



## Key Features

- Interfaces:
  - Up to 4 CoaXPRESS links
  - Each link can be host or device (configuration specific)
  - External power supply for extended use of power over CXP (optional)
- VITA 57.1 compliant
- Conduction or air cooled
- 4 x Micro BNC connectors available from the front panel
- MIL-I-46058c conformal coating (optional)
- HPC – High Pin count connector
- 63mm x 84mm, single slot FMC
- Power over CoaXPRESS support
- Support standard CoaXPRESS data rates up to 12.5Gbps
- -40°C to 85°C operating environment temperature (industrial grade)

# FMC CoaXPRESS Mezzanine card

The FMC-CXP-II is the industry's first FPGA Mezzanine Card (VITA 57.1) providing a high performance CoaXPRESS 2.0 compliant connection. The FMC-CXP-II is capable of capturing video from up to 4 CoaXPRESS mode cameras and is ideally suited to industrial, defense and aerospace applications. This mezzanine card might be also used as camera simulator, emulating up to 4 transmitting channels. Customer specific data pre-processing or custom protocols are easily accommodated via FPGA carrier card. The FMC-CXP-II uses a high-pin count connector (HPC) as an interface to the host board, general purpose I/O and can be used in a ruggedized conduction cooled factor for harsher environments. Up to 4 host/device links can be provided using front panel Micro BNC connectors. Each link supports standard CoaXPRESS bitrates up to 12.5Gbps. Each host link is capable of providing up to 13W of power to compatible devices via Power over CoaXPRESS (PoCXP). The FMC-CXP can support up to 4 individual links, or combinations of aggregated CoaXPRESS links (e.g. one camera requiring one link, and two additional cameras each using two links).



## Applications

- High speed cameras
- High definition cameras
- Panoramic cameras
- Existing coax systems upgrade
- Defense remote systems
- Slip Ring systems
- Automotive surround view system
- Surveillance
- Robotic Vision

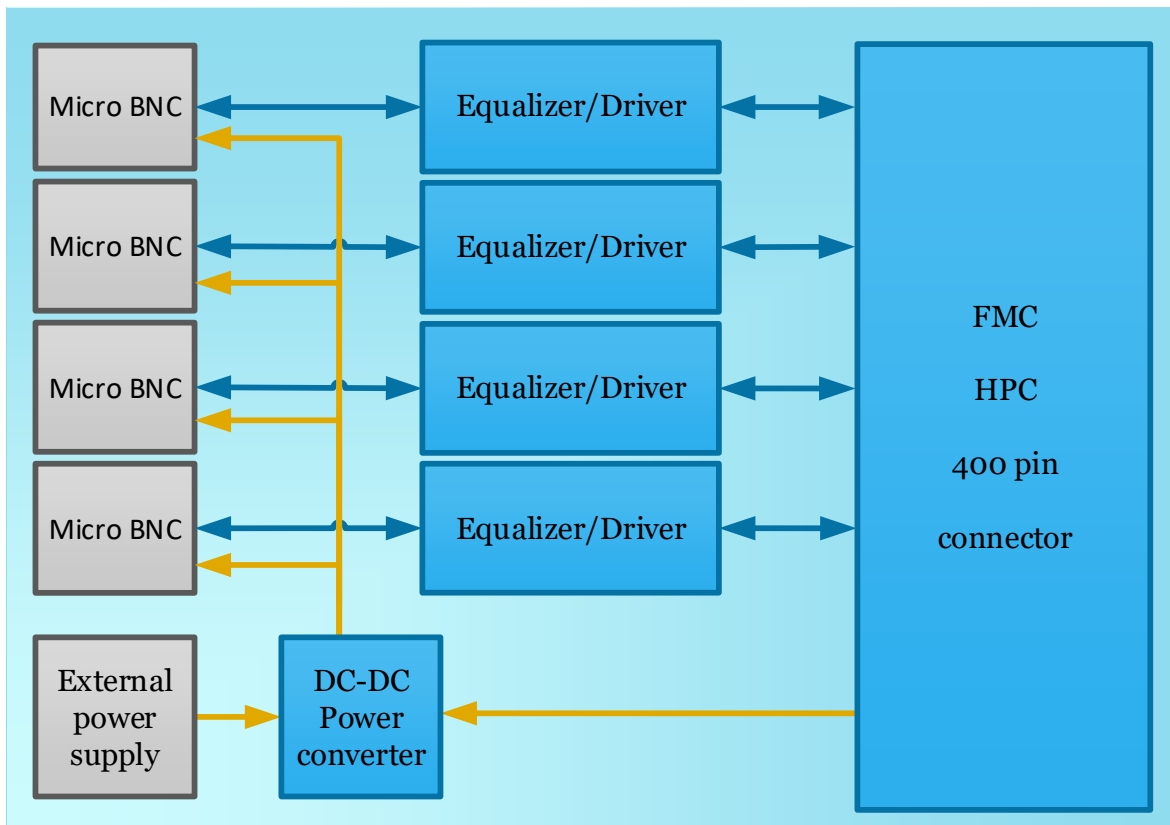
## Deliverables

- FMC-CXP-II card
- Hardware user manual
- Coax cables (optional)
- Complimentary CXP FPGA IP
- CoaXPress IP for FPGA
- Supports host and device interfaces
- Altera and Xilinx

## Available Configurations

| Model            | Host Links | Device Links |
|------------------|------------|--------------|
| KY-FMC-CXP-II-4R | 4          | 0            |
| KY-FMC-CXP-II-4T | 0          | 4            |

## FMC II CoaXPress Mezzanine card HW Block Diagram



## Compatibility

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### Supported vision standard



### Supported vision libraries



### Supported operating systems



### Compatible with most popular machine vision libraries

KAYA Instrument strives to create and maintain compatibility and interfaces for the most common and advanced vision image processing libraries and applications. Major support is available for **MVTec Halcon**, **National Instruments LabVIEW** and **MathWorks MATLAB**.

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### International Distributors



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