



# H3C S6850 Series

## Data Center Switches

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New H3C Technologies Co., Limited

## H3C S6850 Series Data Center Switches

### Product overview

H3C S6850 high-density intelligent switch series is developed for data centers and cloud computing networks. It provides powerful hardware forwarding capacity and abundant data center features. It provides up to 48\*25G ports and 8\*100G ports. The switch supports modular power modules and fan trays. By using different fan trays, the switch can provide field-changeable airflows.

The switch is an ideal product for high-density 25GE switching and aggregation at data centers and cloud computing networks. It can also operate as a TOR access switch on an overlay or integrated network.

### Product Appearance

The S6850 series come in the following models.

- S6850-56HF: The switch provides 48 × 25G SFP28 ports, 8 × 100G QSFP28 ports, and 2 × 1G SFP ports



S6850-56HF front panel



S6850-56HF rear panel

- S6850-2C: The switch provides 2 service slots, 2 × 100G QSFP28 ports



S6850-2C front panel



S6850-2C rear panel

### Features and Benefits

#### High-Density 25GE Access

- The switch offers high-density 100G/40G/25G/10G ports and a wire-speed forwarding capacity as high as 4 Tbps. With standard 25G ports, it can provide high-density server access in high-end data centers.

#### IRF2 (Second Generation Intelligent Resilience Architecture)

- Facing the application requirements of the unified switching architecture of the data center, the series switches support the IRF2 technology, which virtualizes multiple devices into one logical.
- The equipment has strong advantages in scalability, reliability, distributed and availability.

- IRF2 not only can achieve a long-distance intelligent elastic architecture within a rack, across racks, and even across regions.

### Abundant Data Center Features

The switch supports abundant data center features, including:

- H3C S6850 switch series supports VXLAN (Virtual Extensible LAN), which provides two major benefits, higher scalability of Layer 2 segmentation and better utilization of available network paths.
- H3C S6850 switch series supports MP-BGP EVPN (Multiprotocol Border Gateway Protocol Ethernet Virtual Private Network) which can run as VXLAN control plane to simplify VXLAN configuration, eliminate traffic flooding and reduce full mesh requirements between VTEPs via the introduction of BGP RR.
- H3C S6850 switch series support Fiber Channel over Ethernet (FCoE), which permits storage, data, and computing services to be transmitted on one network, reducing the costs of network construction and maintenance.
- H3C S6850 switch series support Priority-based Flow Control (PFC), Enhanced Transmission Selection (ETS) and Data Center Bridging eXchange (DCBX). These features ensure low latency and zero packet loss for FC storage, RDMA applications and high-speed computing services.

### H3C Distributed Resilient Network Interconnection (DRNI)

- H3C S6850 switch series support DRNI(M-LAG), which enables links of multiple switches to aggregate into one to implement device-level link backup. DRNI is applicable to servers dual-homed to a pair of access devices for node redundancy.
- Streamlined topology: DRNI simplifies the network topology and spanning tree configuration by virtualizing two physical devices into one logical device.
- Independent upgrading: The DR member devices can be upgraded independently one by one to minimize the impact on traffic forwarding.
- High availability: The DR system uses a keepalive link to detect multi-active collision to ensure that only one member device forwards traffic after a DR system splits.

### Powerful Visibility

With the rapid development of data center, the scale of the data center expands rapidly; reliability, operation and maintenance become the bottleneck of data center for further expansion. H3C S6850 switch series conform to the trend of automated data operation and maintenance, and support visualization of data center.

- INT (Inband-Telemetry) is a network monitoring technology used to collect data from the device. Compared with the traditional network monitoring technology featuring one query, one reporting, INT requires only one-time configuration for continuous data reporting, thereby reducing the request processing load of the device. INT can collect timestamp information, device ID, port information, and buffer information in real time. INT can be implemented in IP, EVPN, and VXLAN networks.
- Provides a variety of traffic monitoring and analytic tools, including sFlow, NetStream, SPAN/RSPAN/ERSPAN mirroring, and port mirroring to help customers perform precise traffic analysis and gain visibility into network application traffic. With these tools, customers can collect network traffic data to evaluate network health status, create traffic analysis reports, perform traffic engineering, and optimize resource allocation.
- Supports realtime monitoring of buffer and port queues, allowing for visible and dynamic network optimization.

- Supports PTP (Precision Time Protocol) to achieve highly precise clock synchronization.

