



**SSE-F3548S/SSE-F3548SR**

**Port Mirroring**

**User's Guide**

Revision 1.0

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## Document Revision History

Date	Revision	Description
03/2/2020	1.0	Initial document.

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# 1 Port Mirroring Overview

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Supermicro switches support Port Mirroring function. Users can configure the Port mirroring session(s) to provide a method to monitor networking traffic flow on another port.

Port mirroring feature allow user to configure up to 4 independent sessions. Each session will have one destination port and as many source ports as available in the Switch. Networking traffic flowing in any direction for the source ports(s), being transmit only, receive only or both transmit and receive, will be monitored, or mirroring at the destination port.

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## 2 Port Mirroring Defaults

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Parameter	Default Value
Port mirroring	Disabled
Port mirroring direction	Both

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## 3 Configure Port Mirroring in CLI

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Step	Command	Description
Step 1	<code>configure terminal</code>	Enters the configuration mode
Step 2	<code>Monitor session &lt;session number: 1-4&gt; destination interface &lt;interface-type&gt; &lt;interface-id&gt;</code>	Configure Port Mirroring.  <i>session_number</i> – 1, indicates only one session is supported.  <i>Destination</i> – Monitoring Port.  <i>interface-type</i> –may be any of the following: fx-ethernet – fx cx-ethernet – cx  <i>interface-id</i> –is in <i>slot/port</i> format for all physical interfaces.

		NOTE: Source and Destination port cannot be same.
Step 3	<b>Monitor session &lt;session number: 1-4&gt;source interface &lt;interface-type&gt; &lt;interface-id&gt; {rx } tx   both}</b>	<p>Configure Port Mirroring.</p> <p><i>session_number</i> – 1, indicates only one session is supported.</p> <p><i>Source</i> – Monitored Port.</p> <p><i>interface-type</i> –may be any of the following:  fx-ethernet – fx  cx-ethernet – cx</p> <p><i>interface-id</i> –is in <i>slot/port</i> format for all physical interfaces.</p> <p><i>rx</i> – Packets received on source port are monitored (Ingress).</p> <p><i>tx</i> – Packets transmitted on source port are monitored (Egress).</p> <p><i>both</i> – Packets received and transmitted on source port are monitored.</p> <p>NOTE: Source and Destination port cannot be same.</p>
Step 3	<b>End</b>	Exits the configuration mode.
Step 4	show port-monitoring	Displays the port monitoring configuration.
Step 5	<b>write startup-config</b>	Optional step – saves this configuration to be part of startup configuration.

The following command in Switch configuration mode is used to configure a session of mirroring for one unique source port to one destination port. The source port has to be unique, because once the source port is used in one session, it can not be used in another session, unless the port is removed first. Destination port does not have this restriction.

The mirroring action is carried out only when both destination port and source port(s) are in place for the same session. Hence, the execution to carry out a mirroring action generally is composed of these commands.

The first command will establish the mirroring session with the destination port. The interface-id is the port that user wanted to be mirrored to, with format of example like fx 0/1, cx 0/1, cx 0/23 ...

The second command will establish the other half of the mirroring action, in which the session, if it is the same as the session of the previous destination port command, will mirror traffic from the source port

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<interface-id>, with direction of ingress (Rx), egress (Tx) or both. If direction is not given, then both is the default direction.

In CLI, user can only add one source port at a time to any session.

In the same session, user's new command for direction of same port, will overwrite the previous configuration of the same source port.

Once the source port is used in a session, to use it in another session, user needs to remove the source port first. If not, the recently input source port will overwrite the previous source port.



The "no monitor session [session\_number:1-4] destination interface <interface-type> <interface id>" command delete the destination port mirroring.

The "no monitor session [session\_number:1-4] source interface <interface-type> <interface-id>" command deletes the source port mirroring.

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Note that in the command to remove the source port, there is no provision for the direction field {rx ,tx, both}.

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The example below shows the commands used to configure Port Mirroring.

SMIS# configure terminal

SMIS(config)# monitor session destination interface fx 0/48

SMIS(config)# monitor session source interface fx 0/22

SMIS(config)# monitor session source interface fx 0/23

SMIS(config)# monitor session source interface fx 0/24

SMIS(config)# monitor session source interface fx 0/25

SMIS(config)# end

SMIS# show port-monitoring

Port Monitoring is enabled

Monitor Port : Fx0/48

Port	Ingress-Monitoring	Egress-Monitoring
Fx0/1	Disabled	Disabled
Fx0/2	Disabled	Disabled
Fx0/3	Disabled	Disabled
Fx0/4	Disabled	Disabled
Fx0/5	Disabled	Disabled
Fx0/6	Disabled	Disabled
Fx0/7	Disabled	Disabled
Fx0/8	Disabled	Disabled
Fx0/9	Disabled	Disabled
Fx0/10	Disabled	Disabled
Fx0/11	Disabled	Disabled
Fx0/12	Disabled	Disabled

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Fx0/13	Disabled	Disabled
Fx0/14	Disabled	Disabled
Fx0/15	Disabled	Disabled
Fx0/16	Disabled	Disabled
Fx0/17	Disabled	Disabled
Fx0/18	Disabled	Disabled
Fx0/19	Disabled	Disabled
Fx0/20	Disabled	Disabled
Fx0/21	Disabled	Disabled
Fx0/22	Enabled	Enabled
Fx0/23	Enabled	Enabled
Fx0/24	Enabled	Enabled
Fx0/25	Enabled	Enabled
Fx0/26	Disabled	Disabled
Fx0/27	Disabled	Disabled
Fx0/28	Disabled	Disabled
Fx0/29	Disabled	Disabled
Fx0/30	Disabled	Disabled
Fx0/31	Disabled	Disabled
Fx0/32	Disabled	Disabled
Fx0/33	Disabled	Disabled
Fx0/34	Disabled	Disabled
Fx0/35	Disabled	Disabled
Fx0/36	Disabled	Disabled
Fx0/37	Disabled	Disabled
Fx0/38	Disabled	Disabled
Fx0/39	Disabled	Disabled
Fx0/40	Disabled	Disabled
Fx0/41	Disabled	Disabled
Fx0/42	Disabled	Disabled
Fx0/43	Disabled	Disabled
Fx0/44	Disabled	Disabled
Fx0/45	Disabled	Disabled
Fx0/46	Disabled	Disabled
Fx0/47	Disabled	Disabled
Fx0/48	Disabled	Disabled
Cx0/1	Disabled	Disabled
Cx0/2	Disabled	Disabled
Cx0/3	Disabled	Disabled
Cx0/4	Disabled	Disabled

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# Contacting Supermicro

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