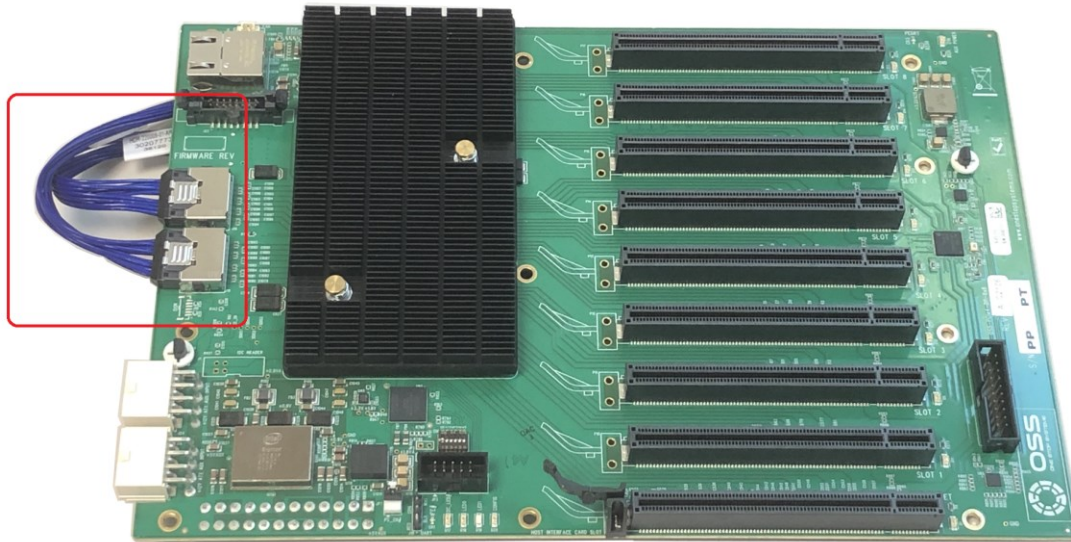




ENABLE OPTION SLOT #8

OSS-521



QUICK INSTALLATION GUIDE

Arc Cables Installation & Enable Option Slot



OSS
ONE STOP SYSTEMS

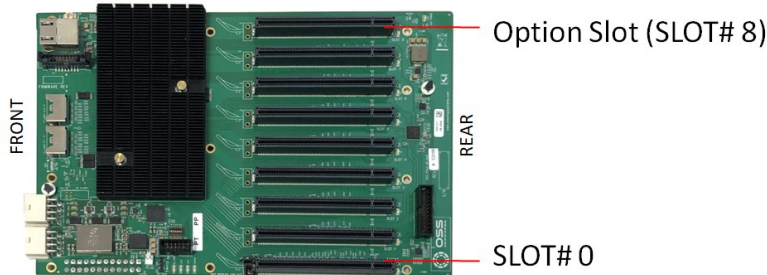
www.onestopsystems.com

Table of Contents

1	Enable Option Slot	3
2	Arc Cables Installation	4
	STEP 1: Use Appropriate Arc Cables	4
	STEP 2: Locate the ARF6 Connectors	4
	STEP 3: Connect the ARC6 Cables	5
	STEP 4: Set Dipswitches	7
3	Use Case - Configuration	9
3.1	Slot 8 configured as Downstream mode	9
3.2	Slot 8 configured as an Upstream mode	10
4	How to Get More Help	11
4.1	Contacting Technical Support	11
4.2	Returning Merchandise	11
4.3	Third Party Hardware & Software Support Policy	12
4.4	Online Support Resources	12