### RoCE (RDMA over Converged Ethernet)

- Remote Direct Memory Access (RDMA) directly transmits the user application data to the storage space of the servers, and uses the network to fast transmit the data from the local system to the storage of the remote system. RDMA eliminates multiple data copying and context switching operations during the transmission process, and reduces the CPU load.
- RoCE supports RDMA on standard Ethernet infrastructures. H3C S6850 switch support RoCE and can be used to build a lossless Ethernet network to ensure zero packet loss.
- RoCE include the following key features, include PFC(Priority based Flow Control), ECN(Explicit Congestion Notification), DCBX(Data Center Bridging Capability Exchange Protocol), ETS(Enhanced Transmission Selection).

### Flexible programmability

- The switch uses industry-leading programmable switching chips that allow users to define the forwarding logic as needed.
- Users can develop new features that meet the evolving trend of their networks through simple software updates.

### Powerful SDN capacity

- H3C S6850 switch series adopt the next-generation chip with more flexible Openflow FlowTable, more resources and accurate ACL matching, which greatly improves the software-defined network (SDN) capabilities and meet the demand of data center SDN network.
- H3C S6850 switch series can interconnect with H3C SeerEngine-DC Controller through standard protocols such as OVSDB, Netconf and SNMP to implement network automatic deployment and configuration.

### Comprehensive security control policies

- H3C S6850 series switch supports AAA, RADIUS and user account based authentication, IP, MAC, VLAN, port-based user identification, dynamic and static binding; when working with the H3C iMC platform, it can conduct real time management, instant diagnosis and crackdown on illicit network behavior.
- H3C S6850 series switch supports enhanced ACL control logic, which enables an enormous amount of inbound and outbound ACL, and delegate VLAN based ACL. This simplifies user deployment process and avoids ACL resource wastage. S6850 series switch can also take advantage of Unicast Reverse Path Forwarding (Unicast RFP). When the device receives a packet, it will perform the reverse check to verify the source address from which the packets are supposedly originated, and will drop the packet if such path doesn't exist. This can effectively prevent the source address spoofing in the network.

### Multiple reliability protection

- The S6850 series switch provides multiple reliability protection at both switch and link levels. With over current, overvoltage, and overheat protection, all models have a redundant pluggable power module, which enables flexible configuration of AC or DC power modules based on actual needs. The entire switch supports fault detection and alarm for power supply and fan, allowing fan speed to change to suit different ambient

temperatures.

- The switch supports diverse link redundancy technologies such as H3C proprietary RRPP, VRRPE, and Smart Link. These technologies ensure quick network convergence even when large amount of traffic of multiple services runs on the network.
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### Flexible choice of airflow

- To cope with data center cooling aisle design, the H3C S6850 series switch comes with flexible airflow design, which features bi-cooling aisles in the front and back. Users may also choose the direction of airflow (from front to back or vice versa) by selecting a different fan tray.

### Excellent manageability

The switch improves system management through the following ways:

- Provides multiple management interfaces, including the serial console port, mini USB console port, USB port, two out-of-band management ports, and two SFP ports. The SFP ports can be used as in-band management port through which encapsulated sampling packets are sent to the controller or other management devices for deep analysis.
- Supports multiple access methods, including SNMPv1/v2c/v3, Telnet, SSH 2.0, SSL, and FTP.
- Supports standard NETCONF APIs that allow users to configure and manage the switch, enhancing the compatibility with third-party applications.

## Product Specifications

### Hardware Specification

| Item                        | S6850-56HF                                    | S6850-2C                                      |
|-----------------------------|-----------------------------------------------|-----------------------------------------------|
| Dimensions (H × W × D)      | 43.6 × 440 × 460 mm (1.72 × 17.32 × 18.11 in) | 44.2 × 440 × 660 mm (1.74 × 17.32 × 18.11 in) |
| Weight                      | ≤ 15 kg (33.07 lb)                            | ≤ 16 kg (35.27 lb)                            |
| Serial console port         | 1                                             | 1                                             |
| Out-of-band management port | One GE copper port and one GE fiber port      | One GE copper port and one GE fiber port      |
| Mini USB console port       | 1                                             | 1                                             |
| USB port                    | 1                                             | 1                                             |
| QSFP28 port                 | 8                                             | 2                                             |
| SFP28 port                  | 48                                            | -                                             |
| SFP port                    | 2                                             | -                                             |
| Expansion slot              | -                                             | 2                                             |
| CPU                         | 2.2GHz@4Core                                  | 2.2GHz@4Core                                  |
| Flash/SDRAM                 | 4GB/8GB                                       | 4GB/8GB                                       |
| Latency                     | <1μs                                          | <1μs                                          |
| Switching capacity          | 4 Tbps                                        | 3.6Tbps                                       |

