ComEth4071e
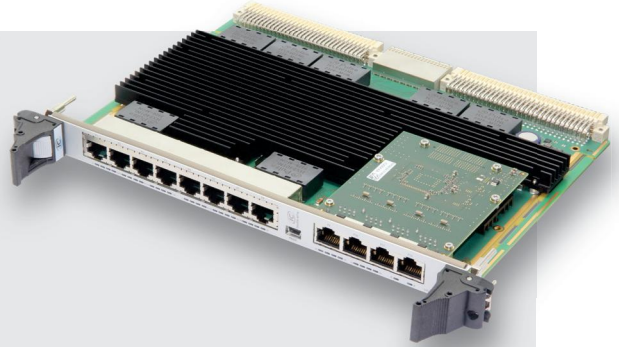## 6U VME 1/10/40 Gigabit Ethernet Switch

- *6U VME*
- *Managed Layer 2+/3 switch*
- *Up to 32 ports*
- *SFP+/QSFP+ (front) (option)*
- *10/100/1000BASE-T (front and rear)*
- *VME64x compliant*

Overview

The **ComEth4071e** is a cutting-edge 6U VME Layer 2/3 Ethernet switch compatible with VME 64x systems, complementing IC's Ethernet switch product line including the ComEth4070e and the ComEth4000e.

Description

Powered by a Marvell highly integrated system-on-chip (SoC) with programmable packet processors, the ComEth40xxe line not only offers complete backward compatibility with the previous generation of products, but also provides a high 10/40 Giga Ethernet port count, making these products unique compared to other VME Ethernet switch products.

The ComEth40xxe matrix coupled with an independent management processor is controlled by Switchware, the field-proven Interface Concept network management application.

Switchware supports a wide range of Ethernet protocols and has an easy to use graphical user interface (GUI).

In addition to a non-Flash device, a removable Flash disk allows storing switch configuration files and logs, offering flexibility to the user, and allowing sanitization when needed.

Ethernet interfaces

The **ComEth4071e** provides up to 32 Ethernet ports in two different options:

- 24 rear and 8 front 1000BASE-T ports

- 20 rear 1000BASE-T ports, 8 1000BASE-T ports and a front interface mezzanine

The available mezzanines are:
- 4 front SFP+ (1/10Gbs)
- 4 front 1000BASE-T
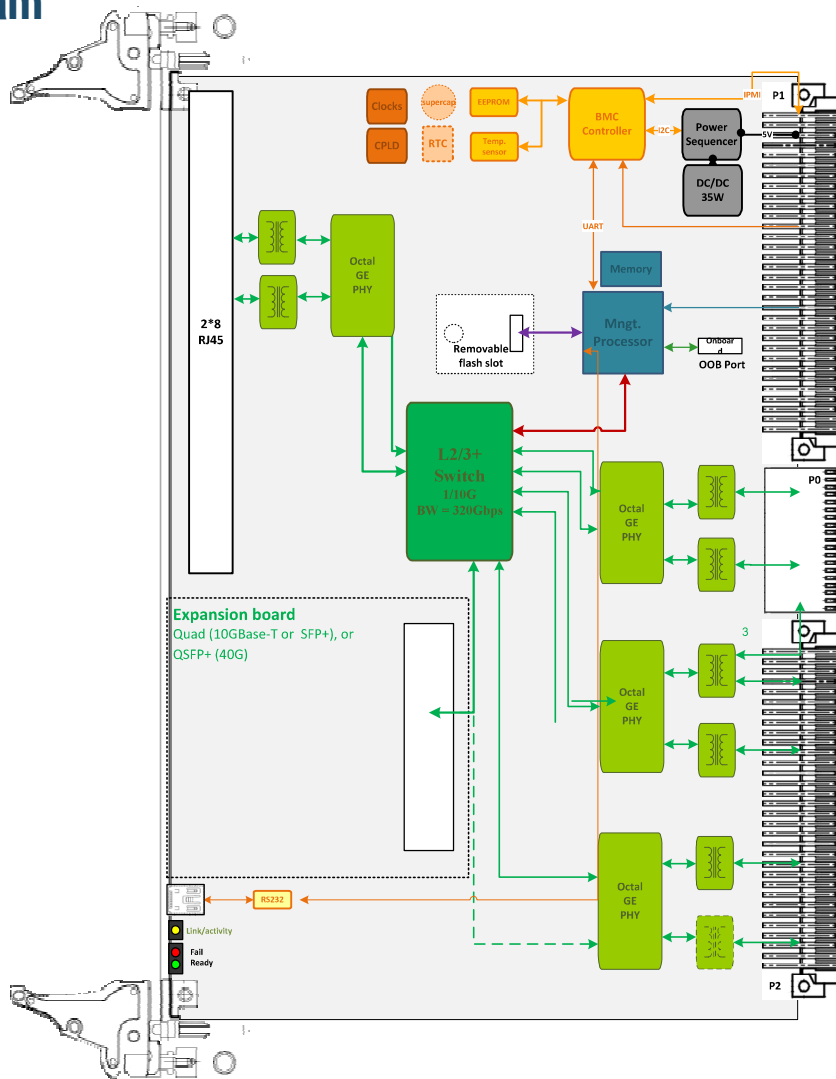- 4 front 1/2.5/5/10GigaE-baseT
- 1 front QSFP+(40Gbs)