1 Enable Option Slot

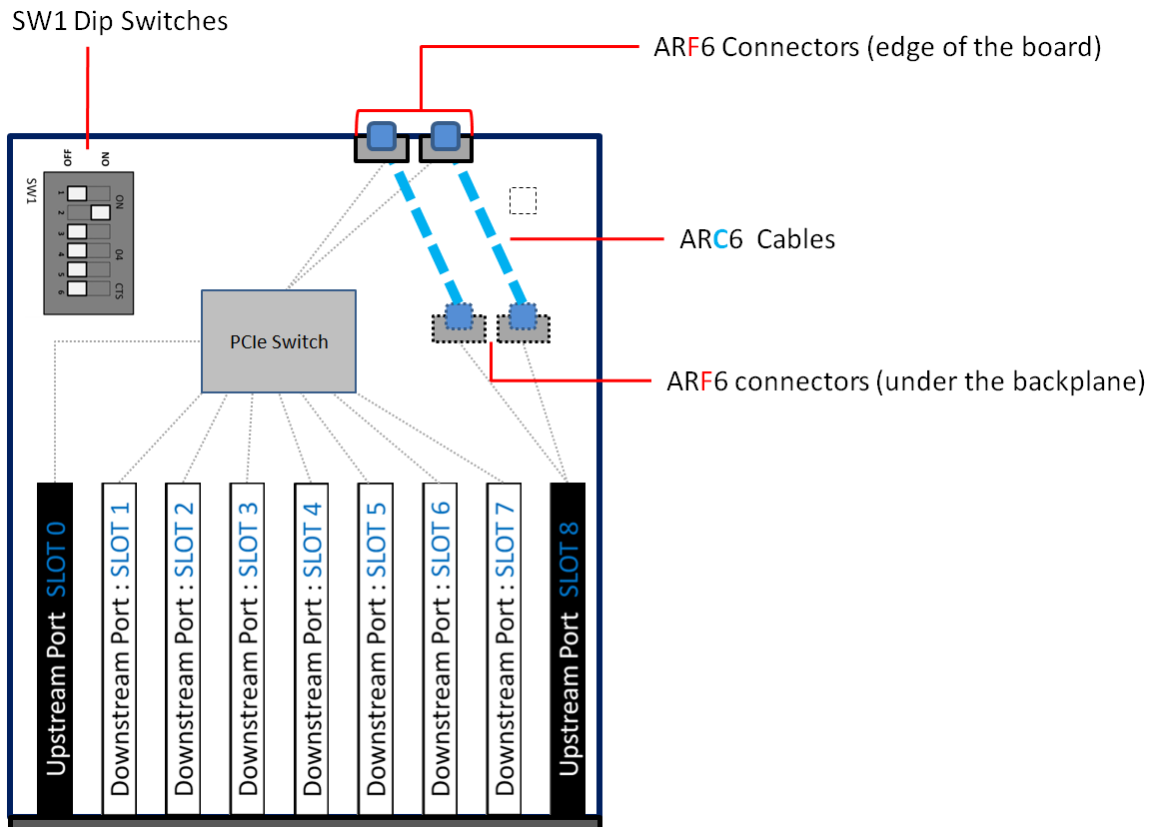
Enable Option Slot# 8, OSS-521 board. Attach ARC6 cables between the ARF6 connectors on the edge of the board and under the backplane.



Slot #8 is an option slot on OSS-521 backplane. SLOT #8 can be configured to operate in an Upstream mode or Downstream mode. To enable the Slot #8 as Upstream mode or Downstream mode:

Upstream mode: Set SW1 #2 to ON position. Set SW1 #1 to OFF position.

Downstream mode: Set SW #1 and #2 to ON positions.

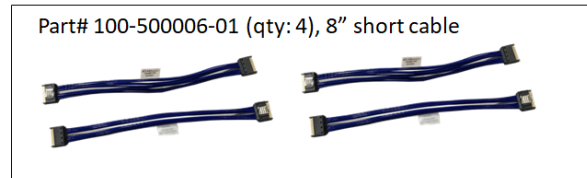
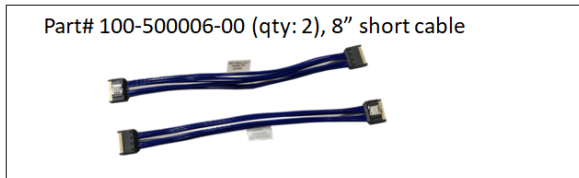


2 Arc Cables Installation

STEP 1: Use Appropriate Arc Cables

- For a single backplane, you need two ARC6 Cables.
- For a dual backplane or when installing two backplanes, you need four cables.
- If you need to order the ARC6 cables, use the OSS part numbers below.

Prepare the ARC6 cable; it is an 8" short cable.