|                                        |                                                               |                                          |
|----------------------------------------|---------------------------------------------------------------|------------------------------------------|
| Forwarding capacity                    | 2024 Mpps                                                     | 2024 Mpps                                |
| Buffer(byte)                           | 32M                                                           | 32M                                      |
| AC-input voltage                       | 90v AC to 264v AC                                             | 90v AC to 264v AC                        |
| DC-input voltage                       | -40v DC to -72v DC                                            | -40v DC to -72v DC                       |
| Power module slot                      | 2                                                             | 2                                        |
| Fan tray slot                          | 5 Hot-swappable fan, fan speed adjustable and wind invertible |                                          |
| Air flow direction                     | From front to rear or from rear to front                      | From front to rear or from rear to front |
| Static power consumption               | Single AC: 167 W                                              | Single AC: 136 W                         |
|                                        | Dual AC: 179 W                                                | Dual AC: 148 W                           |
|                                        | Single DC: 154 W                                              | Single DC: 132 W                         |
|                                        | Dual DC: 174 W                                                | Dual DC: 146 W                           |
| Typical power consumption              | Single AC: 201 W                                              | Single AC: 273 W ( with LSWM18CQ)        |
|                                        | Dual AC: 224 W                                                | Dual AC: 282 W( with LSWM18CQ)           |
|                                        | Single DC: 198 W                                              | Single DC: 268 W( with LSWM18CQ)         |
|                                        | Dual DC: 210 W                                                | Dual DC: 275 W( with LSWM18CQ)           |
| Maximum heat consumption<br>(BTU/hour) | Single AC: 686                                                | Single AC:932 ( with LSWM18CQ)           |
|                                        | Dual AC: 765                                                  | Dual AC:963( with LSWM18CQ)              |
|                                        | Single DC: 676                                                | Single DC:915( with LSWM18CQ)            |
|                                        | Dual DC: 717                                                  | Dual DC: 939( with LSWM18CQ)             |
| Operating temperature                  | 0°C to 45°C (32°F to 113°F)                                   |                                          |
| Operating humidity                     | 5% to 95%, noncondensing                                      |                                          |
| MTBF(year)                             | 33.2                                                          | 34                                       |
| MTTR(hour)                             | 1                                                             | 1                                        |

## Software Specification

| Item                   | Feature description       |
|------------------------|---------------------------|
| Device Virtualization  | IRF2.0                    |
|                        | M-LAG(DRNI)               |
|                        | S-MLAG                    |
| Network Virtualization | BGP-EVPN                  |
|                        | VxLAN                     |
|                        | EVPN ES                   |
| VxLAN                  | L2 VxLAN gateway          |
|                        | L3 VxLAN gateway          |
|                        | Distributed VxLAN gateway |
|                        | Centralized VxLAN gateway |
|                        | EVPN VxLAN                |
|                        | manual configured VxLAN   |
|                        | IPv4 VxLAN tunnel         |

| Item             | Feature description                                                           |
|------------------|-------------------------------------------------------------------------------|
| VxLAN            | IPv6 VxLAN tunnel                                                             |
|                  | QinQ VxLAN access                                                             |
| SDN              | H3C SeerEngine-DC                                                             |
| Lossless network | PFC and ECN                                                                   |
|                  | DCBX                                                                          |
|                  | RDMA and ROCE                                                                 |
|                  | PFC deadlock watchdog                                                         |
|                  | ECN overlay                                                                   |
|                  | ROCE stream analysis                                                          |
| Programmability  | Openflow1.3                                                                   |
|                  | Netconf                                                                       |
|                  | Ansible                                                                       |
|                  | Python//TCL/Restful API to realize DevOps automated operation and maintenance |
| Traffic analysis | Sflow                                                                         |
|                  | Netstream, only S6850-2C                                                      |
| VLAN             | Port-based VLANs                                                              |
|                  | Mac-based VLAN ,Subnet-based VLAN and Protocol VLAN                           |
|                  | VLAN mapping                                                                  |
|                  | QinQ                                                                          |
|                  | MVRP(Multiple VLAN Registration Protocol)                                     |
|                  | Super VLAN                                                                    |
|                  | PVLAN                                                                         |
| MAC address      | Dynamic learning and aging of mac address entries                             |
|                  | Dynamic,static and blackhole entries                                          |
|                  | Mac address limiting on ports                                                 |
| IPv4 routing     | RIP(Routing Information Protocol) v1/2                                        |
|                  | OSPF (Open Shortest Path First) v1/v2                                         |
|                  | ISIS(Intermediate System to Intermediate system)                              |
|                  | BGP (Border Gateway Protocol)                                                 |
|                  | Routing policy                                                                |
|                  | VRRP                                                                          |
|                  | PBR                                                                           |
| IPv6 routing     | RIPng                                                                         |
|                  | OSPFv3                                                                        |
|                  | IPv6 ISIS                                                                     |
|                  | BGP4+                                                                         |
|                  | Routing policy                                                                |
|                  | VRRP                                                                          |
|                  | PBR                                                                           |
| MPLS/VPLS        | Support L3 MPLS VPN                                                           |
|                  | Support L2 VPN: VLL (Martini, Kompella)                                       |
|                  | Support VPLS, VLL                                                             |
|                  | Support hierarchical VPLS and QinQ+VPLS access                                |
|                  | Support P/PE function                                                         |
|                  | Support LDP protocol                                                          |

