression
- 1 electron (RS), 5 electrons (GS)
- 8, 10, or 12 bit
- 30 fps (12-bit), 55 fps (10-bit), 67 fps (8-bit)
- 85 MHz
- 73 dB (RS), 56 dB (GS)
- 100 dB (typ) GS, up to 2 knee points, piecewise linear
- Mono: 8, 10, 12; Color 8, 10, 12
- 12-bit: 0-12 dB (16 steps); 8 or 10-bit: 0-18 dB (32 steps)
- 24 dB (128 steps)
- Manual, auto, off
- 1µs/step, 5 µs to 1.0 sec (GS), 2 µs to 1.0 sec (RS)
- Off, internal, external
- 1 ROI per frame (see Dual Video feature below)
- 4:1, 9:1 (both color and monochrome)
- N pixels: 2, 4, 6...30 by every M pixels: 2, 4, 6... 32
- Two programmable frames: Frame A and Frame B
- Manual, Auto, External Trigger
- 'M' (1 to 255) Frame A's, 'N' (1 to 255) Frame B's, repeat
- Independent control of each frame's: resolution, gain, offset, pixel averaging, sub-sampling, ROI, XDR
- External, pulse generator, software, computer
- Edge, debounce
- Internal, external, computer
- 2 IN (LVTTTL), 2 OUT (TTL), user programmable
- 2 strobes, programmable position and duration
- Yes, programmable
- Vertical/horizontal flip
- Defective/hot pixel correction (static, dynamic)
- F-Mount (Default), C, M42, EF
- 12VDC (10V-15V), 1.5 A inrush
- CLF 340 mA @ 12V, CXP TBD
- 74.0mm (W) x 74.0mm (H) - Applies to all interfaces
- CLF 86.0mm (L), CXP - TBD
- CLF TBD g, CXP - TBD g
- 100g (20-200) HZ XYZ, 1000g
- 40°C to +85°C Operating, -50°C to +90°C Storage
- 10% to 90% non-condensing
- >660,000 hours @ 40°C (Telcordia SR-322)
- FCC 15 part A, CE, RoHS

Color (Bayer RGB) with Microlens KAC-12040



Monochrome with Microlens KAC-12040



- Trigger Inputs
- Trigger Options
- Trigger Modes
- External Inputs/Outputs
- Strobe Output
- Pulse Generator
- Image Enhancement
- Corrections
- Lens Mount
- Supply Input Range
- Power Consumption
- Size - Width/Height
- Size - Length
- Weight
- Vibration, Shock
- Environmental
- Humidity
- MTBF
- Regulatory

Preliminary





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### Power and I/O Interface:



- 1 12V DC Return
- 2 +12V DC
- 3 N/C
- 4 RS232-TX
- 5 RS232-RX
- 6 OUT1/2 Return
- 7 OUT1 Signal
- 8 IN1 Signal
- 9 IN2 Signal
- 10 IN1/2 Return
- 11 GPIO
- 12 OUT2 Signal

### C4080 Ordering Information

#### Interfaces available

- Camera Link® Full (CLF)
- CoaXPress (CXP)

#### Sensor types available

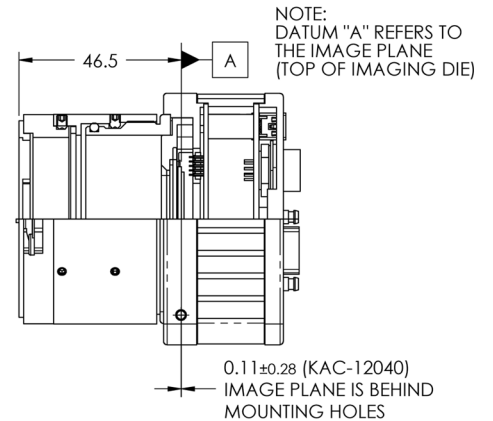
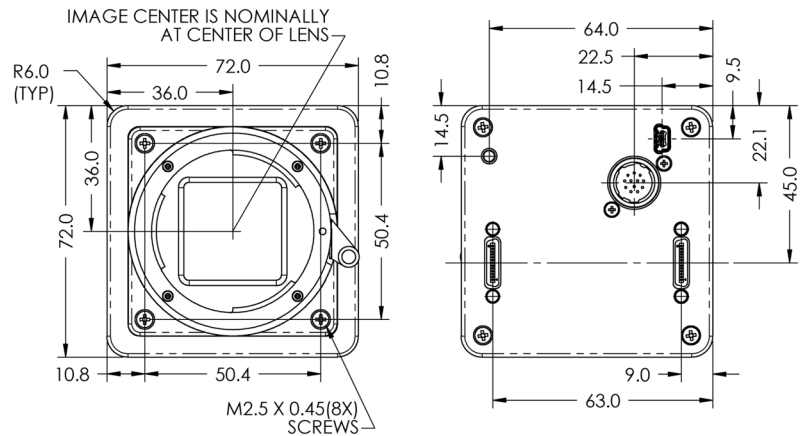
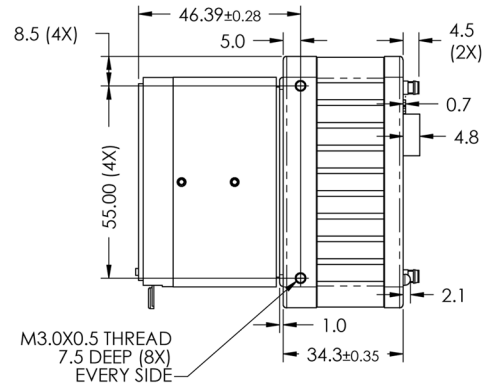
- Monochrome
- Bayer Color

#### Lens Mounts

- F Mount (Default)
- C Mount
- M42
- EF

#### Accessories (Sold separately)

- PS12V04-Power Supply w/ 1 input and 1 output



Quality Management System ISO 9001:2008 Registered  
 Environmental Management System ISO 14001:2004 Registered  
 DDTC Registered (Directorate of Defense Trade Controls, US Department of State)

