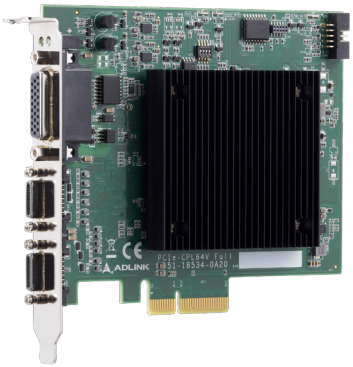
PCIe-CPL64V Full

PCI Express® Camera Link Frame Grabber with PoCL

Features

- PCI Express® Gen3 x4 compliant
- Supports 1-CH Camera Link® Full / Medium / Base configuration
- Acquisition pixel clock rates up to 85 MHz
- Maximum aggregated camera data transfer rate: 850 MB/s
- PoCL (Power over Camera Link®) safe power compliant with auto-detection
- 512 MB DDR for acquisition
- 4-CH Isolated Digital Input, 4-CH Isolated Digital Output
- 1-Pair A/B Phase Encoder Input
- Multi-card synchronization for image acquisition, up to 4 cards



Introduction

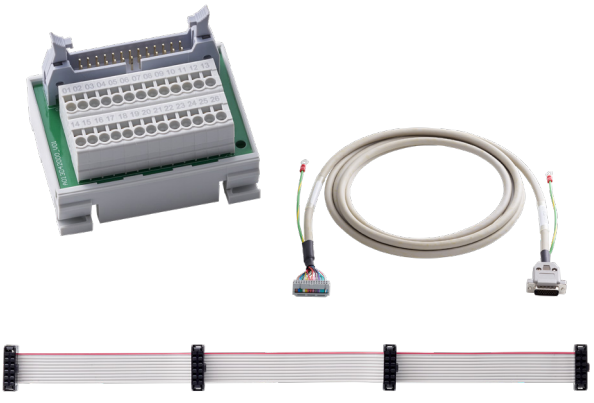
The PCIe-CPL64V Full is a Camera Link frame grabber featuring PCIe Gen3 x4 high-bandwidth connectivity and PoCL (Power Over Camera link) support. It supports one channel Base, Medium, and Full configurations, as well as multi-card synchronous intra-PC operation, making it a flexible solution for high-throughput, high-resolution machine vision systems.

Software Support

- **OS Information**
  Windows® 10/11 64-bit
- **Software Compatibility**
  VC++, C#, VB.NET
- **Software Recommendation**
  ADLINK CamCreator™