| Item                          | Feature description                                                                                                                                                                                                                                                                                   |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MPLS/VPLS                     | Support MCE                                                                                                                                                                                                                                                                                           |
|                               | Support MPLS OAM                                                                                                                                                                                                                                                                                      |
| Multicast                     | IGMP snooping                                                                                                                                                                                                                                                                                         |
|                               | MLD snooping                                                                                                                                                                                                                                                                                          |
|                               | IPv4 and IPv6 multicast VLAN                                                                                                                                                                                                                                                                          |
|                               | IPv4 and IPv6 PIM snooping                                                                                                                                                                                                                                                                            |
|                               | IGMP and MLD                                                                                                                                                                                                                                                                                          |
|                               | PIM and IPv6 PIM                                                                                                                                                                                                                                                                                      |
|                               | MSDP                                                                                                                                                                                                                                                                                                  |
|                               | Multicast VPN                                                                                                                                                                                                                                                                                         |
| Reliability                   | LACP                                                                                                                                                                                                                                                                                                  |
|                               | STP/RSTP/MSTP protocol, PVST compatible                                                                                                                                                                                                                                                               |
|                               | STP Root Guard and BPDU Guard                                                                                                                                                                                                                                                                         |
|                               | RRPP and ERPS                                                                                                                                                                                                                                                                                         |
|                               | Ethernet OAM                                                                                                                                                                                                                                                                                          |
|                               | Smartlink                                                                                                                                                                                                                                                                                             |
|                               | DLDP                                                                                                                                                                                                                                                                                                  |
|                               | BFD for OSPF/OSPFv3, BGP/BGP4, IS-IS/IS-ISv6, PIM/IPM for IPv6 and Static route                                                                                                                                                                                                                       |
| QOS                           | VRRP and VRRPE                                                                                                                                                                                                                                                                                        |
|                               | Weighted Random Early Detection (WRED) and tail drop                                                                                                                                                                                                                                                  |
|                               | Flexible queue scheduling algorithms based on port and queue, including strict priority (SP), Weighted Deficit Round Robin (WDRR), Weighted Fair Queuing (WFQ), SP + WDRR, and SP + WFQ.                                                                                                              |
|                               | Traffic shaping                                                                                                                                                                                                                                                                                       |
|                               | Packet filtering at L2 (Layer 2) through L4 (Layer 4); flow classification based on source MAC address, destination MAC address, source IP (IPv4/IPv6) address, destination IP (IPv4/IPv6) address, port, protocol, and VLAN to apply qos policy,including mirroring,redirection,priority remark etc. |
|                               | Committed access rate (CAR)                                                                                                                                                                                                                                                                           |
|                               | Account by packet and byte                                                                                                                                                                                                                                                                            |
|                               | COPP                                                                                                                                                                                                                                                                                                  |
| FC/FOCE                       | FC, FC subcard is supported on S6850-2C                                                                                                                                                                                                                                                               |
|                               | FCOE                                                                                                                                                                                                                                                                                                  |
| Telemetry                     | gRPC                                                                                                                                                                                                                                                                                                  |
|                               | ERSPAN                                                                                                                                                                                                                                                                                                |
|                               | Mirror on drop                                                                                                                                                                                                                                                                                        |
|                               | Telemetry Stream                                                                                                                                                                                                                                                                                      |
|                               | INT                                                                                                                                                                                                                                                                                                   |
|                               | iNQA                                                                                                                                                                                                                                                                                                  |
|                               | Packet trace, Packet capture                                                                                                                                                                                                                                                                          |
| Configuration and maintenance | Console telnet and SSH terminals                                                                                                                                                                                                                                                                      |
|                               | SNMPv1/v2/v3                                                                                                                                                                                                                                                                                          |
|                               | ZTP                                                                                                                                                                                                                                                                                                   |
|                               | System log                                                                                                                                                                                                                                                                                            |
|                               | File upload and download via FTP/TFTP, BootRom update and remote update                                                                                                                                                                                                                               |
|                               | NQA                                                                                                                                                                                                                                                                                                   |
|                               | ping,tracert                                                                                                                                                                                                                                                                                          |

