

SBM-25G-P10 Pass-Thru Module



USER'S MANUAL

Revision 1.0d

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Manual Revision 1.0d

Release Date: July 01, 2024

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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: https://www.supermicro.com/support/manuals/
- Product safety info: https://www.supermicro.com/about/policies/safety_information.cfm

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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 Pass-Thru Module

1 Overview

The Supermicro SBM-25G-P10 Pass-Thru Module is designed for Supermicro SuperBlade enclosures for high performance datacenter traffic application usage. It is compatible with the SuperBlade 8U (SBE-820J), 6U (SBE-610J), and 4U (SBE-414E) enclosures. Up to four modules can be used in the 8U or 6U enclosure, and up to two in the 4U enclosure.

The Pass-Thru module leverages the existing network infrastructure to provide direct network connectivity between the blade servers and the external Top of Rack (ToR) switches using five external QSFP28 ports. The module can support both 10G and 25G speed blade servers on its internal ports. The five QSFP28 external ports can accept QSFP28 DAC, DAC breakout cables and QSFP28 fiber transceiver modules for the external network connectivity.

The module provides a one-to-one connectivity from the internal blade server ports to the external QSFP28 Ports.



Figure 1. Pass-Thru Function

2 Features

- Twenty internal 25G/10G downlink ports mapped from server node to external QSFP connection
- Up to twenty external 25G/10G uplink ports through the five QSFP28 ports
- Auto-configuration of the port speed
- Minimal configuration and management through the Chassis Management Module (CMM)





Module Front Features				
Item	Description			
QSFP28 Ports	Ports accept QSFP28 Direct Attach Cable (DAC) or QSFP28 transceiver modules			
Console Port	RJ45, usually for debug logs			
UID LED	Unit ID indicator; can be activated from CMM			
QSFP28 Port Status LED	Indicates port linkup			
Module Fault LED	Module has either failed POST or has detected an operational fault within the module			
Module Initiation OK LED	Module is operational and has passed the POST with no critical faults			
Latch Lever	Used to physically install or uninstall the module			

3 Management

The SBM-25G-P10 module is managed through the CMM module web interface. It supports the upload of configuration files, as described later in this manual. Note that CMM version 3.55 or later is required.

The module can be connected to any computer using the RS-232 Console port. This is generally used to collect debug logs for the Supermicro Technical Support team. The computer COM port settings should be:

Baudrate: 115200 Data: 8 bit bit Parity: none Stop: 1 bit Flow Control: none

Using the CMM Module web interface, the user can perform the below tasks on the passthru module.

- Reset
- Configure management IP (Static/DHCP)
- Configuration upload
- Firmware upgrade

4 Port Mapping

The port mapping between the blade server and the switch external port varies depending on the model of the enclosure. The on-board dual port NIC card and the optional add-on mezzanine card with dual ports have internal mapping to the pass-thru module as shown below.



Figure 3. Blade Server with On-Board NIC Connection





Internal to External Port Mapping Tables

In the tables below, the following identifiers are used:

Module Slot – A1, A2, B1 and B2 refer to the modules and their slot number. (Shown for the SBE-610J enclosure with four pass-thru modules.)



Figure 5. Four Pass-Thru Modules Labeled

External Port – Q1 to Q5 refer to the external QSFP28 ports on the pass-thru module. **External Port LED** – This is the QSFP28 (Q1 to Q5) port LED number (split) on the module front panel.



Figure 6. External Ports Labeled

Cable Link – When using a split cable, normally each vendor's QSFP28 to 4xSFP28 cables have labels printed on their 4xSFP28 split cables with either A, B, C and D or 1, 2, 3 and 4 to represent the cable. The column addresses both the specifications with, example A/1 (A or 1).



