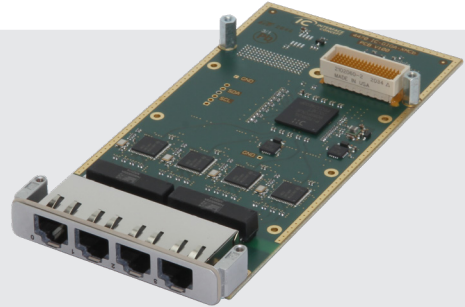# IC-GIGA-XMCb
Gigabit Ethernet XMC module

- *XMC (VITA42.3 or 61.0)*
- *4 * 10/100/1000 BASE-T*
- *PCI Express 4-lanes 5.0GT/s*
- *half and full-duplex transmission rates*

Overview

The **IC-GIGA-XMCb** is an XMC module providing up to four 10/100/1000 Ethernet channels.

Description

The on-board PCI Express Switch allows to access to the four Intel I210 Gigabit Ethernet controllers, being available via front panel RJ45 connectors.

PCI Express interface

- 1* PCIe x4 2.5GT/s or 5.0GT/s to Pn5

Ethernet interfaces

- 4* 10/100/1000 BASE-T to RJ45 connector

(4* Intel I210IT controllers)

10, 100 and 1000 Mbit/s transmission rates are supported for full or half duplex operation.
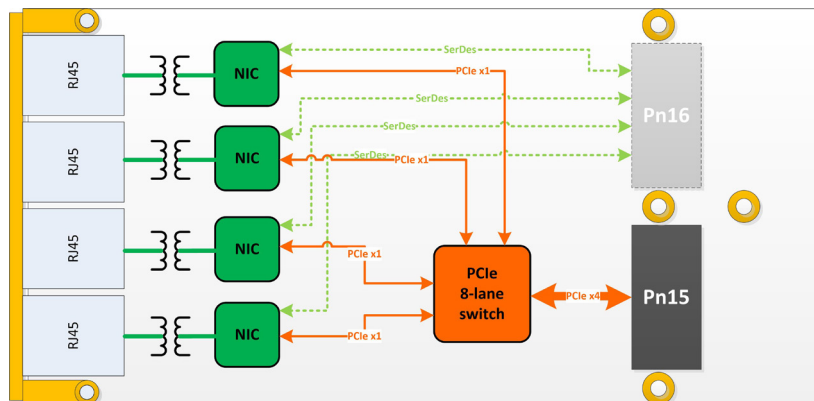
XMC standard

This Switch Mezzanine Card (XMC) is pluggable on any XMC slot being available on 6U VME or VPX Single Board Computers.

Operating systems

The Intel I210 Gigabit Ethernet controllers are supported under Linux or VxWorks.

The **IC-GIGA-XMCb** is available in air-cooled grade.

Block Diagram

Main features

- Four Intel I210 Gigabit Ethernet Controllers (NIC)
- One 8-lane PCI-Express Gen1/2 switch (Pn5 connector)
- Default Configuration: 4* 10/100/1000 BASE-T (front panel)
- Optional Configuration: 4* 1000 BASE-X SerDes (Pn6 connector)

Grades

Criterion	Coating	Operation Temperature	Rec. Airflow	Oper. HR% no cond.	Storage Temperature	Sinusoidal Vibration	Random Vibration	Shock 1/2 Sin. 11ms
Standard	Optional	0 to 55°C	1 .. 2 m/s	5 to 90%	-45 to 85°C	2G [20..2000]Hz	0.002g2 /Hz [10..2000]Hz	20G
Extended	Yes	-20 to 65°C	2 .. 3 m/s	5 to 95%	-45 to 85°C	2G [20..2000]Hz	0.002g2 /Hz [10..2000]Hz	20G
Rugged	Yes	-40 to 75°C or 85° C(*)	2 .. 5 m/s	5 to 95%	-45 to 100°C	5G [20..2000]Hz	0.05g2 /Hz [10..2000]Hz	40G
Conduction Cooled	Yes	-40 to 75°C or 85° C at the thermal interface(*)		5 to 95%	-45 to 100°C	5G [20..2000]Hz	0.1g2 /Hz [10..2000]Hz	40G

(*) : For some architectures, subject to limitation (or extension) depending on Frequency restriction / Processing usage rate. Consult us for more information.

All information contained herein is subject to change without notice.

For more information, please contact:

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