| Item                          | Feature description                                                                                             |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------|
| Configuration and maintenance | VxLAN ping and VxLAN tracet                                                                                     |
|                               | NTP                                                                                                             |
|                               | PTP(1588v2)                                                                                                     |
|                               | GIR Graceful Insertion and Removal                                                                              |
| Security and management       | Macsec, Macsec subcard is supported on S6850-2C and only 100G macsec subcard can support 256-bit AES encryption |
|                               | Micro-Segmentation                                                                                              |
|                               | Hierarchical management and password protection of users                                                        |
|                               | Authentication methods,including AAA,RADIUS and HWTACACS                                                        |
|                               | Support DDos, ARP attack and ICMP attack function                                                               |
|                               | IP-MAC-port binding and IP Source Guard                                                                         |
|                               | SSH 2.0                                                                                                         |
|                               | HTTPS                                                                                                           |
|                               | SSL                                                                                                             |
|                               | PKI                                                                                                             |
|                               | Boot ROM access control (password recovery)                                                                     |
| EMC                           | RMON                                                                                                            |
|                               | FCC Part 15 Subpart B CLASS A                                                                                   |
|                               | ICES-003 CLASS A                                                                                                |
|                               | VCCI CLASS A                                                                                                    |
|                               | CISPR 32 CLASS A                                                                                                |
|                               | EN 55032 CLASS A                                                                                                |
|                               | AS/NZS CISPR32 CLASS A                                                                                          |
|                               | CISPR 24                                                                                                        |
|                               | EN 55024                                                                                                        |
|                               | EN 61000-3-2                                                                                                    |
|                               | EN 61000-3-3                                                                                                    |
|                               | ETSI EN 300 386                                                                                                 |
|                               | GB/T 9254                                                                                                       |
|                               | YD/T 993                                                                                                        |
| IEEE Standard                 | 802.3x/802.3ad/802.3AH/802.1P/802.1Q/802.1X/802.1D/802.1w/802.1s/802.1AG<br>802.1x/802.1Qbb/802.1az/802.1Qaz    |
| Safety                        | UL 60950-1                                                                                                      |
|                               | CAN/CSA C22.2 No 60950-1                                                                                        |
|                               | IEC 60950-1                                                                                                     |
|                               | EN 60950-1                                                                                                      |
|                               | AS/NZS 60950-1                                                                                                  |
|                               | FDA 21 CFR Subchapter J<br>GB 4943.1                                                                            |