Figure 7. Split Cable Labeled

Blado		Port Mapping					
Slot	NIC	Module Slot	External Port	External Port LED Number	Cable Link		
	On Board - NIC 1	A1	Q3	11	C / 3		
	On Board - NIC 2	A2	Q5	19	C/3		
AI	Mezzanine - NIC 3	B1	Q1	2	B / 2		
	Mezzanine - NIC 4	B2	Q1	2	B / 2		
	On Board - NIC 1	A1	Q4	13	A / 1		
A-2	On Board - NIC 2	A2	Q5	17	A/1		
A2	Mezzanine - NIC 3	B1	Q1	4	D / 4		
	Mezzanine - NIC 4	B2	Q1	4	D / 4		
	On Board - NIC 1	A1	Q4	15	C / 3		
A2	On Board - NIC 2	A2	Q4	15	C / 3		
AS	Mezzanine - NIC 3	B1	Q2	6	B / 2		
	Mezzanine - NIC 4	B2	Q2	6	B / 2		
	On Board - NIC 1	A1	Q5	19	C / 3		
	On Board - NIC 2	A2	Q4	13	A / 1		
A4	Mezzanine - NIC 3	B1	Q2	8	D / 4		
	Mezzanine - NIC 4	B2	Q2	8	D / 4		
	On Board - NIC 1	A1	Q5	17	A / 1		
A.5	On Board - NIC 2	A2	Q3	11	C / 3		
AJ	Mezzanine - NIC 3	B1	Q3	10	B / 2		
	Mezzanine - NIC 4	B2	Q3	10	B / 2		
	On Board - NIC 1	A1	Q3	9	A / 1		
A.G	On Board - NIC 2	A2	Q1	3	C / 3		
AO	Mezzanine - NIC 3	B1	Q3	12	D / 4		
	Mezzanine - NIC 4	B2	Q3	12	D / 4		
	On Board - NIC 1	A1	Q2	7	C / 3		
A7	On Board - NIC 2	A2	Q1	1	A / 1		
~	Mezzanine - NIC 3	B1	Q4	14	B / 2		
	Mezzanine - NIC 4	B2	Q4	14	B / 2		
	On Board - NIC 1	A1	Q2	5	A / 1		
A 8	On Board - NIC 2	A2	Q2	5	A/1		
AU	Mezzanine - NIC 3	B1	Q4	16	D / 4		
	Mezzanine - NIC 4	B2	Q4	16	D / 4		
	On Board - NIC 1	A1	Q1	3	C / 3		
٨٩	On Board - NIC 2	A2	Q2	7	C / 3		
AJ	Mezzanine - NIC 3	B1	Q5	18	B / 2		
	Mezzanine - NIC 4	B2	Q5	18	B / 2		
	On Board - NIC 1	A1	Q1	1	A / 1		
Δ10	On Board - NIC 2	A2	Q3	9	A / 1		
	Mezzanine - NIC 3	B1	Q5	20	D / 4		
	Mezzanine - NIC 4	B2	Q5	20	D / 4		

Mapping for SBE-820J/SBE-820J2 Four Pass-Thru Modules Installed

Blado		Port Mapping					
Slot	NIC	Module Slot	External Port	External Port LED Number	Cable Link		
	On Board - NIC 1	A1	Q5	20	D / 4		
D1	On Board - NIC 2	A2	Q5	20	D/4		
ы	Mezzanine - NIC 3	B1	Q3	9	A / 1		
	Mezzanine - NIC 4	B2	Q1	1	A / 1		
	On Board - NIC 1	A1	Q5	18	B / 2		
D2	On Board - NIC 2	A2	Q5	18	B / 2		
DZ	Mezzanine - NIC 3	B1	Q2	7	C / 3		
	Mezzanine - NIC 4	B2	Q1	3	C / 3		
	On Board - NIC 1	A1	Q4	16	D / 4		
B2	On Board - NIC 2	A2	Q4	16	D / 4		
БЗ	Mezzanine - NIC 3	B1	Q2	5	A / 1		
	Mezzanine - NIC 4	B2	Q2	5	A / 1		
	On Board - NIC 1	A1	Q4	14	B / 2		
R4	On Board - NIC 2	A2	Q4	14	B / 2		
D4	Mezzanine - NIC 3	B1	Q1	1	A / 1		
	Mezzanine - NIC 4	B2	Q2	7	C / 3		
	On Board - NIC 1	A1	Q3	12	D / 4		
R5	On Board - NIC 2	A2	Q3	12	D / 4		
53	Mezzanine - NIC 3	B1	Q1	3	C / 3		
	Mezzanine - NIC 4	B2	Q3	9	A / 1		
	On Board - NIC 1	A1	Q3	10	B / 2		
R6	On Board - NIC 2	A2	Q3	10	B / 2		
50	Mezzanine - NIC 3	B1	Q3	11	C / 3		
	Mezzanine - NIC 4	B2	Q5	17	A / 1		
	On Board - NIC 1	A1	Q2	8	D / 4		
B7	On Board - NIC 2	A2	Q2	8	D / 4		
07	Mezzanine - NIC 3	B1	Q4	13	A / 1		
	Mezzanine - NIC 4	B2	Q5	19	C / 3		
	On Board - NIC 1	A1	Q2	6	B / 2		
B8	On Board - NIC 2	A2	Q2	6	B / 2		
00	Mezzanine - NIC 3	B1	Q4	15	C / 3		
	Mezzanine - NIC 4	B2	Q4	15	C / 3		
	On Board - NIC 1	A1	Q1	4	D / 4		
BO	On Board - NIC 2	A2	Q1	4	D / 4		
53	Mezzanine - NIC 3	B1	Q5	17	A / 1		
	Mezzanine - NIC 4	B2	Q4	13	A / 1		
	On Board - NIC 1	A1	Q1	2	B / 2		
B10	On Board - NIC 2	A2	Q1	2	B / 2		
510	Mezzanine - NIC 3	B1	Q5	19	C / 3		
	Mezzanine - NIC 4	B2	Q3	11	C / 3		

