

# KIC502

## CompactPCI S.0 Interface Module



### Overview

The KIC502 interface module is an adapter for cable PCI Express connection of the CompactPCI Serial 3U system with external peripheral modules in the PCI Express External Cabling Specification standard.

In order to connect external devices, the PCI Express x4 link and standard Molex

iPass PCIe x4 cable are used.

The width of the x4 link makes it possible to connect bridges to VME, PCI-X and PCI buses, as well as any other devices that support PCIe x4 External, e.g. EKF SX9, SXS.

### Features

- PCI Express External cable connection (for KIC502-01), PCI Express External inter-case connection (KIC502-02);
- Power supply: Power supply voltage  $+12\text{ V} \pm 10\%$ , current consumption – 1A;
- Operating temperature range of the module: from  $-40$  to  $+85^\circ\text{C}$ ;
- Resistance to mechanical stress: Sinusoidal vibration with acceleration of no more than 5g, single shocks with a peak acceleration of no more than 100g, multiple shocks with a peak acceleration of no more than 50g;
- Weight: no more than 0.6 kg;
- MTBF: No less than 500,000 hours.

### Technical Specifications

#### Interfaces

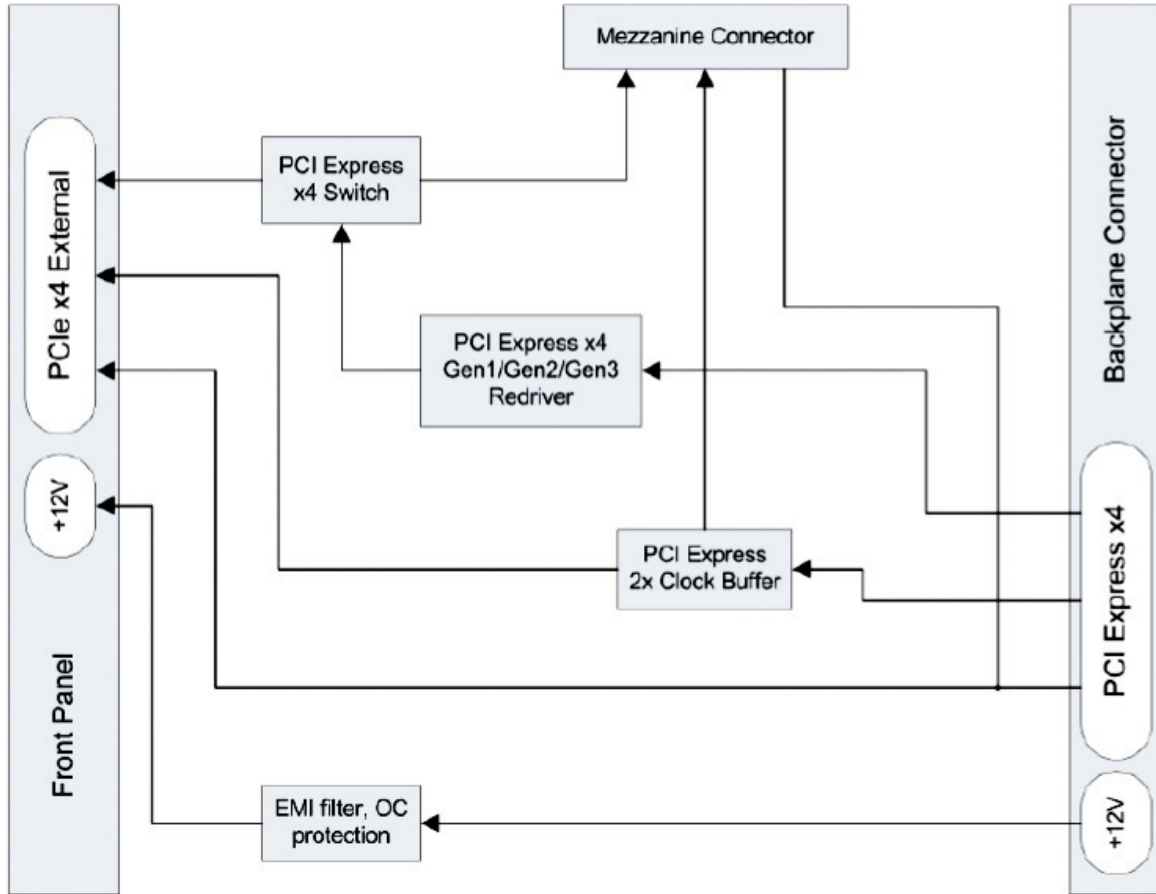
- CompactPCI Serial:
  - Width of the bus – PCIe x4;
  - Support of bandwidth capacity Gen1;
  - Module's dimensions – 3U/4HP;
- PCI Express External cable connection (KIC502-01):
  - Width of the bus – PCIe x4 (connector Molex iPass PCIe x4);
  - Support of bandwidth capacity Gen1 (2.5Gb/sec);
  - Improvement of signal format (redriver);
  - Cable maximum length – 7 m;
  - Additional power supply connector  $+12\text{ V}$  on the front panel;
- PCI Express External inter-case connection (KIC502-02):
  - Width of the bus – PCIe x4;
  - Support of bandwidth capacity Gen1 (2.5Gb/sec);
  - Improvement of signal format (redriver);
  - Rigid connection with KIC504 by mezzanine connector;
  - Location of the mezzanine PCIe connector (Samtec Q STRIP QSH) is similar to the one with CPC510 for an opportunity to use it together with MIC590, support of power supply of MIC590;
- Compatibility with the PICMG/VITA standards:
  - PICMG CPCI-S.0 R2.0 CompactPCI Serial;
  - PICMG 2.0 R3.0 CompactPCI;
- Structure of the I/O channels:
  - CompactPCI Serial, PCIe Gen1 x4;
  - PCI Express External x4 inter-case connection;
  - PCI Express External x4 cable connection;
- Power supply:
  - Power supply voltage:  $+12\text{ V} \pm 10\%$ ;
  - Consumption current: 1A;
- Operating temperature range:
  - from  $-40$  to  $+85^\circ\text{C}$ ;
- Resistance to mechanical stress:
  - Sinusoidal vibration for frequencies from 10 to 500 Hz with acceleration of no more than 5g;
  - Single shocks with a length of 1–5 ms and a peak acceleration of no more than 100g;
  - Multiple shocks with a length of 5–15 ms and a peak acceleration of no more than 50g;
- Weight: no more than 0.6 kg;
- Dimensions:
  - No more than 131.0 mm  $\times$  214.0 mm  $\times$  21 mm;
- Humidity:
  - Up to 80% at the temperature of  $25^\circ\text{C}$ , non-condensing;
  - Up to 95% at the temperature of  $25^\circ\text{C}$ , for /COATED option;
- MTBF: No less than 500,000 hours.



