COMETH

Gigabit & 10 Giga Ethernet Switch

6U OpenVPX L3+ IP Router

4341a

24 x 1Gbe & 4 x 10Gbe Ethernet ports with a full-wire speed switching capacity of 125 Mpps.

Layer2 Switching capabilities :
• *16K entries forwarding database*
• *Automatic or controlled learning and aging routing table*
• *Port and MAC access control*
• *Flow control and backpressure*
• *10 KB Jumbo Frame*
• *IGMPv3 & MLDv2 snooping*
• *Rapid Reconfiguration 802.1w*

Link aggregation static or LACP

Bandwidth management :
• *Unicast & Multicast rate limiting*
• *Egress rate shaping with rate ranging port from 64K to 1Gbs*
• *Minimal bandwidth guarantee per traffic Class*

VLANs services :
• *4K actives VLANs*
• *4K Bridge mulcticast groups*
• *Flexible VLAN assignment 802.1Q port -based, protocol based 802.1v, service Vlans 802.1ad, Policy-based Vlans*

Quality of Service engine :
• *8 priority queues per port*
• *Flexible bandwidth management with hierarchical shaping*
• *QOS strategy (strict/fair) configuration per queue/port*
• *Configuration of buffers allocations for Ingress & Egress queues*
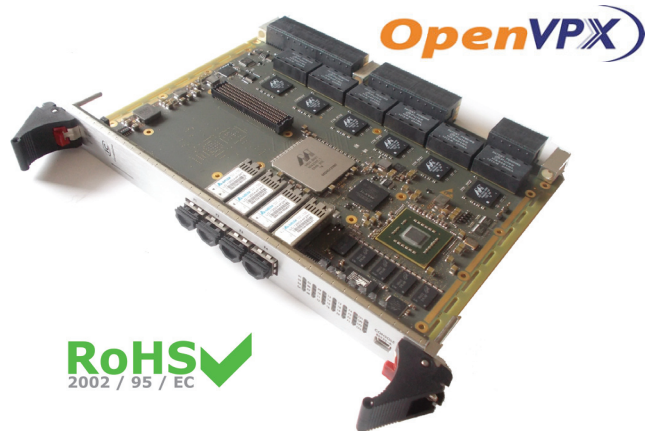
Unicast and Multicast routing engine
RIPV2, OSPF V2 Routing proxy-ARP, DHCP relay

IPV6 Ready phase 2 compliant

Security features :
• *802.1X Port authentication*
• *Multicast/Broadcast limiting*
• *STP/RSTP protocol*
• *Virtual cable tester On-Line*
• *User authentication (certificate HTTPS / Key SSH)*

Mirror traffic and log recording on Nand Flash

Description

The **ComEth4341a** is built on highly integrated Gigabit switch engine and PHY transceivers. Its matrix combines in a single equipment a full layer 3 router with an optimized power consumption.

The **ComEth4341a** supports full-wire speed L2 bridging and L3 Unicast and Multicast routing with L2-L4 advanced traffic classification, filtering and prioritization.

The **ComEth4341a** design allows to create a ring where several **ComEth43xx** (up to 15) are connected to form a unified switching architecture. A rapid failover algorithm authorizes an healing delay of less than 20ms (on 10G ports).

The **ComEth4341a** offers :

• **4 * 10GKX4** ports available on P1 rear connector.
• **24 * 1000BASE-T** ports routed on rear I/O (P2, P3 & P4 connectors).

Option : the **ComEth4341a** models is also available with

• 4 * **1000SX/LX** fiber ports or **4 * 1000BASE-T** ports on the front panel (in that case only 20 **1000BASE-T** ports are available on rear connectors),
• up to 4 * **10G** ports available on the front panel as 10GBaseT ports or SFP+ cages (in that case the corresponding **10GKX4** ports are no more available on P1 rear connector)

The **ComEth4341a** incoporates a micro-controller dedicated to the *management plan* (VITA 46.11).
The I**ComEth4341a** is compliant with the 6U module definitions of the VITA 46.0.
It is available in air-cooled (1'') and conduction cooled (0.8'' / without front IO).

The **ComEth 4341a** is compliant with the *OpenVPX* module profiles (VITA 65):

MOD6-SWH-4F24T-12.4.4

INTERFACE CONCEPT
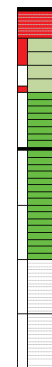
ComEth4341a

Gigabit & 10Giga Ethernet Switch - VPX 6U

Switch Management

The **ComEth 4341a** can be monitored via :
    CLI : CONSOLE (RS323) ou any of the Ethernet ports (TELNET or SSH),
    WEB : any of the Ethernet ports (HTTP or HTTPS),
    MIB browser or SNMP agent : any of the Ethernet ports (SNMPv2c or SNMPv3).
The Switchware and configuration files can be updated by FTP (or SFTP) and it is always possible to restore the previous release or the default factory configuration.