Blado		Port Mapping					
Slot	NIC	Module Slot	External Port	External Port LED Number	Cable Link		
	On Board - NIC 1	A1	Q3	10	B / 2		
	On Board - NIC 2	A2	Q3	10	B / 2		
AI	Mezzanine - NIC 3	B1	Q1	1	A / 1		
	Mezzanine - NIC 4	B2	Q1	1	A / 1		
	On Board - NIC 1	A1	Q3	9	A / 1		
۸2	On Board - NIC 2	A2	Q3	9	A / 1		
A2	Mezzanine - NIC 3	B1	Q1	2	B / 2		
	Mezzanine - NIC 4	B2	Q1	2	B / 2		
	On Board - NIC 1	A1	Q2	8	D / 4		
A2	On Board - NIC 2	A2	Q2	8	D / 4		
AJ	Mezzanine - NIC 3	B1	Q1	3	C / 3		
	Mezzanine - NIC 4	B2	Q1	3	C / 3		
	On Board - NIC 1	A1	Q2	7	C / 3		
A4	On Board - NIC 2	A2	Q2	7	C / 3		
A4	Mezzanine - NIC 3	B1	Q1	4	D / 4		
	Mezzanine - NIC 4	B2	Q1	4	D / 4		
	On Board - NIC 1	A1	Q2	6	B / 2		
Δ5	On Board - NIC 2	A2	Q2	6	B / 2		
A3	Mezzanine - NIC 3	B1	Q2	5	A / 1		
	Mezzanine - NIC 4	B2	Q2	5	A / 1		
	On Board - NIC 1	A1	Q2	5	A / 1		
46	On Board - NIC 2	A2	Q2	5	A / 1		
AU	Mezzanine - NIC 3	B1	Q2	6	B / 2		
	Mezzanine - NIC 4	B2	Q2	6	B / 2		
	On Board - NIC 1	A1	Q1	4	D / 4		
Δ7	On Board - NIC 2	A2	Q1	4	D / 4		
	Mezzanine - NIC 3	B1	Q2	7	C / 3		
	Mezzanine - NIC 4	B2	Q2	7	C / 3		
	On Board - NIC 1	A1	Q1	3	C / 3		
Δ8	On Board - NIC 2	A2	Q1	3	C / 3		
~0	Mezzanine - NIC 3	B1	Q2	8	D / 4		
	Mezzanine - NIC 4	B2	Q2	8	D / 4		
	On Board - NIC 1	A1	Q1	2	B / 2		
44	On Board - NIC 2	A2	Q1	2	B / 2		
~~	Mezzanine - NIC 3	B1	Q3	9	A / 1		
	Mezzanine - NIC 4	B2	Q3	9	A / 1		
	On Board - NIC 1	A1	Q1	1	A / 1		
A10	On Board - NIC 2	A2	Q1	1	A / 1		
	Mezzanine - NIC 3	B1	Q3	10	B / 2		
	Mezzanine - NIC 4	B2	Q3	10	B / 2		