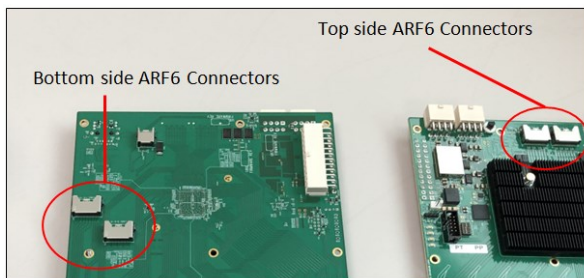


Note: For reference only, 290-001-218-RC is the part number for the single ARC6 cable.

STEP 2: Locate the ARF6 Connectors

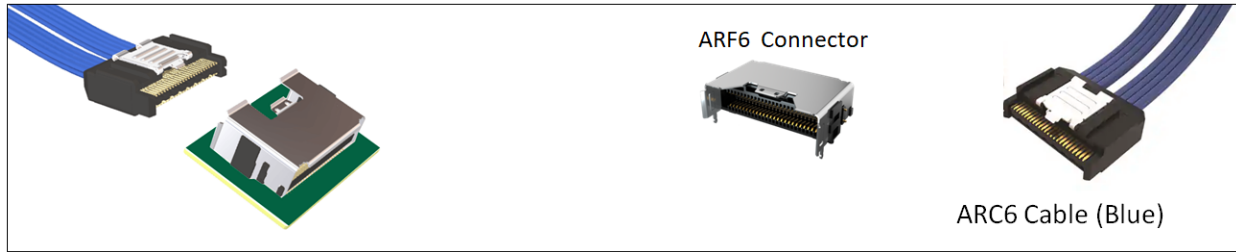
Locate the ARF6 connectors on the backplane. There are total of four ARF6 connectors mounted on the backplane.

- Two ARF6 connectors / ports on the edge of the board (topside).
- Two ARF6 connectors / ports under the backplane (bottom side).



STEP 3: Connect the ARC6 Cables

Attach the ARC6 cable between the top side and bottom side ARF6 connectors.



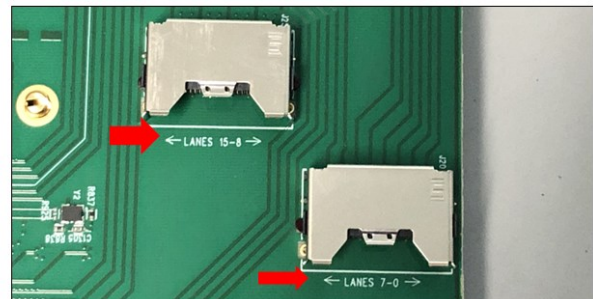
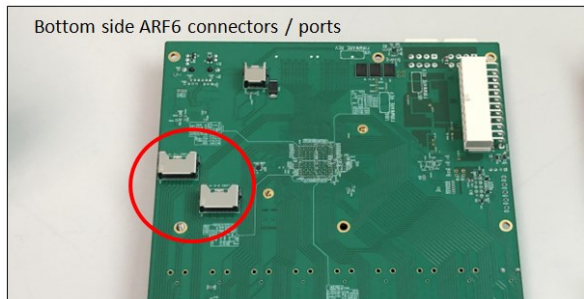
Pay attention on the ARF6 connector / port, each connector is labeled with lane numbers for proper port identification and location.

- One ARF6 connector / port: x8 lanes
- Two ARF6 connectors / ports: x16 lanes

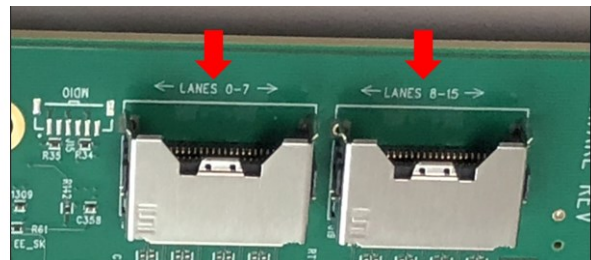
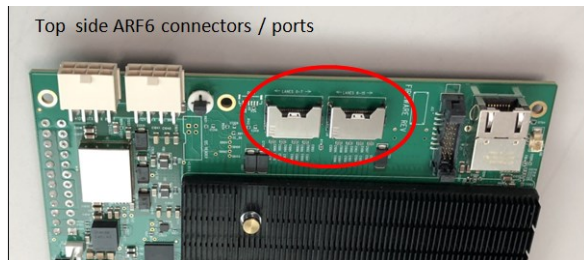
High lane Ports are labeled with 15-8 & 8-15		Low lane Ports are labeled with 7-0 & 0-7	
Lane Port	Location	Lane Port	Location
8-15 port	Top of the board	0-7	Top of the board
15-8	Under the board	7-0	Under the board

NOTE: It is very important to connect the ARC6 cables to the appropriate ARF6 ports to achieve proper x16 lane connectivity and slot operation.

