

10G Managed Ethernet Switch/Router

Part Number: SD-36PR10GS

SDK Systems 10G Managed Ethernet Switch/Router provides high density, high port count Layer 2 switching and Layer 3 routing with 10G uplinks. A total of 36 switchable ports, with 4 x 10G, 8 x 1G (SGMII) and 24 x 1G (Copper 10/100/1000Mbps) ports.

The device targets managed Layer 2 and Layer 3 equipment in SMB, SME, and industrial applications where high port count 1G switching with 10G aggregation/uplinks are required.



Specifications

Ethernet Switch Engine	Vitesse VSC7448 Ethernet Switch Chipset
Ports	36 Total Switching Ports <ul style="list-style-type: none"> • 4x 10G (SFI) Ports • 8x 1G (SGMII) Ports • 24x 1G (Copper 10/100/1000Mbps) Ports
Memories	<ul style="list-style-type: none"> • 4Gb DDR3 SDRAM • 128Mb Serial NOR Flash
I/O Connectors	MIL-DTL-38999
Layer 2 & Layer 3 Forwarding	<ul style="list-style-type: none"> • IEEE802.1Q switch with 4K VLANs and 32K MAC table entries • Push/pop up to 3VLAN tags on ingress and egress • RSTP and MSTP support • Fully non-blocking wire-speed switching performance for all frame sizes • IPv4/IPv6 unicast and multicast Layer 2 switching with up to 32K groups and 1K port masks • IPv4/IPv6 unicast and multicast Layer 3 forwarding (routing) with reverse path forwarding (RPF) support • IGMPv2, IGMPv3, MLDv1, and MLDv2 support • Link aggregation (IEEE 802.3ad) • Independent and shared VLAN learning (IVL, SVL) • Jumbo frame support
Quality of Service	<ul style="list-style-type: none"> • Four megabytes of integrated shared packet memory • Eight QoS classes with a pool of up to 32K queues • TCAM-based classification with pattern matching against Layer 2 through Layer 4 information • Dual-rate policers selected by VCAP IS2, eight single-rate priority policers per port, and four single-rate port policers for each port • Flexible 4K ingress QoS mappings and 8K egress QoS mappings for VLAN tags and DSCP values • Up to 4K egress VLAN tag operations • Audio/ video bridging (AVB) with support for time-synchronized, low-latency and video streaming services • Priority-based flow control (PFC) (IEEE 802.1Qbb)
Security	<ul style="list-style-type: none"> • Vitesse Content Aware Processor (VCAP™) packet filtering engine using ACLs for ingress and egress packet inspection • Storm controllers for flooded broadcast, flooded multicast, and flooded unicast traffic • Per-port, per-address registration for copying/redirecting/discarding 32 VCAP single-rate policers

FEATURES

- ✓ **36 ports (4x 10GbE; 8x 1GbE [SGMI]; 24x 1GbE)**
- ✓ **Wide input range: +9V to +36V DC**
- ✓ **227.3 x 77.5 x 182 mm (W x H x D)**
- ✓ **Extended Temperature Range -40°C to +85°C**
- ✓ **Full IP67 water, dust proof, anti-corrosion housing**
- ✓ **MIL-STD-810G compliance**
- ✓ **Humidity: 5~95%, non-condensing**
- ✓ **Vibration: 2.5G, 5Hz~500Hz / XYZ**
- ✓ **Shock: 40G, 11ms duration, MIL-STD-810G**
- ✓ **EMI: MIL-STD-461F for CE101, RE101**

Specifications

Maximum Bandwidth	80Gbps
Layer 2 Switching Parameters	<ul style="list-style-type: none"> • Packet Buffer: 32Mb • MAC Table Size: 32k • Layer 2 Multicast Port Masks: 1k • Super VCAP blocks: 8 • VCAP CLM entries: 4k • VCAP LPM entries: 4k/1k (IPv4/IPv6) • VCAP IS2 entries: 4k/1k (IPv4/IPv6)
Layer 3 Switching Parameters	<ul style="list-style-type: none"> • Router Legs: 128 • IP unicast routes/hosts: 4k/1k (IPv4/IPv6) • Next-hop/ ARP table entries: 2k • IP multicast groups: 2k/512 • Multicast router leg masks: 1k • ECMPs: 16
Management Access	Web Interface CLI via RS-232 Software API SNMP
Input Voltage	+9V to 36V Input Range
Power Consumption	25W
Dimensions	227.3 x 77.5 x 182 mm
Weight	3kg
Warranty and Support	3 Years Warranty
Operating Temp	-40°C to +85°C
Humidity	5~95%, non-condensing