# KIC502

## CompactPCI S.0 Interface Module

### Block diagram



Fastwel



Fastwel



Fastwel

# KIC502

## CompactPCI S.0 Interface Module

### Ordering Information

### KIC502 Configuration

#### Configurations:

##### Versions

- |           |   |
|-----------|---|
| KIC502-01 | Interface Module, Power supply voltage: +12 V $\pm$ 10%, Dimensions: no more than 131.0 mm $\times$ 214.0 mm $\times$ 21 mm, weight: 0.6 kg, MTBF: no less than 500,000 hours, PCI Express External Cabling x4 for external cable connection; |
| KIC502-02 | Interface Module, Power supply voltage: +12 V $\pm$ 10%, Dimensions: no more than 131.0 mm $\times$ 214.0 mm $\times$ 21 mm, weight: 0.6 kg, MTBF: no less than 500,000 hours, PCI Express External Cabling x4 for inter-case connection;     |

Conformal coating is available (In this case, the version will be provided with the /COATED option)

#### Delivery checklist:

- KIC502-01 Interface Module for External Cable Connection;
- Packaging;
- KIC502-02 Interface Module for inter-case Connection;
- KIC504-02 Module with Mezzanine Connector, as a set with KIC502-02, with a common front plate;
- Packaging;

### Corporate Offices

#### FASTWEL GROUP Co. Ltd

108 Profsoyuznaya str.  
Moscow, Russia 117437  
Tel: +7 (495) 232-1681  
Fax: +7 (495) 232-1654  
E-mail: info@fastwel.com  
Web: www.fastwel.com

Ver. 1.10.2019

Product specifications are subject to change without notice



Fastwel



Fastwel



Fastwel