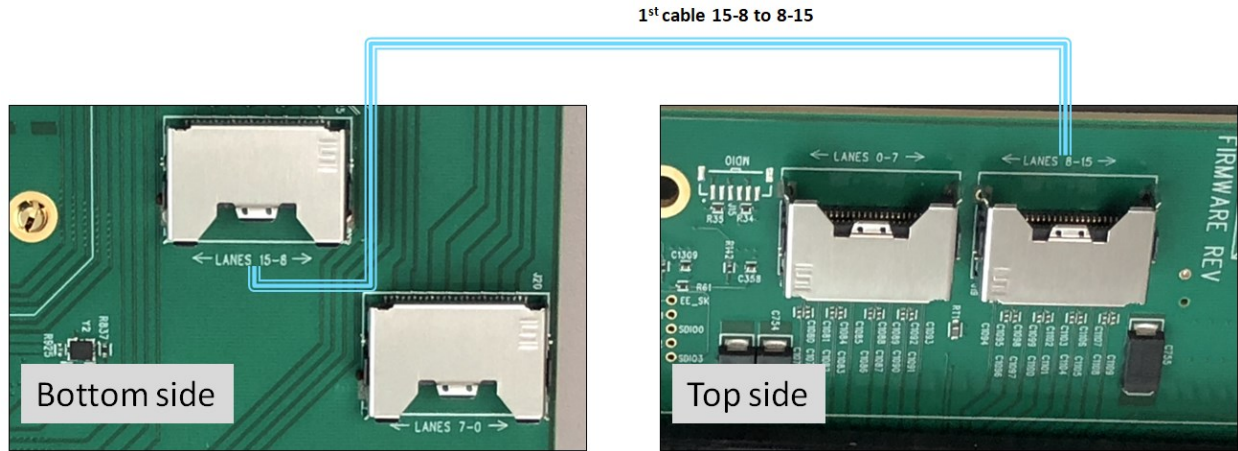
Bottom (under) side ARF6 connectors / ports, see photos below.



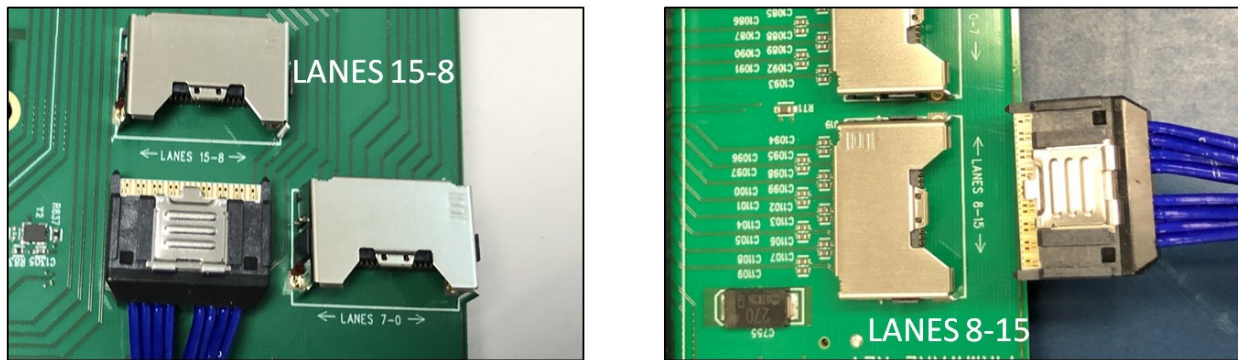
Top side ARF6 connectors / ports, see photos below.



