**Imperx**:

Technically superior products, full tech support, rapid-response customer care. “Bobcat 2.0” adds many new features, lens control, more memory and enhanced image quality. Each easy to use Bobcat is supported by Imperx professionals.

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**B0610**

**Interfaces Available:**
- Camera Link® Base (PoCL), GigE Vision, PoE, CoaXPress
- Resolution: 640 x 480 (std.), 648 x 488 (max.)
- Sensor: KAI-0340S, CCD
- Sensor Format: 4.79mm (H) x 3.61 mm (V) 5.92mm diagonal 1/3” optical format
- Pixel Size: 7.40 μm
- Frame Rate Standard Clock: 40 MHz / 109 fps
- Frame Rate Overclocked: 50 MHz / 136 fps
- Maximum Frame Rate: 1855 fps
- Minimum S/N Ratio: 60dB
- Output Format: Mono CCD: 8, 10, 12, 14-bit (Single only)
  - Color CCD: 8, 10, 12, RGB 24
- Analog Gain Control: Manual, Auto: 0 - 36dB 1024 steps
- Black Level Control: Manual, 1024 steps
- Digital Gain and Offset: Manual
- RGB Gain and Offset: Manual
- White Balance: Manual
- Shutter Speed: 1us/step, 1/500,000 to 1/110 sec (nom)
- Exposure Control: Manual, auto, external
- Long Integration: Up to 16 seconds
- Regions of Interest (ROI): 7 ROIs, any line to any line, any pixel to any pixel
- Binning H/V: 1x, 2x, 3x, 4x, 8x (Independent for H & V)
- Trigger Inputs: External (TTL via IN1/IN2), pulse generator, software, computer
- Trigger Options: Level, edge, pulse width, internal exposure, up to 16 seconds trigger delay, debounce
- Trigger Modes: Free-run, standard, double, fast, asynchronous, frame accumulation
- Double Trigger (PIV) Interframe: Time: 200 nanoseconds
- External Inputs/Outputs: 2 IN, 2 OUT, user programmable
- Strobe Output: 2 strobos, programmable position and duration
- RS232 Interface: Yes, programmable
- Pulse Generator: Yes, programmable
- Image Overlay: Optical center, programmable H & V lines
- Image Enhancement: Threshold, contrast enhancement, knee correction, horizontal flip, negative image, bit shift (+/- 7 places)
- Internal DDR Memory: 2Gb (256 MB)
- On Board FIFO (GEV & PoE): 1Gb (128 MB)
- Gamma Correction: G=1.0, G=0.45, user upgradeable LUT
- Data Corrections: Defective/hot pixel correction (static, dynamic), black level, vertical smear
- Minimum Illumination: 1 Lux, F/ 1.4
- Lens Mount: C-Mount (Default), CS
- Auto, programmable
- Video Iris Control: Manual, user programmable
- Iris, Zoom Focus Control: 12VDC (10V - 15V), 1.5 A inrush
- Supply Input Range: CLB 2.3W, GEV 3.9W, PoE 4.8W, CXP TBD
- Power Consumption: 46 mm (W) x 46 mm (H) - Applies to all interfaces
- Size - Width / Height: CLB 46.8mm (L), GEV 64.7mm (L), PoE 78.3mm (L), CXP 54.5mm (L)
- Size - Length: CLB 160g, GEV 217g, PoE 319g, CXP 208g
- Weight: 100g (20-200) HZ XYZ, 1000g
- Vibration, Shock: -40°C to +85°C Operating, -50°C to +90°C Storage
- Humidity: 10% to 90% non-condensing
- MTBF: >660,000 hours @ 40°C (Telcordia SR-332)
- Regulatory: FCC 15 part A, CE, RoHS
BOBCAT 2.0 B0610 Specifications

**GigE Vision (Without PoE)**

- Interfaces available:
  - Camera Link® Base (CLB)
  - GigE Vision (GEV / PoE)
  - CoaXPress (CXP)

**GigE Vision (With PoE)**

- Interfaces available:
  - Camera Link® Base (CLB)
  - GigE Vision (GEV / PoE)
  - CoaXPress (CXP)

**Camera Link**

- Interfaces available:
  - Camera Link® Base (CLB)
  - GigE Vision (GEV / PoE)
  - CoaXPress (CXP)

**Hirose Connectors**

Power and I/O Interface

1. 12V DC Return
2. +12V DC
3. IRIS VCC
4. IRIS Video
5. IRIS Return
6. OUT1/2 Return
7. OUT1 Signal
8. IN1 Signal
9. IN2 Signal
10. IN1/2 Return
11. Reserved
12. OUT2 Signal

*Not connected for CXP

Lens Control/RS232

- See manual for PIN information

1. IRIS Return
2. IRIS VCC
3. IRIS Video
4. IRIS -
5. IRIS +
6. FOCUS -
7. FOCUS +
8. ZOOM -
9. ZOOM +
10. UART_COM
11. UART_RX
12. UART_TX

Connector: Hirose HR 10A-10R-12PB(71)

**B0610 Ordering Information**

- **Interfaces available**
  - Camera Link® Base (CLB)
  - GigE Vision (GEV / PoE)
  - CoaXPress (CXP)

- **Sensor types available**
  - Monochrome
  - Bayer Color

- **Accessories (Sold separately)**
  - PS12v04-Power Supply w/ 1 input and 1 output
  - PS12v05-Power Supply (as above) and Video Iris

**Accessories**

- PS12v04-Power Supply w/ 1 input and 1 output
- PS12v05-Power Supply (as above) and Video Iris

**Common Image Plane Distance**

- **CoaXPress**
  - IMAGE PLANE

- **Camera Link**
  - IMAGE PLANE

**BOBCAT 2.0 B0610**

bobcat-B0610-v2,Rev1