## Performance and scalability

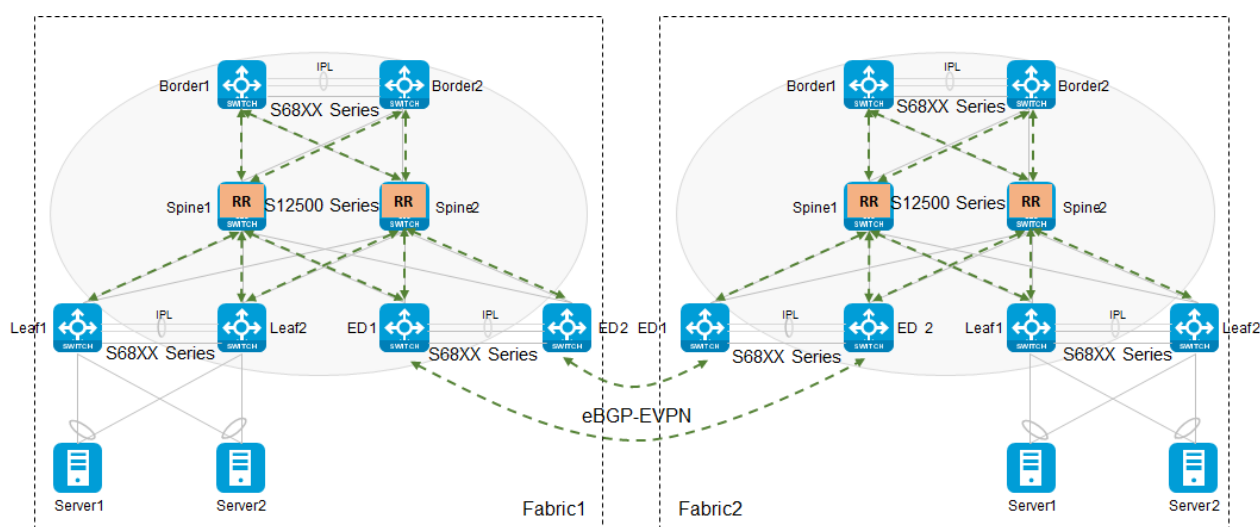
| Item           | Description               |                          |
|----------------|---------------------------|--------------------------|
| Virtualization | IRF2.0 stack              | 9                        |
|                | M-LAG device number       | 2                        |
|                | ED group                  | 8                        |
| ACL            | max number of ingress ACL | 18K/pipe, total 2 pipes  |
|                | max number of ingress Car | 2304/pipe, total 2 pipes |

| Item             | Description                       |                           |
|------------------|-----------------------------------|---------------------------|
|                  | max number of ingress Counter     | 10752/pipe, total 2 pipes |
|                  | max number of egress ACL          | 2048                      |
|                  | max number of egress Car          | 1K                        |
|                  | max number of egress Counter      | 1K                        |
| Forwarding table | Jumbo frame length(byte)          | 9416                      |
|                  | Mirroring group                   | 4                         |
|                  | PBR policy                        | 1000                      |
|                  | PBR node                          | 256                       |
|                  | max number of MAC per switch      | 288K max                  |
|                  | max number of ARP entries IPv4    | 272K max                  |
|                  | max ND table size for IPv6        | 136K max                  |
|                  | max number of unicast routes IPv4 | 324K max                  |
|                  | max number of unicast routes IPv6 | 162K max                  |
|                  | IPv4 I2 multicast group           | 4000                      |
|                  | IPv4 I3 multicast group           | 4000                      |
|                  | IPv4 multicast routing            | 16K                       |
|                  | IPv6 I2 multicast group           | 4000                      |
|                  | IPv6 I3 multicast group           | 4000                      |
|                  | IPv6 multicast routing            | 8K                        |
|                  | LAGG group                        | 1024                      |
|                  | LAGG member per group             | 256                       |
|                  | ECMP group                        | max 4K                    |
|                  | ECMP member per group             | 2-128                     |
|                  | VRF                               | 4095                      |
| Interface        | Loopback interface number         | 1K                        |
|                  | L3 sub interface number           | 2500                      |
|                  | SVI interface number              | 2K                        |
|                  | VxLAN AC number                   | 16K                       |
|                  | VxLAN VSI number                  | 16K                       |
|                  | VxLAN tunnel number               | 2K                        |
|                  | VSI interface number              | 8K                        |
|                  | IPv4 tunnel number                | 2K                        |
|                  | IPv6 tunnel number                | 2K                        |
|                  | VLAN number                       | 4094                      |
|                  |                                   |                           |
| Performance      | RIB                               | 1M                        |
|                  | MSTP instance                     | 64                        |
|                  | PVST instance                     | 510                       |
|                  | PVST logical port number          | 2000                      |
|                  | VRRP VRID                         | 255                       |
|                  | VRRP group                        | 256                       |
|                  | NQA group                         | 32                        |
| Static table     | static mac-address                | 4000                      |
|                  | static multicast mac-address      | 1K                        |
|                  | static ARP                        | 1K                        |
|                  | static ND                         | 4K                        |

| Item         | Description               |      |
|--------------|---------------------------|------|
| Static table | static IPv4 routing table | 2K   |
|              | static IPv6 routing table | 4000 |

## Data Center Application

The typical data center application is an EVPN-VxLAN design, S12500G-AF or S12500X-AF switches work as spine or spine/border, S68XX series work as leaf and border or ED. From this design, the users can get a non-blocking large L2 system.