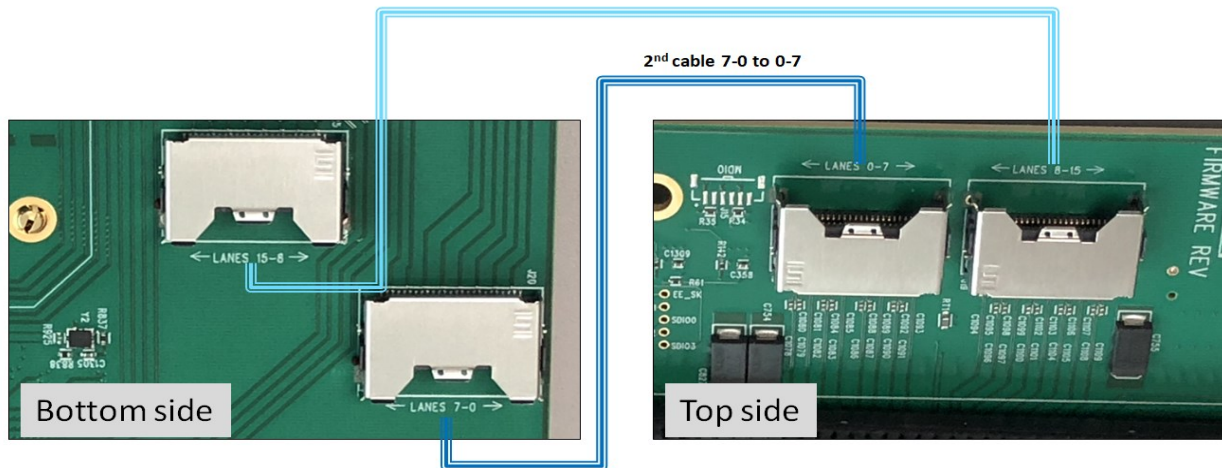
Attach the 1st cable between bottom ARF port LANES 15-8 and top ARF port LANES 8-15. Follow the diagram below.



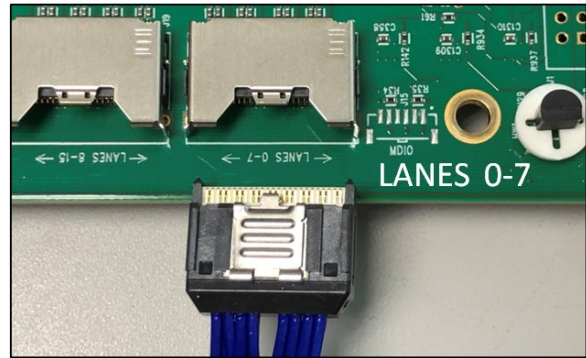
Photos below showing the attached cable between port lanes 15-8 and port lanes 8-15 (or vice versa).



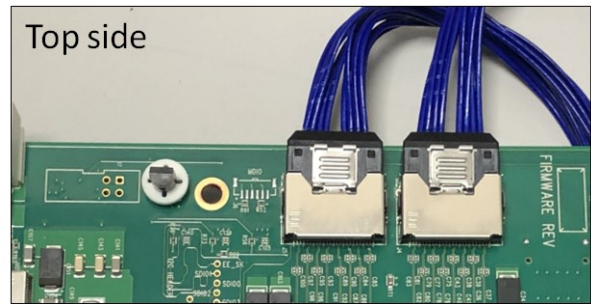
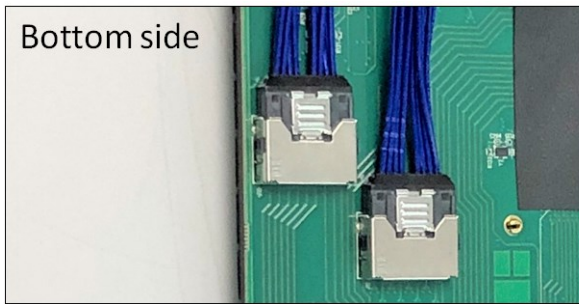
Attach the 2nd cable between bottom ARF port LANES 7-0 and top ARF port LANES 0-7. See diagram below



Photos below showing the attached cable between port port lanes 7-0 and port lanes 0-7 (or vice versa).



See photos below after attaching the two ARC6 cables between the bottom side and top side ARF6 ports.