Many additional functions are provided on this full-managed version : Configuration of all the PHY and switch parameters, ports monitoring, static MAC address, QoS policy, Multicast and VLAN control, STP/RSTP protocols, MAC security, monitoring of all statistical counters and an extensive list of RMON counters...

The management application, named **SWITCHWARE**, is carried out by the processor of the **ComEth 4341a**.
Please consult the **Switchware User's Manual** for a comprehensive overview of all the product features.

Power supply : P = 50 W *(TBC)*

Block diagram :
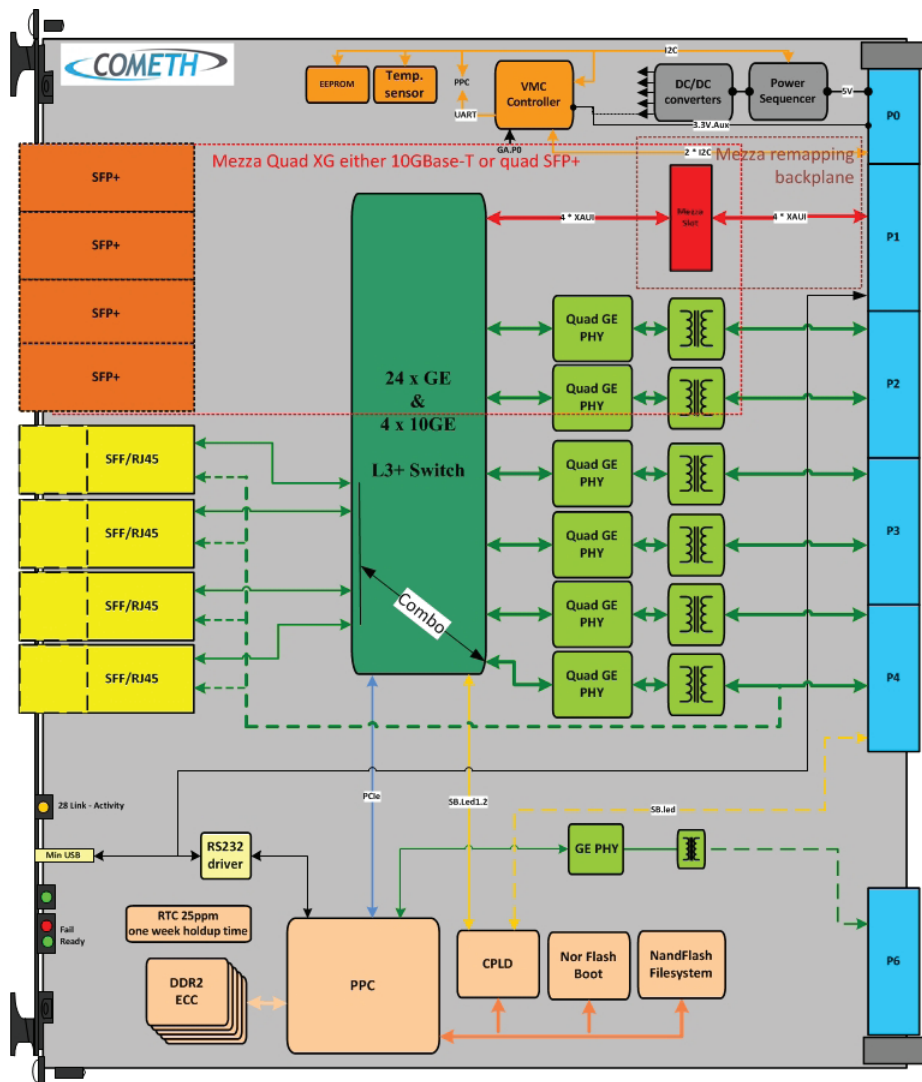
Environnement Specifications:
Please consult the **ComEth4341a** page at **www.interfaceconcept.com**.

Ordering Information:
Please contact our sales department : tel. **+33 (0)2 98 573 030** - email : **info@interfaceconcept.com**

This document supersedes any earlier documentation relating to the products referred to herein. The information contained in this document is current at the date of publication. It may subsequently be updated or withdrawn without notice.

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