Mapping for SBE-610J/SBE-610J2 Four Pass-Thru Modules Installed

Mapping for MBE-620E with Two Pass-Thru Modules Installed

Blado		Port Mapping					
Slot	NIC	Module Slot	External Port	External Port LED Number	Cable Link		
۸1	On Board - NIC 1	A1	Q5	20	D / 4		
AI	On Board - NIC 2	A2	Q1	1	A / 1		
A2	On Board - NIC 1	A1	Q5	18	B / 2		
AZ	On Board - NIC 2	A2	Q1	3	C / 3		
٨2	On Board - NIC 1	A1	Q4	16	D / 4		
AJ	On Board - NIC 2	A2	Q2	5	A / 1		
A4	On Board - NIC 1	A1	Q4	14	B / 2		
A4	On Board - NIC 2	A2	Q2	7	C / 3		
۸ <u>5</u>	On Board - NIC 1	A1	Q3	12	D / 4		
AJ	On Board - NIC 2	A2	Q3	9	A / 1		
16	On Board - NIC 1	A1	Q3	10	B / 2		
~~	On Board - NIC 2	A2	Q3	11	C / 3		
Δ7	On Board - NIC 1	A1	Q2	8	D / 4		
~'	On Board - NIC 2	A2	Q4	13	A / 1		
48	On Board - NIC 1	A1	Q2	6	B / 2		
	On Board - NIC 2	A2	Q4	15	C / 3		
۵۹	On Board - NIC 1	A1	Q1	4	D / 4		
AJ	On Board - NIC 2	A2	Q5	17	A / 1		
Δ10	On Board - NIC 1	A1	Q1	2	B / 2		
	On Board - NIC 2	A2	Q5	19	C / 3		
B1	On Board - NIC 1	A1	Q1	1	A / 1		
51	On Board - NIC 2	A2	Q5	20	D / 4		
B2	On Board - NIC 1	A1	Q1	3	C / 3		
	On Board - NIC 2	A2	Q5	18	B / 2		
B3	On Board - NIC 1	A1	Q2	5	A / 1		
	On Board - NIC 2	A2	Q4	16	D / 4		
B4	On Board - NIC 1	A1	Q2	7	C / 3		
51	On Board - NIC 2	A2	Q4	14	B / 2		
B5	On Board - NIC 1	A1	Q3	9	A/1		
	On Board - NIC 2	A2	Q3	12	D / 4		
B6	On Board - NIC 1	A1	Q3	11	C / 3		
	On Board - NIC 2	A2	Q3	10	B / 2		
B7	On Board - NIC 1	A1	Q4	13	A/1		
	On Board - NIC 2	A2	Q2	8	D / 4		
B8	On Board - NIC 1	A1	Q4	15	C / 3		
	On Board - NIC 2	A2	Q2	6	B / 2		
B9	On Board - NIC 1	A1	Q5	17	A / 1		
	On Board - NIC 2	A2	Q1	4	D / 4		
B10	On Board - NIC 1	A1	Q5	19	C / 3		
	On Board - NIC 2	A2	Q1	2	B / 2		