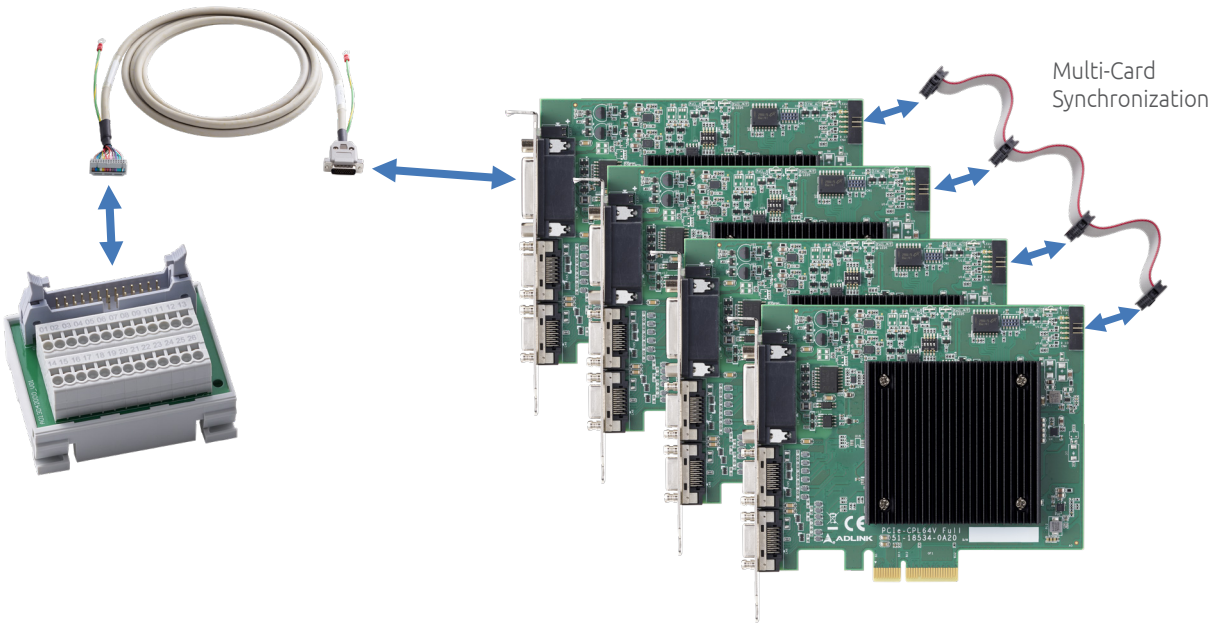
Ordering Information

- **26-Pin Terminal Board (92-97314-0010)**
  DINKLE 0241-C126, IDC 26P to 26P terminal block board
- **3 m I/O Extension Cable (30-22113-0000-A0)**
  Wire, 2x13P (2.54) to DB26P(M), L=3 m
- **5 m I/O Extension Cable (30-22113-1000-A0)**
  Wire, 2x13P (2.54) to DB26P (M), L=5 m
- **Multi-Card Synchronization Cable (30-10321-0000-A0)**
  Flat, 2x5P (2.0) to 2x5P (2.0) x3, L = 60/60/60±5 mm



Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

Connection Diagram



26-Pin Terminal Board Pinout Information

Pin	Signal	Usage
1	NC	Floating
2	EA+	Encoder Input Pair A+
3	EB+	Encoder Input Pair B+
4	NC	Floating
5	DI0+	Digital Input Pair0+
6	DI1+	Digital Input Pair1+
7	DI2+	Digital Input Pair2+
8	DI3+	Digital Input Pair3+
9	NC	Floating
10	DO0+	Digital Output0
11	DO1+	Digital Output1
12	DO2+	Digital Output2
13	DO3+	Digital Output3

Pin	Signal	Usage
14	NC	Floating
15	EA-	Encoder Input Pair A-
16	EB-	Encoder Input Pair B-
17	NC	Floating
18	DI0-	Digital Input Pair0-
19	DI1-	Digital Input Pair1-
20	DI2-	Digital Input Pair2-
21	DI3-	Digital Input Pair3-
22	NC	Floating
23	DO0-	DO GND
24	DO1-	DO GND
25	DO2-	DO GND
26	DO3-	DO GND

Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

Specifications

Model	PCIe-CPL64V Full
Form Factor	
PCI Express Specification	PCI Express Gen3 x 4
Port	
Connector	• 2x Shrunk Delta Ribbon (SDR) Connectors for Camera Link • 1x D-SUB 26-Pin Connector for I/O • 1x Box Header ML 2x5P for Multi-Card Synchronization
Video Input	
Camera Link Configuration	Supports Base, Medium, Full Camera Link® Configuration Cameras
Supported Camera Types	• Area-Scan Cameras • Line-Scan Cameras
Maximum Aggregated Camera Data Transfer Rate	850 MB/s
Tap Configuration	• 1 Tap - 8/10/12-Bit Mono/Bayer • 1 Tap -12-Bit RGB • 1 Tap - 8-Bit RGB • 2 Taps - 8/10/12-Bit Mono/Bayer • 2 Taps - 8-Bit RGB • 4 Taps - 8/10/12-Bit Mono • 8 Taps - 8/10-Bit Mono • 10 Taps - 8-Bit Mono
Camera Link Clock Frequency	From 20MHz Up to 85 MHz
On-Board Processing	
On-Board Memory	512 MB
General purpose I/O & Advanced Function	
Digital Input / Trigger In	4-CH Isolated Digital Input / Trigger Input @ 10KHz
Digital Output / Strobe Out	4-CH Isolated Digital Output / Strobe Out @ 500KHz
Encoder Input	- 1 x A/B Phase Encoder, Isolated Differential Input @ 5MHz (Max. 20MHz @ 4xAB Phase Mode) - Supports to 1/2/4 x AB Phase, OUT/DIR, CW/CCW Mode
Multi-card synchronization	Up to 4 Cards - The Latency Between Multiple Cameras < 100 ns
Isolation Voltage	500 Vrms
Power over Camera Link	
PoCL Function	- Power Line Output per SDR Connector: max @ 0.8A - Over-Current Protection Function Automatically Detects When Non-PoCL Cable or PoCL Camera is Connected
Software	
OS	Windows® 10/11 64-Bit
Programming Languages	VC++, C#, VB.NET
Utility	CamCreator™
Environmental Conditions	
Operating Environment	0°C to 60°C (32° to 140°F), 5% to 90% RHNC
Physical	
Dimensions (L x H)	130 mm x 111.28 mm
Certifications	
• CE/FCC Part 15, Class A	Yes
• EN 61000-6-4	Yes

All products and company names listed are trademarks or trade names of their respective companies. Updated Jan. 22, 2026. ©2026 ADLINK Technology, Inc. All Rights Reserved. All pricing and specifications are subject to change without further notice.