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TECHNOLOGY GROUP

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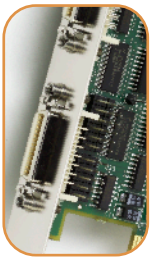
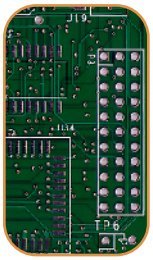
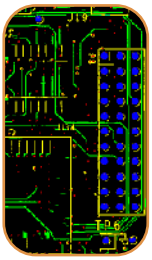
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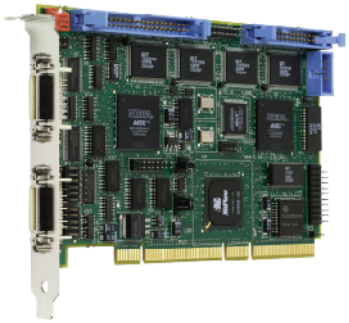
Visit our website - *Click HERE*

R64

Camera Link
Frame Grabber

CONNECT  ACQUIRE  PROCESS  DONE.

The R64-CL Camera Link frame grabber takes high-speed imaging to the next level by offering a solution for the 64-bit/66Mhz PCI bus. Featuring an enhanced version of the time-tested and proven FlowThru architecture that BitFlow pioneered more than 6 years ago, the R64-CL product line follows the tradition of its predecessors by supporting image acquisition at today's camera speeds with zero latency and CPU usage. Combining the built-in flexibility to support hundreds of off-the-shelf and proprietary cameras with the simplicity of a Camera Link interface, the R64-CL offers the best camera interface solution for the most demanding OEM, System Integrator or End-User applications.



CAMERA LINK INTERFACE The R64-CL features a single or dual Camera Link camera interface configuration. In the single camera configuration, the R64-CL is capable of supporting a Base, Medium or Full Camera Link camera. Output configurations include two taps, three taps (RGB), four taps and eight taps. The dual camera configuration R64-CL is capable of supporting two identical Base Camera Link cameras. Area cameras must be synchronized via a common vertical reset signal.

FLOWTHRU ARCHITECTURE For the last 6 years, BitFlow's frame grabber products have been built around our revolutionary FlowThru architecture. Comprised of a user-programmable Video Pipeline, a flexible Camera Control Unit, efficient high-speed video FIFOs and a highly-optimized scatter/gather DMA engine, the FlowThru architecture allows the R64-CL to control, acquire, reformat and transfer video data directly into the user's application at camera speeds with zero latency and CPU usage. Our FlowThru architecture has been continuously optimized and enhanced to support a wide variety of imaging applications such as document/package processing, semiconductor, continuous web inspection, sequence capture and motion analysis and can easily be adapted to the specific needs of your application.

VIDEO PIPELINE BitFlow's Video Pipeline (VP) is a key component of the FlowThru architecture that is featured on the R64-CL product. The VP is designed to efficiently manipulate and move video data from the board's Camera Link input, through the FIFOs and to the board's DMA engine. The VP can perform arbitrary shifts on pixel data (beneficial for real-time display of 10, 12, 14 or 16-bit pixel data), generate synthetic test images, apply user-defined masks, perform arithmetic operations and control on-the-fly reformatting. The user can program the VP via a camera configuration file or their application.

CAMERA CONTROL & I/O Supported by a GUI camera file editing utility (CamEd), the R64-CL's Camera Control Unit (CCU) provides full support for monochrome or color area and line scan cameras and their operating modes. The CCU can acquire fixed or variable size frames (up to 256K x 128K) and lines (up to 256K x unlimited lines in continuous acquisition mode, 256K x 128K in triggered acquisition mode) and features a programmable AOI (Area Of Interest) sub-windowing capability. Camera control signals such as exposure and asynchronous reset can be customized to the camera's capabilities. Programmable TTL, differential and opto-coupled I/O signals such as trigger, encoder (with onboard rate control capability), synch generator, general purpose inputs and general purpose outputs provide flexibility when interfacing to system control equipment and ensure trigger to image accuracy. The R64-CL board, as with our past interface products, is capable of supporting not only simple triggering modes but also extremely complicated, application-specific modes as well.

64-bit/66MHz PCI BUS The R64-CL supports the following bus configurations: 32-bit/33MHz, 32-bit/66MHz, 64-bit/33MHz, 64-bit/66MHz as well as PCI-X.

FEATURES

- Half-Size 64-bit/66MHz PCI 2.2 bus mastering frame grabber.
- Base, Medium, Full or Dual-Base Camera Link interface.
- Proven FlowThru architecture.
- Onboard processing capability supports real-time Bayer color decoding (contact us for details).
- Up to 66MHz pixel clock.
- On-the-fly reformatting for multi-tap cameras.
- Full support for monochrome and color cameras.
- Area image sizes up to 256K by 128K pixels.
- Line scan image sizes up to 256K horizontally,unlimited vertically.
- TTL, Differential and Opto-coupled user-programmable I/O.
- Numerous trigger modes for application specific acquisition and control.
- Supported by BitFlow SDK 4.00 or higher.
- Drivers and DLLs for Windows® NT, 2000 and XP.

Contact your local Distributor, Sales Representative, visit www.bitflow.com or call 1-781-932-2900 for more information.

BitFlow
Imaging Solutions

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

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We're here to make your life easier. How can we help you today?

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