

# ComEth4081e

3U VPX 1/10/40 Gigabit Ethernet Switch

- 3U VPX
- Managed Layer 2+/3 switch
- VITA 65.0 SLT3-SWH-2F12T-14.4.8
- VITA 65.0 SLT3-SWH-8U12T-14.4.10
- Up to 22 ports
- 2 \* LC connectors (front)
- 10GBASE-T (rear)
- 10GBASE-KR / 40GBASE-KR4 (rear)



Not actual photo

The **ComEth4081e** is an upgraded release of IC's ComEth4080a and ComEth4080e 3U VPX L2/L3 Ethernet Switches, a product line designed for system integrators looking for high-speed Ethernet-based centralized architectures with a high availability of external 1/10/40G Ethernet interfaces, and aiming at building sophisticated networks with «external» interfaces.

# **Description**

Powered by a Marvell highly integrated System-on-a-Chip (SoC) with programmable packet processors, and controlled by Switchware, the field-proven Interface Concept network management application, the ComEth4080e offers a high density of 1GbE/10GbE and 40GbE ports on a 3U footprint.

# ComEth4081e:

- 22 ports in a single board solution
  - 8 \* 1GBASE-KX/10GBASE-KR [P1] or
    - 2 \* 40GBASE-KR4 [P1]
  - 12 \* 10M/100M/1G/2.5G/5G/10G BASE-T [P1&P2]
  - 2 \* 1G/10G LC connectors [front panel]

## **Switch Management**

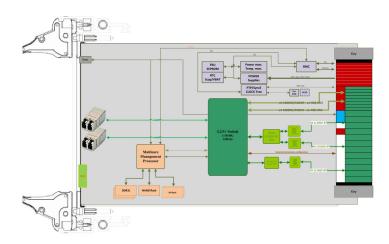
**Switchware** is a comprehensive switch management stack running on Interface Concept's Ethernet switch product line. It is running on the **ComEth4081e** on-board processor and supports a rich set of Layer 2/3 features controlled through the following interfaces:

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

The **ComEth4081e** 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.

The **ComEth4081e** is available in standard, extended, rugged air-cooled and conduction-cooled grades, as per Interface concept environmental grades.

# **Block Diagram**



The ComEth4081e is compliant with the VITA 65.0 SLT3-SWH-8U12T-14.4.10. slot profile.

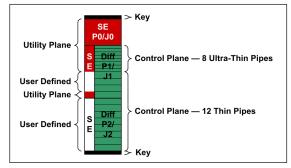


Figure 14.4.10-1 SLT3-SWH-8U12T-14.4.10

The **ComEth4081e** is compliant with the VITA 65.0 SLT3-SWH-2F12T-14.4.8 slot profile.

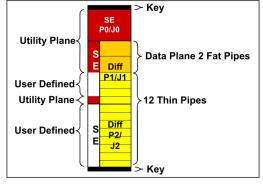


Figure 14.4.8-1 SLT3-SWH-2F12T-14.4.8

# **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)

### Layer 3

- 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

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# **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 [202000]Hz	0.002g2 /Hz [102000]Hz	20G
Extended	Yes	-20 to 65°C	2 3 m/s	5 to 95%	-45 to 85°C	2G [202000]Hz	0.002g2 /Hz [102000]Hz	20G
Rugged	Yes	-40 to 75°C or 85° C (*)	2 5 m/s	5 to 95%	-45 to 100°C	5G [202000]Hz	0.05g2 /Hz [102000]Hz	40G
Conduction- Cooled 71°C	Yes	-40 to 71°C at the thermal interface (*)		5 to 95%	-45 to 100°C	5G [202000]Hz	0.05g2 /Hz [102000]Hz	40G
Conduction- Cooled 85°C	Yes	-40 to 85° C at the thermal interface (*)	-	5 to 95%	-45 to 100°C	5G [202000]Hz	0.1g2 /Hz [102000]Hz	40G

<sup>(\*):</sup> 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:



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