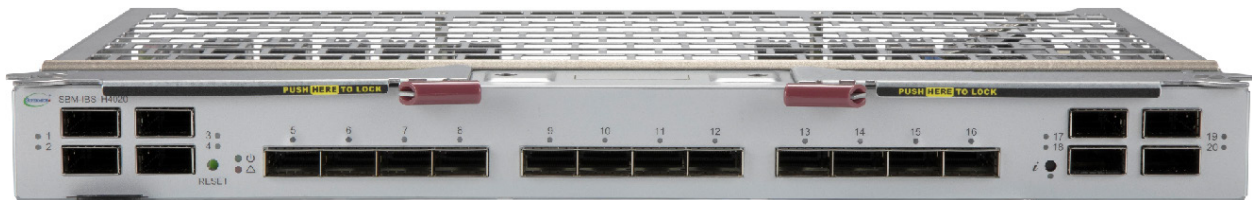




SBM-IBS-H4020
SUPERBLADE HDR 200G
INFINIBAND SWITCH



USER'S MANUAL

Revision 1.0

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Preface

About this Manual

This manual is written for professional system integrators and PC technicians. It provides information for the installation and use of this module. Installation and maintenance should be performed by experienced technicians only.

Notes

- Supermicro product manuals: <http://www.supermicro.com/support/manuals/>
- Product safety info: http://www.supermicro.com/about/policies/safety_information.cfm

If you have any questions, please contact our support team at:
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Warnings

Special attention should be given to the following symbols used in this manual.



Warning! Indicates important information given to prevent equipment/property damage or personal injury.



Warning! Indicates high voltage may be encountered when performing a procedure.

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SuperBlade HDR 200G InfiniBand Blade Switch

1 Overview

The document provides the details about the SuperBlade HDR 200G InfiniBand Blade Switch model SBM-IBS-H4020.

Supermicro SBM-IBS-H4020 is an HDR 200G InfiniBand Blade Switch designed for Supermicro blade enclosures for high performance datacenter traffic applications. It provides a 1:1 non-blocking architecture and supports twenty internal HDR ports at 200G and twenty external HDR ports at 200G with ZQSFP+/QSFP56 ports.

Module Managment

The switch is unmanaged. It does not use an operating system.

2 Features

The switch module includes these features.

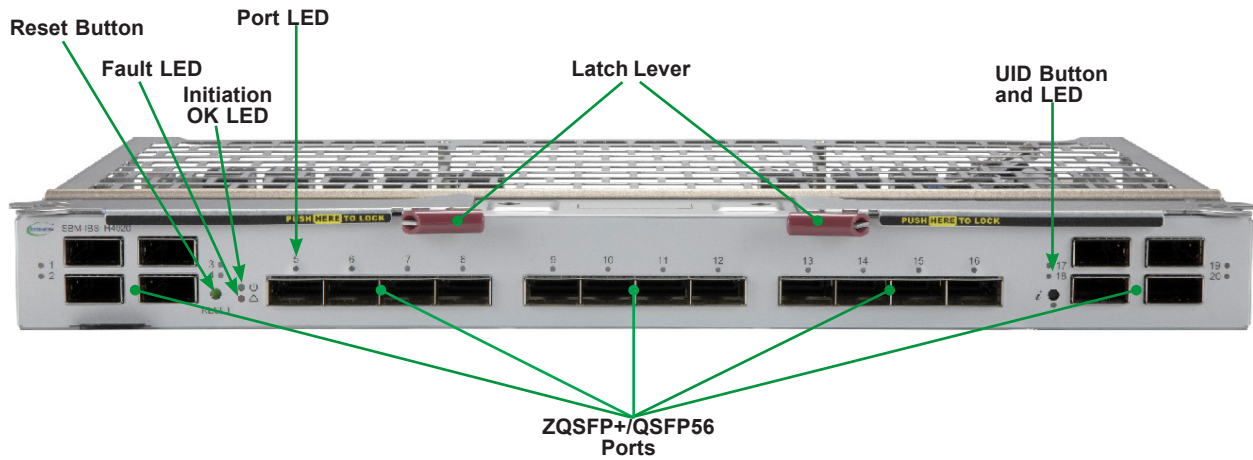


Figure 1. Front View

Front Features	
Feature	Description
ZQSFP+/QSFP56 Ports	Ports accept QSFP56 Direct Attach Cable (DAC) or QSFP56 transceiver modules
Port LED	Each port has a status LED that indicates a port linkup
Reset Button	
Fault LED	Indicates module has either failed POST or has detected an operational fault within the module
Initiation OK	Indicates module is operational and has passed the POST with no critical fault
Module Fault LED	Module has either failed POST or has detected an operational fault within the module
Latch Levers	Used to physically install or uninstall the module
UID Button and LED	Unit ID LED indicator can be activated using the button or the CMM interface

3 Installation

Make sure the cover to the switch module has been installed before installation.

1. Pull open the latch levers of the blade switch module.
2. Slide the switch module into the bay until the module connectors seat in the enclosure.
3. Push the latch levers closed.

The module will power on and a POST test will verify it is working properly.

Removing the Blade Switch

The switch module is hot-swappable. The blade enclosure and blades can continue to operate when it is removed.

- Pull open the latch levers and pull the module out of the enclosure.

4 Specifications

Hardware Specifications

- Internal Ports: Twenty HDR 200G Ports
- External Ports: Twenty HDR 200G Ports with ZQSFP+/QSFP56 connectors

Physical & Environmental Specifications

- Weight: 8.927 LB
- Dimensions: 6 &1/2" x 10 &9/16" x 1 &1/2"
- Temperature: Operating 0°C to 45°C (32°F to 113°F)
- Humidity: Operating 5% to 95% (non-condensing)

Power Specifications

- Hot-Pluggable: Yes
- Power consumption (Typical): 244 Watts

Enclosure Compatibility

- This blade switch module is compatible with the Supermicro enclosure SBE-820H with no more than one switch module per enclosure.

5 Port Mapping

The port mapping between the blade servers and the switch internal ports is shown in the table below.

Port Mapping	
Module	Internal Port
A1	P21
A2	P22
A3	P23
A4	P24
A5	P25
A6	P26
A7	P27
A8	P28
A9	P29
A10	P30
B1	P31
B2	P32
B3	P33
B4	P34
B5	P35
B6	P36
B7	P37
B8	P38
B9	P39
B10	P40

6 Cabling and Transceiver Compatibility

The SBM-IBS-H4020 has been qualified with the following cables for compatibility:

Passive:

- CBL-NTWK-0643—INFINIBAND, QSFP56, 200G, PASSIVE, PULL, 2M, 26AWG
- CBL-MCP7H50-H002R26—INFINIBAND, QSFP56,HDR 200G to 2x100G, 2M, 26AWG

Active:

- CBL-MFS1S00H10-MT037—INFINIBAND, QSFP56, 200G, ACTIVE OPTICAL 10M
- CBL-QSFP56AOC-20M—INFINIBAND, QSFP56, 200G, ACTIVE OPTICAL 20M

Transceiver:

- MMA1T00-HS Optical Transceiver HDR QSFP56 MPO 850nm SR4 up to 100m