## Order information

| PID           | Description                                                                      |
|---------------|----------------------------------------------------------------------------------|
| LS-6850-56HF  | H3C S6850-56HF L3 Ethernet Switch with 48 SFP28 Ports and 8 QSFP28 Ports         |
| LS-6850-2C    | H3C S6850-2C L3 Ethernet Switch with 2*QSFP28 Ports and 2*Interface Module Slots |
| <b>Power</b>  |                                                                                  |
| LSVM1AC650    | 650W AC Power Supply Module                                                      |
| LSVM1DC650    | 650W DC Power Supply Module                                                      |
| <b>Fan</b>    |                                                                                  |
| LSWM1FANSAB   | Fan Module (SW, 4056, DC, Air Inlets in Panel)                                   |
| LSWM1FANSA    | Fan Module (SW, 4056, DC, Air Inlets in Panel)                                   |
| <b>Module</b> |                                                                                  |
| LSWM18QC      | 8-Port QSFP Plus Interface Card                                                  |
| LSWM124XG2Q   | 24-Port SFP Plus and 2-Port QSFP Plus Interface Card with MACSec                 |
| LSWM124XGT2Q  | 24-Port 10GBASE-T and 2-Port QSFP Plus Interface Card with MACSec                |
| LSWM124XG2QL  | 24-Port SFP Plus and 2-Port QSFP Plus Interface Card                             |
| LSWM124XG2QFC | 24 Ports SFP Plus and 2 Ports QSFP Plus Interface Card with FC                   |

|                           |                                                                                                               |
|---------------------------|---------------------------------------------------------------------------------------------------------------|
| LSWM18CQ                  | H3C 8-Port 100G Ethernet Optical Interface Module(QSFP28)                                                     |
| LSWM116Q                  | H3C 16-Port 40G Ethernet Optical Interface Module(QSFP Plus)                                                  |
| LSWM124TG2H               | H3C 24-Port 25G Ethernet Optical Interface (SFP28) and 2-Port 100G Ethernet Optical Interface (QSFP28) Module |
| LSWM18CQMSEC              | H3C 8-Port 100G MACSEC Ethernet Optical Interface Module(QSFP28)                                              |
| <b>Transceiver</b>        |                                                                                                               |
| SFP-GE-LH80-SM1550        | 1000BASE-LH80 SFP Transceiver, Single Mode (1550nm, 80km, LC)                                                 |
| SFP-FE-LX-SM1310-A        | 100BASE-LX SFP Transceiver, Single Mode (1310nm, 15km, LC)                                                    |
| SFP-FE-SX-MM1310-A        | 100BASE-FX SFP Transceiver, Multi-Mode (1310nm, 2km, LC)                                                      |
| SFP-FE-LH40-SM1310        | 100BASE-LH40 SFP Transceiver, Single Mode (1310nm, 40km, LC)                                                  |
| SFP-GE-LX-SM1310-A        | 1000BASE-LX SFP Transceiver, Single Mode (1310nm, 10km, LC)                                                   |
| SFP-GE-LH40-SM1310        | 1000BASE-LH40 SFP Transceiver, Single Mode (1310nm, 40km, LC)                                                 |
| SFP-GE-LH40-SM1550        | 1000BASE-LH40 SFP Transceiver, Single Mode (1550nm, 40km, LC)                                                 |
| SFP-GE-SX-MM850-A         | 1000BASE-SX SFP Transceiver, Multi-Mode (850nm, 550m, LC)                                                     |
| SFP-GE-T                  | SFP GE Copper Interface Transceiver Module (100m,RJ45)                                                        |
| QSFP-100G-LR4-WDM1300     | 100G QSFP28 Optical Transceiver Module(1310nm,10km,LR4,WDM,LC)                                                |
| QSFP-100G-LR4L-WDM1300    | 100G QSFP28 Optical Transceiver Module (1310nm,2km,LR4L,CWDM4,LC)                                             |
| QSFP-100G-PSM4-SM1310     | 100G QSFP28 Optical Transceiver Module (1310nm,500m,PSM4,MPO/APC)                                             |
| QSFP-100G-SR4-MM850       | 100G QSFP28 Optical Transceiver Module (850nm,100m OM4,SR4,MPO)                                               |
| QSFP-100G-LR4L-WDM1300    | 100G QSFP28 Optical Transceiver Module (1310nm,2km,LR4L,CWDM4,LC)                                             |
| QSFP-100G-LR4-WDM1300     | 100G QSFP28 Optical Transceiver Module(1310nm,10km,LR4,WDM,LC)                                                |
| QSFP-40G-LR4-WDM1300      | QSFP+ 40GBASE Optical Transceiver Module (1310nm,10km,LR4,LC)                                                 |
| QSFP-40G-BIDI-SR-MM850    | QSFP+ 40GBASE BIDI Optical Transceiver Module (850nm,100m,SR)                                                 |
| QSFP-40G-LR4L-WDM1300     | QSFP+ 40GBASE Optical Transceiver Module (1310nm,2km,LR4L,LC)                                                 |
| QSFP-40G-LR4-PSM1310      | QSFP+ 40GBASE Optical Transceiver Module (1310nm,10km,MPO/APC,LR4,Parallel Single Mode)                       |
| QSFP-40G-SR4-MM850        | QSFP+ 40GBASE Optical Transceiver Module (850nm,100m,SR4,Support 40G to 4*10G)                                |
| QSFP-40G-CSR4-MM850       | QSFP+ 40GBASE Optical Transceiver Module (850nm,300m,CSR4,Support 40G to 4*10G)                               |
| SFP-25G-SR-MM850          | 25G SFP28 Optical Transceiver Module (850nm,100m,SR,MM,LC)                                                    |
| <b>Cable</b>              |                                                                                                               |
| QSFP-100G-D-AOC-10M       | 100G QSFP28 to 100G QSFP28 10m Active Optical Cable                                                           |
| QSFP-100G-D-CAB-1M        | 100G QSFP28 to 100G QSFP28 1m Passive Cable                                                                   |
| QSFP-100G-D-AOC-20M       | 100G QSFP28 to 100G QSFP28 20m Active Optical Cable                                                           |
| QSFP-100G-D-CAB-3M        | 100G QSFP28 to 100G QSFP28 3m Passive Cable                                                                   |
| QSFP-100G-D-CAB-5M        | 100G QSFP28 to 100G QSFP28 5m Passive Cable                                                                   |
| QSFP-100G-D-AOC-7M        | 100G QSFP28 to 100G QSFP28 7m Active Optical Cable                                                            |
| QSFP-100G-4SFP-25G-CAB-1M | 100G QSFP28 to 4x25G SFP28 1m Passive Cable                                                                   |
| QSFP-100G-4SFP-25G-CAB-3M | 100G QSFP28 to 4x25G SFP28 3m Passive Cable                                                                   |
| QSFP-100G-4SFP-25G-CAB-5M | 100G QSFP28 to 4x25G SFP28 5m Passive Cable                                                                   |
| LSWM1QSTK0                | 40G QSFP+ Cable 1m                                                                                            |
| LSWM1QSTK1                | 40G QSFP+ Cable 3m                                                                                            |
| LSWM1QSTK2                | 40G QSFP+ Cable 5m                                                                                            |
| QSFP-40G-D-AOC-10M        | 40G QSFP+ to 40G QSFP+ 10m Active Optical Cable                                                               |
| QSFP-40G-D-AOC-20M        | 40G QSFP+ to 40G QSFP+ 20m Active Optical Cable                                                               |
| QSFP-40G-D-AOC-7M         | 40G QSFP+ to 40G QSFP+ 7m Active Optical Cable                                                                |
| LSWM1QSTK3                | 40G QSFP+ to 4x10G SFP+ Cable 1m                                                                              |

