PCIe-CML64FB/FP

1 Channel PCI Express® x4 Camera Link Full Configuration Frame Grabber

New

Grayscale Camera | RGB Camera | Camera Link | PCI EXPRESS® | Digital

Introduction

Camera Link is a communications interface developed for use in vision applications, and created for easy connectivity between the high-speed, high-resolution digital cameras and frame grabbers.

ADLINK PCIe-CML64FB/FP is a Camera Link frame grabber based on the PCI Express® x4 interface that supports one base/medium/full configuration Camera Link™ color and/or monochrome cameras. It delivers all the advantages of the PCI Express® bus while acquiring at the maximum Camera Link rate of 680 MB/s across the x4 lane, and can handle most of the frame and line scan cameras including the complete image reconstruction from outputs using multiple taps. The PCIe-CML64FB/FP utilizes FPGA based (Field Programmable Gate Array) design for greater image acquisition flexibility, high performance, and improved pre-processing functionality (PCIe-CML64FP). The PCIe-CML64FB/FP has been built within Up/down counter technology to control and correct image acquisition process from the external encoder input.
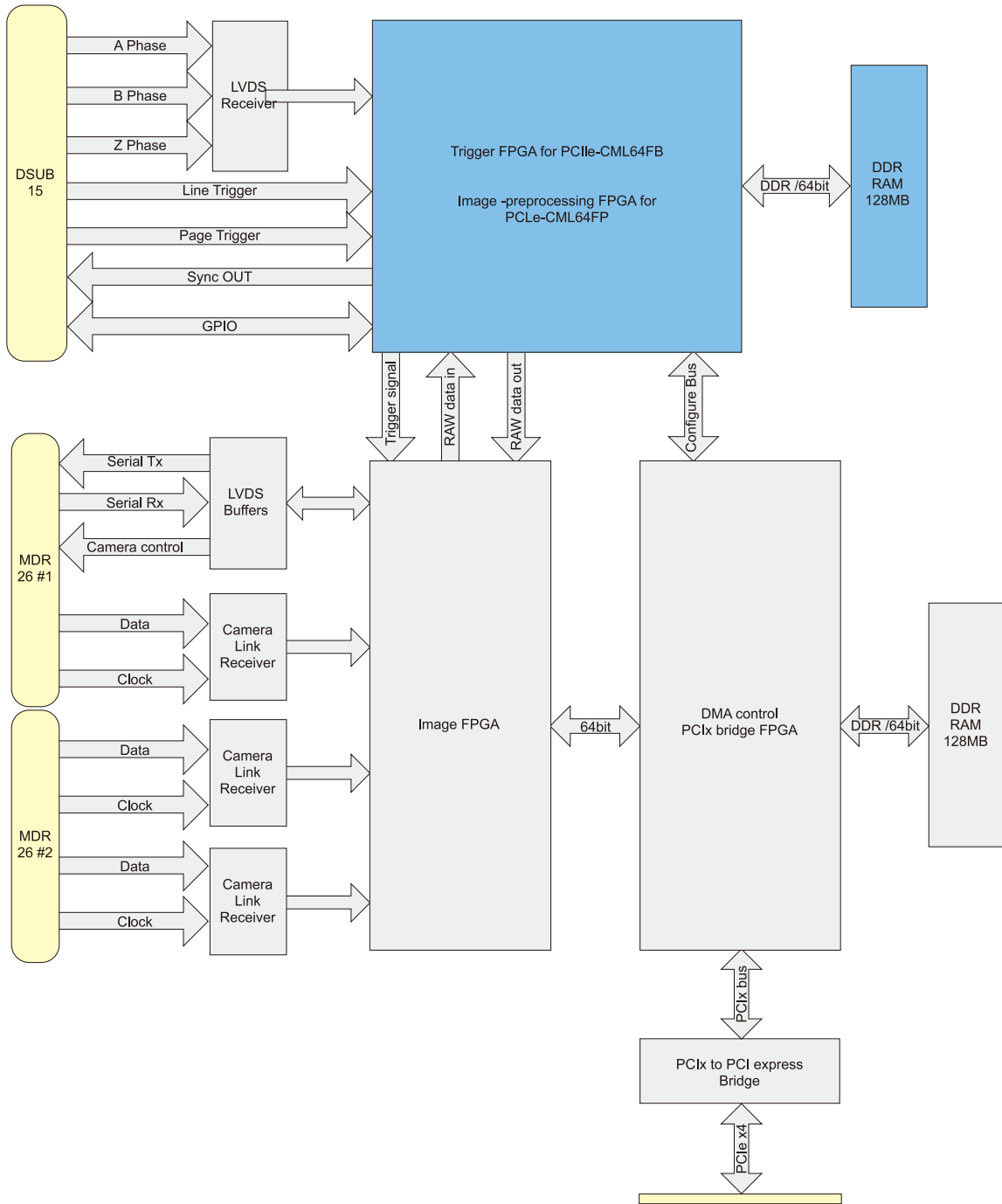
Features

- *One Channel Camera Link Full Configuration*
- *PCI Express® x4 interface*
- *Customizable FPGA-based Pre-processing core (60K logic elements, 128 MB DDR RAM Buffer for PCIe-CML64FP)*
- *High-speed image transfer rates up to 680MB/sec per channel*
- *Acquisition pixel clock rates up to 85 MHz*
- *128 MB DDR SDRAM on-board memory*

Ordering Information

PCIe-CML64FB	PCI Express x4 Camera Link frame grabber
PCIe-CML64FP	PCI Express x4 Camera Link frame grabber with FPGA image pre-processing

Specifications

Channels	1
Acquisition	Pixel clock rates up to 85 MHz
On Board RAM	128MB DDR RAM
Camera type	Area/Line
Pixel format	Full Camera: 8 x 8-bit/tap
	Medium camera: 4 x 8-bit/tap, 4 x 10-bits/tap, 4 x 12-bit/tap
	Base cameras: 3 x 8-bit/tap, 2 x 10-bits/tap, 2 x 12-bit/tap
Data transfer	DMA, single direction from FG to PC
Trigger	Line/Page Trigger (programmable, TTL/RS422) x1, Encoder Trigger (RS422, Up/down counter) x1
Digital I/O	1x TTL DI/DO
Safety compliance	CE/FCC, RoHS
Connector	26-pin MDR26 connector, DB-25 for I/O
Bus	PCI Express® x4 lane
On-board FPGA	Altera Statix II, 60K logic elements (PCIe-CML64FP)
Serial Communication	1xRS-232
Dimension	174.6 x 111.2 mm
Power Consumption	+12V@0.6A, +3.3V@3A
Software	Supports Windows® XP/Vista32
	Supports VC++ 6.0, VB 6.0, BCB 6.0
	Camcreator® utility

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All specifications are subject to change without further notice.