Blado	NIC	Port Mapping					
Slot		Module Slot	External Port	External Port LED Number	Cable Link		
A1	On Board - NIC 1	A1	Q4	14	B / 2		
A1	On Board - NIC 2	A2	Q4	14	B / 2		
42	On Board - NIC 1	A1	Q4	13	A / 1		
AZ	On Board - NIC 2	A2	Q4	13	A / 1		
A 2	On Board - NIC 1	A1	Q3	12	D / 4		
AJ	On Board - NIC 2	A2	Q3	12	D / 4		
	On Board - NIC 1	A1	Q3	11	C / 3		
A4	On Board - NIC 2	A2	Q3	11	C / 3		
۸ <i>Б</i>	On Board - NIC 1	A1	Q3	10	B / 2		
AJ	On Board - NIC 2	A2	Q3	10	B / 2		
16	On Board - NIC 1	A1	Q3	9	A / 1		
Ab	On Board - NIC 2	A2	Q3	9	A / 1		
A7	On Board - NIC 1	A1	Q2	8	D / 4		
A'	On Board - NIC 2	A2	Q2	8	D / 4		
A 0	On Board - NIC 1	A1	Q2	7	C / 3		
AU	On Board - NIC 2	A2	Q2	7	C / 3		
٨٩	On Board - NIC 1	A1	Q2	6	B / 2		
~3	On Board - NIC 2	A2	Q2	6	B / 2		
A10	On Board - NIC 1	A1	Q2	5	A / 1		
AIU	On Board - NIC 2	A2	Q2	5	A / 1		
Δ11	On Board - NIC 1	A1	Q1	4	D / 4		
~''	On Board - NIC 2	A2	Q1	4	D / 4		
A12	On Board - NIC 1	A1	Q1	3	C / 3		
AIZ	On Board - NIC 2	A2	Q1	3	C / 3		
Δ13	On Board - NIC 1	A1	Q1	2	B / 2		
AIS	On Board - NIC 2	A2	Q1	2	B / 2		
A14	On Board - NIC 1	A1	Q1	1	A / 1		
A14	On Board - NIC 2	A2	Q1	1	A / 1		

Mapping for SBE-414E with Two Pass-Thru Modules Installed

5 Firmware and Configuration File Upload

Depending on the vendor and model of the external Top of Rack switch, an appropriate configuration file must be uploaded to the module to enable the external QSFP28 uplinks. This can be done using the CMM Web interface (version 3.55 or later is required). The procedure below applies for both configuration file and firmware upgrade.

Note: Contact Supermicro Technical Support to get the appropriate configuration file or in case the external ports link does not come up.

Instructions to Upload Config File/Upgrade

1. Log in to the CMM web interface and, from the left pane, select **Switch Module** to view the switch summary page. Then click the pass-thru module for which you want to update the configuration file.

In this example we are using switch A1.

Blade System	Switch Module							
Summary	HW Reset	JID On UID Off Ref	resh Auto Refresh	1				
Blade Status	Switch-							
Damas Consulta	Switch	Switch Type	Module Name	Pwr Status	Temperature	UID	Status	Management IP
Power Supply	Switch A1	25G Pass-thru Module	SBM-25G-P10 (P1)	On	38 35	Off UID	🕗 Normal	172.18.0.88
Switch Module	Switch A2							
🔿 СММ								

Figure 8. CMM Switch Module Page

2. Configure an IP address for the module. Scroll down to the **Switch Network Configuration** section to configure the IP address. The IP address can be static or DHCP. Click **Save**.

Switch Module	
HW Reset UID On UID Off Refresh Auto Refresh	
Switch Hide >>> [Switch A1] Summary F	RU Information
Switch A1 2 G Pass-thru Modul	
IP Config	Obtain an IP address automatically (use DHCP mode) 🗸
IP Address	172.18.0.88
Subnet Mask	255.255.255.0
Gateway	172.18.0.254
Mgmt 1 MAC Address	3c:ec:ef:12:4b:90 (Activated)
Mgmt 2 MAC Address	3ctectef:12:4b:91
Save	



3. Scroll further down to the **Pass-Thru Firmware/Configuration Upgrade** section in the Switch Summary page.

HW Reset UID On UID Off F	Refresh Auto Refresh	
Switch Switch Type	Hide >>> [Switch A1] Summary FRU Inform	nation
Switch A1 25G Pass-thru Modul	Gateway	172.18.0.254
Switch A2	Mgmt 1 MAC Address	3c:ec:ef:12:4b:90 (Activated)
	Mgmt 2 MAC Address Save Pass-Thru Firmware/Configuration Upgr TFTP Server IP Address File Name Update File	3c:ec:ef:12:4b:91
		Reset to Factory Default

Figure 10. File Upgrade/Update Section

4. Fill in the file information.

TFTP server IP Address: The configuration file must be available in a TFTP server for download.

File Name: bmb25gp10_cfg.dat

Note: The configuration file name should be exactly the same as above, as it is applied to the pass-thru module.

