

BDCOM S3448

——Hi-performance Gigabit Ethernet Switch

As the newest S3000 Series switch proudly presented by Shanghai Baud Data Communication Co., Ltd. (BDCOM), BDCOM S3448 is the next-generation hi-performance L3 Ethernet switch. It has advanced architecture, 36 Gbps switch fabric, and 13.1 Mpps L3 forwarding rate. Its hardware wire-speed L3 switching capability provides a powerful, multi-layered solution not only for enterprises, but also for Internet Service Providers (ISP's) and telecom carriers. BDCOM S3448 has a sub model, BDCOM S3448-DC.



S3448

Application

- Multi-layer, hi-performance switching platform for enterprises, ISP's and telecom carriers.

Features

Performance

- 36 Gbps switch fabric, hardware routing, wire-speed L3 forwarding rate: 13.1 Mpps
- High port density. 48 Fast Ethernet ports and up to 4 Gigabit ports
- 80-km transfer by Gigabit optical fiber, direct connection to WAN

Security and reliability

- IEEE 802.1x and HTTP user authentication
- Powerful ACL supports L2-L7 data filtering
- Intelligent forwarding, complete defense against viruses like 'Code Red' or 'Blaster'
- RPS power hot standby
- Hardware MPLS, hi-speed and powerful VPN
- QinQ double VLAN security

Easy maintenance

- Automatic recognition for straight-through or cross-over cables
- Stackable physically and through cluster technology. Central management with unified IP address saves IP addresses

- Management via CONSOLE port, Web, SNMP, Telnet, etc.
- Support (BDCOM) Broad Director, HP Open View, Cisco Works 2000

Traffic and broadcast control

- Auto-detection and restraining of broadcast storm, IGMP snooping, effectively restrict broadcast flooding
- Full- and half- duplex traffic control
- Ethernet port rate limiting with 64 K step size
- IP multicast and QoS support

Routing protocols

- Static routing
- Support RIP v1/v2, OSPF v2, BEIGRP, BGP v4 and many other dynamic routing protocols
- Support PIM-SM/DM, DVMRP and many other multicast routing protocols

Specifications

Processor	RISC 300 MHz
FLASH	8 MB
Memory	128 MB (up to 512 MB)
Port & Slot	48 10/100M RJ-45 MDI/MDI-X Self-adapting Ports 2 100/1000M Ethernet Expansion Slots 1 Console Port
Switch Fabric	36Gbps
L3 Forwarding Rate	13.1 Mpps, all wire-speed, with filtering
Switching Mode	Store-and-forward
MAC Address Table Size	16 K
Queuing Buffer	64 MB
Routing Table Size	30 K
802.1Q VLAN	1 ~ 4094, partition at will
Dimensions (L × W × H)	442 mm × 316 mm × 44 mm
Power Consumption	60 W (max.)
Power Supply	AC 100 ~ 240 V, 47 ~ 63 Hz, 1A/230V, RPS power hot standby
Stacking	Hardware stack up to 16, software stack up to 32
LED Indicators	Power, system, link, activity, 10/100M
Temperature	Operating: 0 ~ 50°C, non-operating: -40 ~ 70°C
Humidity	0 ~ 90% (no condensing)

Functions	
Spanning Tree	IEEE 802.1D STP, IEEE 802.1w RSTP, PVST/PVST+
VLAN	Port-based VLAN, 802.1Q tag VLAN, Super VLAN, Private VLAN, GVRP dynamic VLAN configuration
Traffic Control	Back pressure at half-duplex, 802.3x at full-duplex, CAR support, 64 K step size
Broadcast Control	Stop sending at threshold to restrict broadcast storms
Multicast Control	IGMP snooping
Port Trunking	Up to 8 groups with up to 32 ports per group, dynamic LACP or static aggregation
Port Mirroring	Supported. Can be based on flow classification
Clustering	Up to 256, manageable through single IP
Unicast	Static, RIP v1/v2, OSPF v2, BEIGRP (compatible with Cisco EIGRP), BGP v4, Intelligent forwarding to defend against virus attacks and illegal access
Multicast	PIM-SM/DM, OLINK, IGMP v1/v2/v3, DVMRP, GMRP
Policy-based Routing	IP-based routing policies
Redundant Routing	VRRP, HSRP
Proxy	Proxy ARP, DNS Proxy
DHCP	DHCP Server/Client/Relay
NAT	Static or dynamic NAT
Security	IEEE 802.1x port-based user authentication MPLS Martini QinQ double VLAN Security Port Security Hardware support for IP ACL, MAC ACL, VLAN ACL Hardware support for port-based user authentication by combinations and bandings of port, IP address, and MAC address Web user authentication Remote authentication through RADIUS, TACACS+ User privilege classification and password protection
QoS	Head Of Line (HOL) blocking prevention mechanism 4 dispatching queues per port, mapping the 8 priority queues in 802.1p WRED, WFQ, SP, and FIFO queuing algorithms Best Effort Service Differentiated Service Strict Priority Weighted Round Robin First Come First Serve TOS re-tagging RTS

Network Management	SNMP v1/v2 RMON (Group 1, 2, 3, 9) Telnet Command Line Interface (CLI) Web interface Support BDCOM network management tools suite: Broad Director NTP SSH PDP (compatible with Cisco CDP)
Software Upgrade	TFTP/Z-MODEM
Configuration Upload/download	TFTP/Z-MODEM

Order Information

BDCOM S3448	Stackable Ethernet switch with 48 10/100M Fast Ethernet ports, 2 expansion slots supporting up to 4 Gigabit ports, 1 CONSOLE, and standard AC power supply
LS-2GE-TX/SFP	2-port 1000-M SFP/RJ45 Ethernet Combo Module (need GSFP module)
LS-2FE-SFP	2-port 100-M SFP expansion base board (need FSFP module)
GSFP-TX	1-port 1000BaseT SFP module, RJ45 Ethernet
GSFP-SX	1-port 1000BaseSX SFP module, multi-mode, 550 m, 850 nm
GSFP-LX-10	1-port 1000BaseLX SFP module, single-mode, 10 km, 1310 nm
GSFP-LX-40	1-port 1000BaseLX SFP module, single-mode, 40 km, 1310 nm
GSFP-ZX-80	1-port 1000BaseLX SFP module, single-mode, 80 km, 1550 nm
FSFP-SX	1-port 100BaseSX SFP module, multi-mode, 2 km, 850 nm
FSFP-SX-1310	1-port 100BaseSX SFP module, multi-mode, 2 km, 1310 nm
FSFP-LX-15	1-port 100BaseFX SFP module, single-mode, 15 km, 1310 nm
FSFP-LX-40	1-port 100BaseFX SFP module, single-mode, 40 km, 1310 nm
FSFP-ZX-80	1-port 100BaseFX SFP module, single-mode, 80km, 1550 nm

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