COMETH

Ethernet Control & Data Plane Switch

3U OpenVPX Gigabit & 10/40Gigabit L3+ IP Router

4590a

- *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*
- *Ring*
- *IGMP/MLD snooping*

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

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

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

- *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)*

- *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*
- *...*

OpenVPX

RoHS ✓

Description

The **ComEth4590a** is a high performance layer 3 switch implementing two ethernet switch matrix that control and separate physically the Control and Data Planes for highly secured VPX3U systems.

These two Ethernet packet processors, managed by the Dual core ARM processors and the Interface Concept Switchware, offer remarkable switching capabilities and multiple Giga, 10 and 40G Ethernet configurations.

Control Plane: ▬

- **7 * Ultra Thin Pipe** ports routed on rear I/O (P2), operating in **10GBase-KR or 1000Base-KX** modes
- **1 * front optical** port supporting **10GBase-SR or 1000Base-SX**

Data Plane: ▬

- **5 * Fat Pipe** ports routed on rear I/O (P1/P2), operating in **10GBase-KX4** or **40GBase-KR4** modes
  note: each Fat Pipe can also be splitted to provide **4 * 10GBase-KR or 1000Base-KX** ports
- **2 * Ultra Thin Pipe** ports routed on rear I/O (P2), operating in **10GBase-KR or 1000Base-KX** modes
- **2 * Ultra Thin Pipe** ports routed on rear I/O (P2), operating in **1000Base-KX** mode
- **2 * front optical** ports supporting **10GBase-SR or 1000Base-SX**

The **ComEth4590a** also implements a micro-controller dedicated to the ***management plan*** (VITA 46.11).
The **ComEth4590a** is available in air-cooled and conduction cooled versions.

The **ComEth 4590a** is compliant with the slot profile:

SLT3-SWH-5F4UG7U

IC INTERFACE CONCEPT
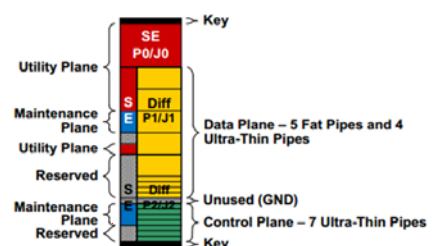
**Switch Management**

The **ComEth 4590a** 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 4590a**.
Please consult the **Switchware User's Manual** for a comprehensive overview of all the product features.

Block diagram :
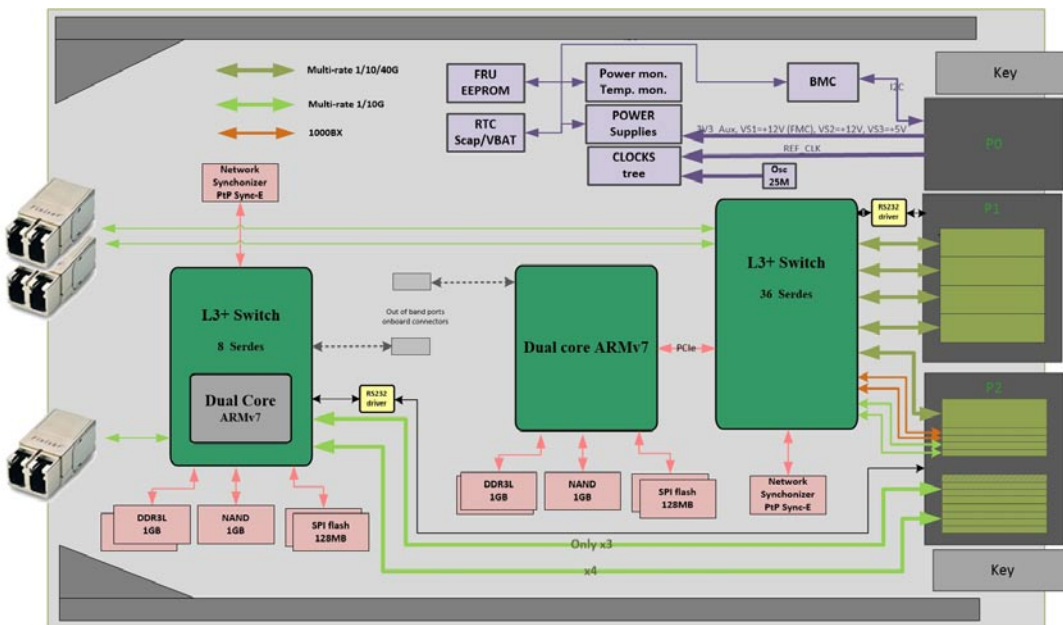
Environmental Specifications:
Please consult the **ComEth4590a** page at **www.interfaceconcept.com**.

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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