Pass-Thru Firmware/Configuration Upgrade					
TFTP Server IP Address	172.31.54.135				
File Name	bmb25gp10_cfg.dat				
Update File Apply File					

Figure 11. File Upgrade/Update Information

- 5. Click **Update File** button to start updating the configuration file.
- 6. Click the **Apply File** button to apply the port settings accordingly. The button is disabled until the process is complete. The new settings will be retained upon reset of the device.

6 WEB User Interface

The pass-thru module has a WEBUI, which is served over HTTPS. By default the WEBUI is disabled.

Setting Password

Set the login password for ADMIN user to enable the pass-thru WEBUI, from the CMM as shown below.

Figure 12. CMM, the WebUI Set Password Dialog

The pass-thru WEBUI can be accessed from a web browser over the link https://<IP-address>. From WEBUI the following tasks can be accomplished.

- View the Dashboard
- Configure management IP settings
- Upgrade the firmware
- Manage port configurations

Dashboard

<How to log in?>

The Dashboard page displays when the user logs in to the WEBUI. The Dashboard provides the management IP address, MAC address, device uptime, default configuration file, firmware version, and hardware model.

Pass-Through Module Information					
Management IP	172.18.1.53				
Management MAC	00:0C:06:68:01:79				
Device Up Time	0 days 0 hrs 19 mins 16 secs				
Default Config File					
Firmware Version	1.0.0.11				
Model	SBM-25G-P10(P1)				

Figure 13. WebUI, Dashboard

<Check instructions?>

Management IP Settings

Management IP of the pass-thru module can be configured in one of the two modes – DHCP and static. By default the pass-thru module operates in DHCP mode.

To view or configure IP settings, in the Dashboard, click the **System** menu. Then select **Managment IP**.

Ianagement IP Management IP Settings	Firmware Firmware	e Upgrade Upgrade	
		ID Address Made	Dunemie
		IP Address Mode	172.18.1.53
		Subnet Mask	255.255.255.0
		Default Gateway	172.18.1.254

Figure 14. WebUI, Setting the IP Address

Firmware Upgrade

The firmware should be maintained at the latest version. Check with Supermicro Support for the latest firmware.

To upgrade the firmware, in the Dashboard, click the **System** menu. Then select **Firmware Upgrade**. Choose the correct firmware file, Then click the **Upload Firmware** button.

	PORTS	
Management IP Management IP Settings	Firmware Upgrade Firmware Upgrade	
	File Name	Choose File BMB-25G-P1.0.0.12.bin
		Upload Firmware

Figure 15. WebUI, Upgrading Firmware

It might take few minutes, so wait for the upload and upgrade to complete. When the upgrade is completed, a confirmation message is displayed.

Ports

The Ports page in the WEBUI allows the user to configure the port speed, negotiation and FEC settings. By default the ports will be configured based on the blade server model, which is obtained from CMM. If a third party peer switch is used and is not compatible with the default settings, then the ports can be manually configured using this page.

SUPPORT HELP REFRESH 🔿
CONFIGURE FILE UPLOAD
e Name Choose File No file chosen
Upload
e

To manually configure the ports, in the Dashboard, click $\ensuremath{\textbf{Ports}}$.

Figure 16. WebUI, Configuring Ports

To upload a configuration file, choose the correct configuration file and click **Upload**.

O DASHBOARD SYSTEM+ FORTS	SUPPORT HELP REFRESH 🔿
PORT CONFIGURATION FILE MANAGEMENT	CONFIGURE FILE UPLOAD
Port Configuration File Name Default Selection	File Name Choose File P10_10G_2Config.dat
Delete Show Config Set As Default Unset Default	Upload

Figure 17. WebUI, Selecting a Port Configuration File

The uploaded configuration files will be displayed as shown below. If an invalid file is uploaded, then the file will be deleted and will not be displayed in the list.

O DASHBOARD SYSTEM - PORTS SUPPORT HELP REFRESH 🔿						
	PORT CONFIGURATION FILE	MANAGEMENT	CONFIGURE FILE UPLOAD			
	Port Configuration File Name	Default Selection	Choose File No file chosen			
	P10_CMM_25LNFC_Config.dat		File Name			
	P10_10G_25LNFC_Config.dat		Upload			
Delete	Show Config Set As Default	Unset Default				

Figure 18. WebUI, Configuring Ports, File List

To check the detailed settings of any configuration file, select that configuration file and click on the **Show Config** button.

