



Product Information CN1-CONGA

CompactPCI[®] Fast-Ethernet Hostadapter

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*The hostadapter CN1-CONGA from EKF interfaces any **CompactPCI[®]** systems to the most popular networking class, the 10/100Mbit/s Ethernet/Fast-Ethernet LAN.*

The 3U board (single sized Eurocard) is provided with a Twisted Pair interface according to IEEE802.3 (ANSI 8802-3) 10Base-T and 100Base-TX, half- and full-duplex. By employing the Auto-Negotiation algorithm, the technology capabilities of the remote link partner may be determined and operation automatically adjusted to the highest performance common operating mode.

The CN1-CONGA is built around the high-end LAN controller chip DEC 21143. Equipped with smart functionality and hardware features as FIFOs and several DMA channels, the 21143 minimizes the hosts load.

All popular operating systems, for example Windows98/NT or Linux, come with ready to use 21143 networking drivers. As an frontend, the ICS 1890 PHY (physical layer adapter) chip cares for a maximum data rate of 200Mbit/s in full-duplex, Fast-Ethernet mode.



The CN1-CONGA should be connected to the LAN (typically hub or switch) by shielded twisted pair (STP) and unshielded twisted pair (UTP) CAT5 cables up to a maximum length of 105m.

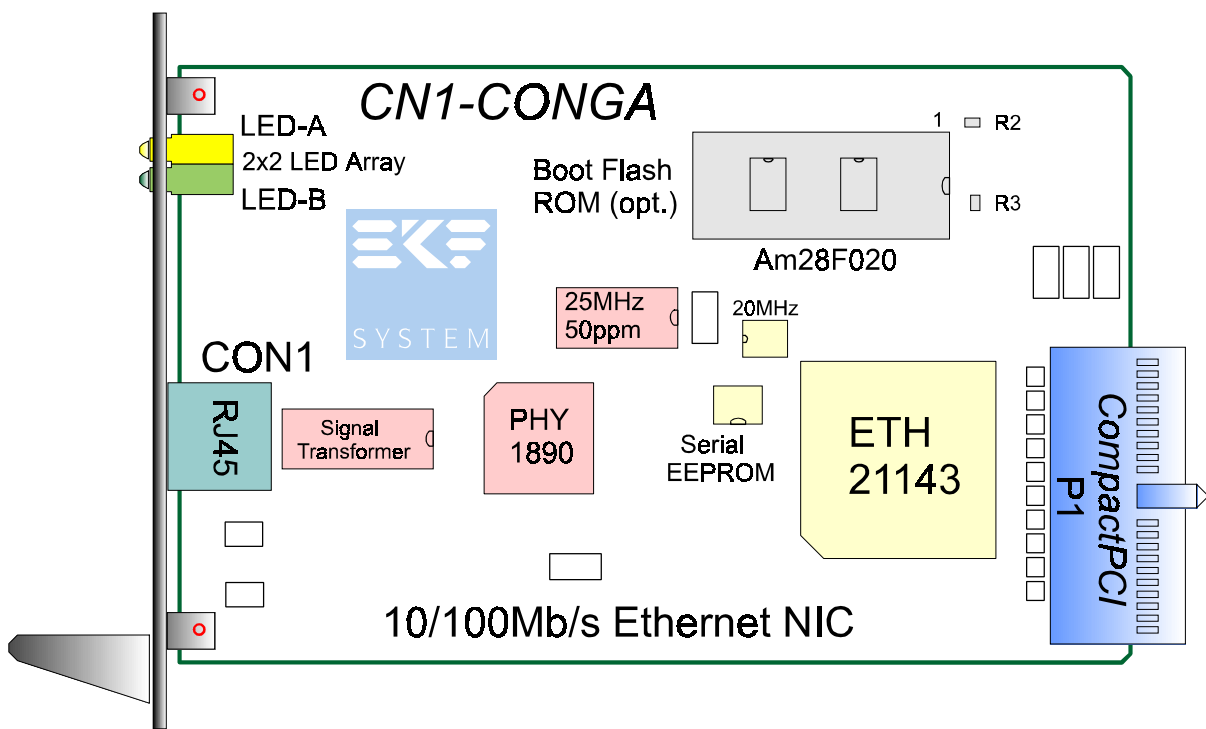
As an option, the CN1-CONGA provides full support for an upgradeable Flash BIOS ROM up to 256KB. This feature allows for remote boot from any node in the the net.

A serial EEPROM is provided for storing the unique Ethernet address, and the CN1-CONGA hard configuration and control data.

The status of the CN1-CONGA is indicated by an array of four LEDs. The jumperless board can be installed in a plug & play manner.

The CN1-CONGA performance will be explored best with a self-learning Fast-Ethernet switch as the remote link.

CompactPCI® PICMG
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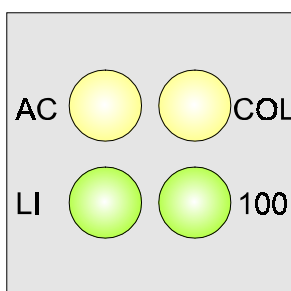
CN1-CONGA * Components Orientation



Technical Specifications

Board	Dimensions	3U Eurocard (100x160mm ²), front panel width 20.2mm, mechanics constructed with respect to EMC requirements, ejector lever
Ethernet	Connector CON1	Twisted Pair RJ45, 8-pole, wired as a hostadapter. 1:1 cabling to any Hubs, Switches, Router, Transceiver. Cross wiring required for direct connection to second hostadapter.
	Cable Type	Category 5, UTP (Unshielded Twisted Pair) or STP (Shielded Twisted Pair), length up to 105m maximum
	Data Transfer Rate ¹	10Base-T 10Mbit/s (20Mbit/s @ Full-Duplex) 100Base-TX (Fast-Ethernet) 100Mbit/s (200Mbit/s @ Full-Duplex), Auto-Negotiation for best performance
	Controller Chip	DEC 21143 PCI Ethernet controller, Low Power CMOS design, OnNow Power Management PC97, PC98, and ACPI compliant, NWAY IEEE 802.3 Auto-Negotiation algorithm, independent DMA controllers for transmit/receive, handles data transfers between CPU memory and onchip memory
	PHY Chip	ICS 1890 PHYceiver, single chip Physical Layer solution, CMOS Low Power design, MII (Media Independent Interface)
	LED Array	2x2 LED, Activity, Collision, Link, 100Mb/s
CompactPCI[®] Bus	Connector P1	32-Bit, 33MHz (133MB/s) 32-Bit DMA Bus Master (133MB/s) PCI Burst Mode 3.3V or 5V Interface
Power Supply	Connector P1	+5V ±5% 0.24A max. +3.3V ±0.3V 0.23A max. +12V ±5% 30mA max.
Temperature Humidity	Operating	Operating Temperature 0-70 °C Humidity 5-90% non condensing

¹ theoretical



LED Array

AC	Activity
COL	Collision
LI	Ethernet Link
100	100Mb/s Fast Ethernet

Subject to change

Ordering Information

Short Alias	Ordering No.	Description
CONGA	CN1-1-CONGA	3U <i>CompactPCI</i> Fast-Ethernet Hostadapter
	CR9-1-ADAPT	mechanical kit, converts frontpanel from 3U to 6U



Member of PICMG Europe

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