# H3C S6850 Series Data Center Switches

|                   |                                                 |
|-------------------|-------------------------------------------------|
| LSWM1QSTK4        | 40G QSFP+ to 4x10G SFP+ Cable 3m                |
| LSWM1QSTK5        | 40G QSFP+ to 4x10G SFP+ Cable 5m                |
| SFP-25G-D-CAB-1M  | 25G SFP28 to 25G SFP28 1m Passive Cable         |
| SFP-25G-D-CAB-3M  | 25G SFP28 to 25G SFP28 3m Passive Cable         |
| SFP-25G-D-CAB-5M  | 25G SFP28 to 25G SFP28 5m Passive Cable         |
| SFP-25G-D-AOC-3M  | 25G SFP28 to 25G SFP28 3m Active Optical Cable  |
| SFP-25G-D-AOC-5M  | 25G SFP28 to 25G SFP28 5m Active Optical Cable  |
| SFP-25G-D-AOC-7M  | 25G SFP28 to 25G SFP28 7m Active Optical Cable  |
| SFP-25G-D-AOC-10M | 25G SFP28 to 25G SFP28 10m Active Optical Cable |
| SFP-25G-D-AOC-20M | 25G SFP28 to 25G SFP28 20m Active Optical Cable |



The Leader in Digital Solutions

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PID

IRF stack

M-LAG device number

Power

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