Figure 19. WebUI, Configuring Ports, Show Configuration

Sample configuration is shown below. These settings vary based on the peer device, cable, etc., so the user must have some level of expertise in networking to edit this settings.

PORT	CONFIGURATION	Apply	Save Exit					
File: P10_(File: P10_CMM_25LNFC_Config.dat							
Port	10G Host	10G Line	25G Host	25G Line	Speed	Description		
0	ANON_NOFEC V	ANOFF_NOFEC V	ANON_RSFEC V	ANOFF_FCFEC V	CMM 🗸			
1	ANON_NOFEC V	ANOFF_NOFEC V	ANON_RSFEC V	ANOFF_FCFEC V	CMM 🗸			
2	ANON_NOFEC V	ANOFF_NOFEC V	ANON_RSFEC V	ANOFF_FCFEC V	CMM 🗸			
3	ANON_NOFEC V	ANOFF_NOFEC V	ANON_RSFEC V	ANOFF_FCFEC V	CMM 🗸			
4	ANON_NOFEC V	ANOFF_NOFEC V	ANON_RSFEC V	ANOFF_FCFEC V	CMM 🗸			
5	ANON_NOFEC V	ANOFF_NOFEC V	ANON_RSFEC V	ANOFF_FCFEC V	CMM 🗸			
6	ANON_NOFEC V	ANOFF_NOFEC V	ANON_RSFEC V	ANOFF_FCFEC V	CMM 🗸			

Figure 20. WebUI, Example Port Configuration Files

After changing the settings, click the **Apply** button to test the configuration. If the links works well, then click on the **Save** button to save the configuration. If the configuration is not saved, it is effective only until the pass-thru module is rebooted.

File: P10_C	CONFIGURATION	Apply	Save			
Port	10C Host	10G Line	25C Host	25C Linc	Speed	Description
0	ANON_NOFEC V	ANOFF_NOFEC V	ANON_RSFEC V	ANOFF_FCFEC V	CMM 🗸	
1	ANON_NOFEC V	ANOFF_NOFEC V	ANON_RSFEC V	ANOFF_FCFEC V	CMM 🗸	
2	ANON_NOFEC V	ANOFF_NOFEC V	ANON_RSFEC V	ANOFF_FCFEC V	CMM 🗸	
3	ANON_NOFEC V	ANOFF_NOFEC V	ANON_RSFEC V	ANOFF_FCFEC V	CMM 🗸	
4	ANON_NOFEC V	ANOFF_NOFEC V	ANON_RSFEC V	ANOFF_FCFEC V	CMM 🗸	
5	ANON_NOFEC V	ANOFF_NOFEC V	ANON_RSFEC V	ANOFF_FCFEC V	CMM 🗸	
6	ANON_NOFEC V	ANOFF_NOFEC ~	ANON_RSFEC V	ANOFF_FCFEC V	CMM 🗸	

Figure 21. WebUI, Applying a Port Configuration File

To apply the configuration across the reboots, make the configuration file as default as shown below. Select the configuration file and click the **Set As Default Config** button.

Figure 22. WebUI, Setting a Default Port Configuration File

Only one file can be the default configuration file. It is marked under the **Default Selection** column.

Unwanted configuration files can be deleted permanently. To delete a configuration file, select the file and click the **Delete** button. A warning message will ask for confirmation. Click OK. The deleted files are not recoverable.

Figure 24. WebUI, Deleting a Port Configuration File

To remove the file from default configuration, select the file and click the **Unset Default** button. If no file is set as default configuration file, then after every boot the pass-thru module will follow the speed setting from CMM.

Figure 25. WebUI, Changing the Default Status

7 Specifications

Module Hardware Specifications

Maximum Internal ports: Twenty 10G/25G Internal Ports External Ports: Five QSFP28/100G ports that can split into four 25G/SFP28 or four 10G/ SFP+ using Fan-out cables Console Port: One (RJ45 based)

Physical and Environmental Specifications

Weight: 1.99lbs (0.902Kg) 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: 74 Watts

Enclosure Compatibility

SBE-820J: Up to four pass-thru modules SBE-610J: Up to four pass-thru modules SBE-414E: Up to two pass-thru modules