# COMETH

# 3U OpenVPX 10G / 40G Ethernet Switch

## 4580a

**6 * 10G/40G Ethernet ports up to 12 * Giga Ethernet ports**

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

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

**Multicast :**
- IGMPv1, IGMPv2, IGMPv3

**Layer 3 Routing :**
- ICMP
- Proxy-ARP
- DHCP-relay
- IPv4/IPv6 unicast routing
- IPv4 multicast routing
- Static IP routing (unicast and multicast)
- RIPv1, RIPv2 (IPv4)
- RIPng(IPv6)
- OSPFv2 (IPv4)
- OSPFv3(IPv6)

**Flexible management tools :**
- PBIT results
- Temperature information
- CPU load Switch state
- Links & Physical interfaces state
- Global / detailed ports statistics
- Bridge egress, ingress and RMON 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
- 802.1X authentication statistics
- Logging management

**OpenVPX**
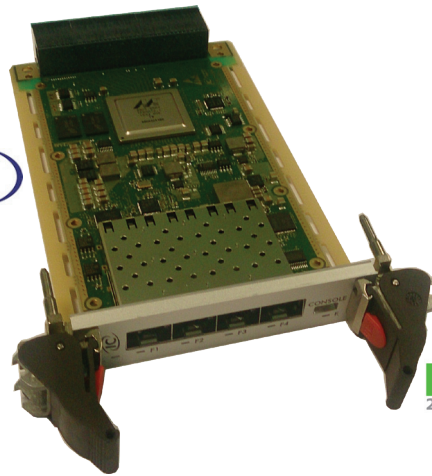
**RoHS** ✓
2002 / 95 / EC

## Description

The **ComEth4580a** is a high performance OpenVPX fully managed Ethernet Switch, providing up to 12* Gigabit ports and 6*10G/40G ports.

Its Ethernet matrix featuring a highly flexible L2/L3/L4 forwarding, classification and policy engine, provides the **ComEth4580a** with state-of-the-art packet processing technology.
IC's **Switchware** management application provides IPv6 support, RIPng, OSPF v3, VRRP, security features, configurable memory allocation, new status counters….

Fully compatible with the existing **ComEth43xx** Switchware, the **ComEth4580a** is also the hardware platform for introdcution of enhanced features.

**Ethernet interfaces :**

- **6 * 10GBase-KX4** ports on P1/P2
- **8 * 1000Base-BX** ports on P2
- **4 * SFP cages**(*) to support fiber or Copper SFP modules

(*) : air cooled versions only

The **ComEth 4580a** is compliant with the **OpenVPX** module profiles (VITA 65):

MOD3-SWH-6F8U-16.4.10   (-3 & -4)

**Miscellaneous :**

- **1 * RS232** port, front mini-USB or on P1 connector
- **Status Led indicators** (front)
- µ-controller for System Management (per VITA 46.11)

The ComEth4580a is compliant with VITA 46.0 standard.
It is available in air-cooled (1") and conduction-cooled (0.8") versions.

## IC INTERFACE CONCEPT

# ComEth 4580a

## 3U OpenVPX 10G / 40G Ethernet Switch

**Switch Management**

The **ComEth 4580a** can be monitored from the console port or any of the Ethernet ports, via HTTP (or HTTPS), SNMPv2c (or SNMPv3), CONSOLE, TELNET (or SSH). The Switchware and configuration files can be updated by FTP (or SFTP) and and previous releases or default configurations can be restored if needed.

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 **ComEth 4580a** embedded ARM processor.

Please consult the **Switchware User's Manual** for more information.

## Block diagram :
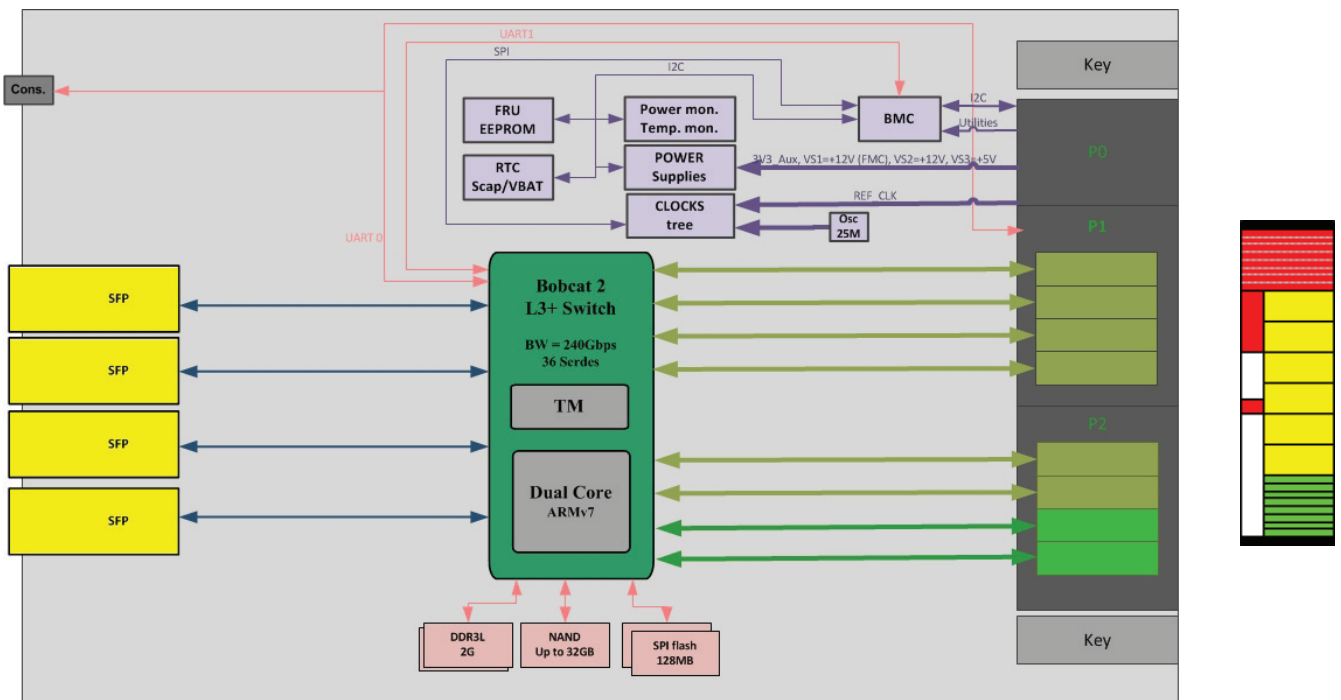


## Environment Specifications:

For details, please consult the **ComEth4580a** page at **www.interfaceconcept.com**.

## Ordering Information:

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