The **ComEth4071e** is available in standard, extended, rugged air-cooled and conduction-cooled grades

powerBridge
Computer

Ehlbeek 15a
30938 Burgwedel
fon 05139-9980-0
fax 05139-9980-49

www.powerbridge.de
info@powerbridge.de

ComEth 4071e
6U VME 1/10/40 Gigabit Ethernet switch

Block Diagram

Main features

Layer 1/2
- Speed, duplex, auto-negotiation, flow control and power management on all ports
- VLAN support / 802.1Q tagging
- Port mirroring
- Port rights management
- Static MAC address list
- Static IPM address list
- Port static authentication
- IEEE 802.1X authentication
- Ingress filtering
- Storm prevention
- QoS on all ports
- Ingress / egress access lists
- Rate limiting
- QoS remarking
- Static trunking / LACP
- STP / RSTP
- IGMP/MLD snooping

Security management
- Login/password, key or certificate authentication
- Secure switch management by HTTPS, SSH or SNMPv3
- 802.1X port-based authentication

QoS
- Layer 2 802.1p User Priority tagging
- Layer 3 IP DSCP (Diffsev)
- Access Control Lists (L2, L3, L4)

Multicast
- IGMP snooping (v1, v2, v3)
- MLD snooping (v1, v2)

Layer3
- ICMP
- Proxy-ARP
- DHCP-relay
- NAT
- IPv4 routing (unicast/multicast)
- Static IP routing (unicast and multicast)
- RIPv1, RIPv2 (IPv4)
- RIPng(IPv6)
- OSPFv2 (IPv4) / OSPFv3(IPv6)

Others
- PBIT results
- Temperature information
- CPU load
- Switch state
- Global and detailed ports statistics
- VLANs statistics
- Bridge egress, ingress and RMON statistics
- Ingress and egress access lists statistics
- Rate limiting statistics
- Queues and ingress buffers counters
- IGMP snooping state by VLAN and by port
- MAC address table access
- IPM address table access
- STP/RTSP state

Switch Management

Switchware is a comprehensive switch management stack running on Interface Concept's Ethernet switch product line. It is running on the **ComEth4071e** on-board processor and supports a rich set of Layer 2/3 features controlled through the following interfaces:

• Graphical User Interface (GUI)
• Command Line Interface (CLI)
• SNMP (v2c or v3)

The **ComEth4071e** also supports VPX System Management in compliance with VITA 46.11 and based on the Intelligent Platform Management Interface (IPMI v1.5) for sensor management (temperature, voltage, current), inventory management, system configuration, recovery and diagnostic management.

Please consult the **Switchware** User's Manual for a comprehensive overview of all the product features.

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 71°C	Yes	-40 to 71°C at the thermal interface(∗)		5 to 95%	-45 to 100°C	5G [20..2000]Hz	0.1g2 /Hz [10..2000]Hz	40G
Conduction Cooled 85°C	Yes	-40 to 85°C at the thermal interface(∗)		5 to 95%	-45 to 100°C	5G [20..2000]Hz	0.1g2 /Hz [10..2000]Hz	40G

(∗) : Temperature grades are subject to availability according to IC products. Please consult us.

All information contained herein is subject to change without notice.

For more information, please contact:

3, rue Félix Le Dantec
29000 QUIMPER
Tel. +33 (0)2 98 57 30 30
Fax. +33 (0)2 98 57 30 00
info@interfaceconcept.com

www.interfaceconcept.com