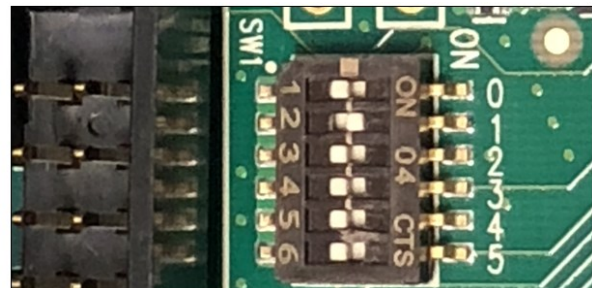
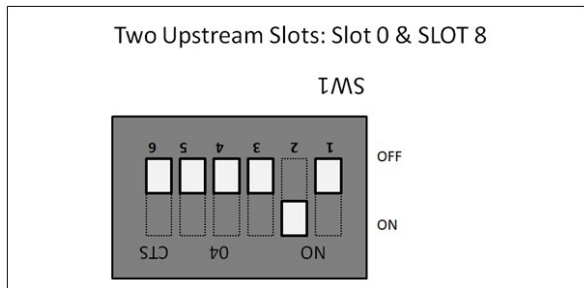


STEP 4: Set Dipswitches

Set the dip switches on the backplane accordingly.

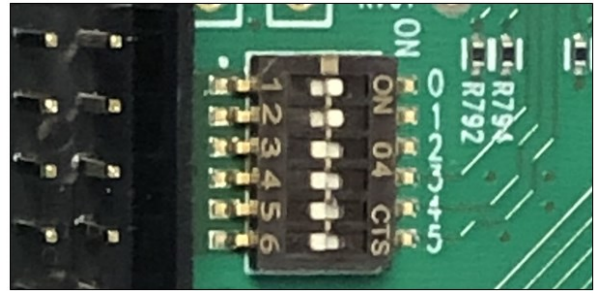
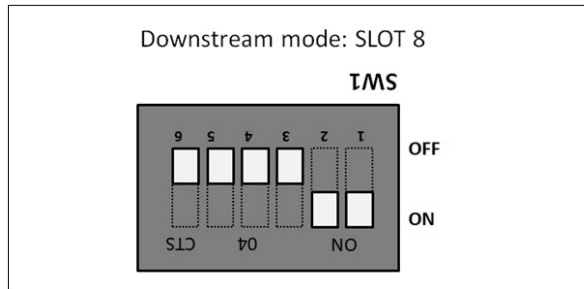
To operate the SLOT 8 in an **Upstream mode**, set the dip switches using the settings below (diagram / photo).

- SW1 #1 to OFF position
- SW1 #2 to ON position.



To operate the SLOT 8 in a **Downstream mode**, set the dip switches using the settings below (diagram / photo).

- SW1 #1 to ON position
- SW1 #2 to ON position



OSS-521 backplane is ready to use.

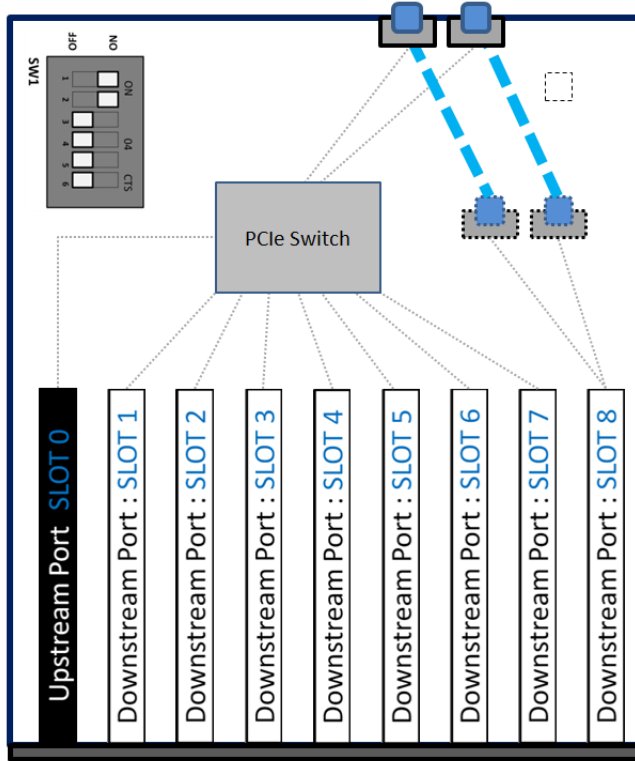
- Upstream slot: Only plug in an OSS HIB Target card (FPGA card).
- Downstream slot: Use for endpoint devices or PCIe cards (i.e. GPUs, video card, sound card, Ethernet cards and etc.)

