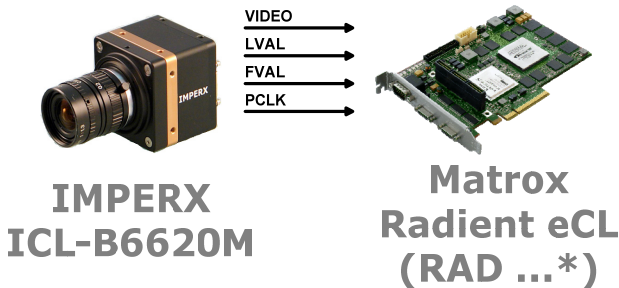


Matrox Radient eCL

Camera Interface Application Note

IMPERX ICL-B6620M

December 16, 2011

Basics about the camera	Camera Descriptions ▪ Effective resolution: 6600 x 4400 x 8 or 12 bit @ 1.8 fps(2.5 fps in Overclocked Mode) ▪ Camera Link BASE interface (Dual tap). ▪ Progressive scan. ▪ Internal sync. ▪ External or internal exposure control. ▪ 30 MHz pixel clock rate (50 MHz in Overclocked Mode).
Mode of operations as per Matrox Imaging (in parentheses as per camera manufacturer)	Interface Mode ▪ Continuous (Free Running)
Basics about the interface modes	Camera Interface Briefs <i>Mode 1: Continuous</i> ▪ 6600 x 4400 x 8 or 12 bit @ 1.8 fps(2.5 fps in Overclocked Mode) ▪ Camera Link BASE interface (Dual tap). ▪ Matrox Radient eCL receiving LVAL, FVAL, CLK and video from camera. ▪ DCF used: ICL-B6620M6600x4400_8bit2TapCon.DCF ▪ DCF used: ICL-B6620M6600x4400_12bit2TapCon.DCF  IMPERX ICL-B6620M Matrox Radient eCL (RAD ...*)
Specifics about the interface modes	Camera Interface Details <i>Mode 1: Continuous</i> ▪ Frame rate: Matrox Radient eCL receives the continuous video from the camera at 1.8 frames per second. (2.5 frames per second in Overclocked mode) ▪ Exposure time: Exposure time is set using the Imperx Bobcat Camera Configuration Utility. Refer to the camera manual for commands description and usage.

Matrox Radiant eCL

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Specifics about the interface modes

Camera Interface Details (cont.)

Mode 1: Continuous

- **Camera configuration:** The camera mode is set as follows using the Imperx Bobcat Camera Configuration Utility. Refer to the camera manual for commands description and usage: Data Output | Video Data | Taps = Dual | Format = 2 Tap Interleaved | Depth = 8 bit and 12 bit

Cabling details for the interface modes

Cabling Requirements

Mode 1: Continuous

- **Cable and Connection:** One Mini-To-Mini Camera Link cable.

The DCFs mentioned in this application note are also attached (embedded) to this PDF file – use the Adobe Reader's View File Attachment to access the DCF files. The information furnished by Matrox Electronics System, Ltd. is believed to be accurate and reliable. Please verify all interface connections with camera documentation or manual. Contact your local sales representative or Matrox Sales office or Matrox Imaging Applications at 514-822-6061 for assistance. © Matrox Electronic Systems Ltd, 2010-2011.

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