Only use certified and compatible OSS Gen4 HIB cards (host and target cards).

- OSS HIB Target card: Install in the appropriate Upstream slot (Slot 0 and or Slot 8).
- OSS HIB Host card: Install in the computer's PCIe x16 slot.

3 Use Case - Configuration

3.1 Slot 8 configured as Downstream mode



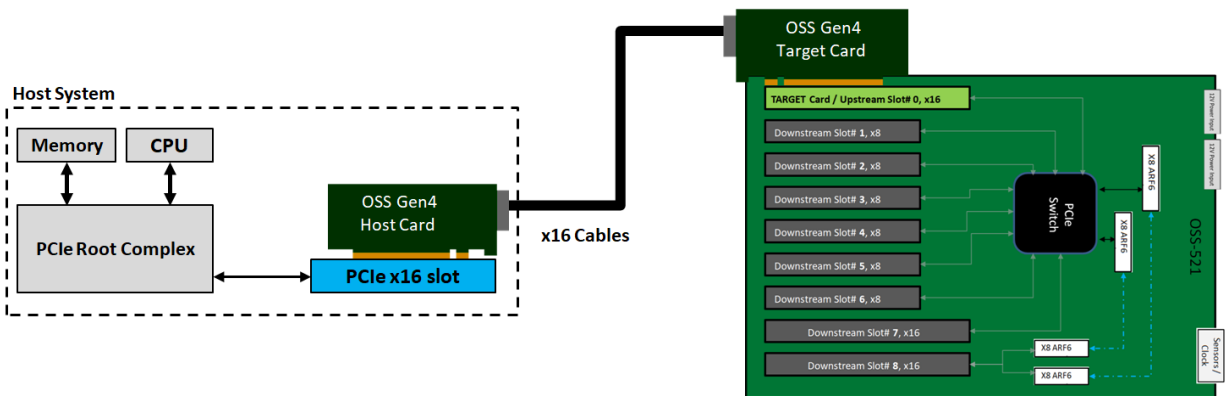
1 Upstream Slot (SLOT 0)

- One partition

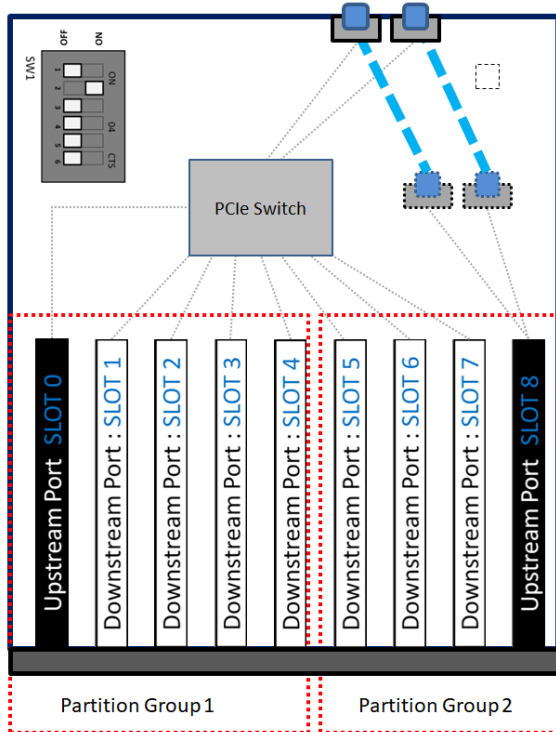
8 Downstream Slots

- Slots # 1, 2, 3, 4, 5, 6, 7 and 8

Setup# 1: OSS-521 connected to a single host computer



3.2 Slot 8 configured as an Upstream mode



2 Upstream Slots (SLOT 0 and SLOT 8)

- Two partitions

7 Downstream Slots

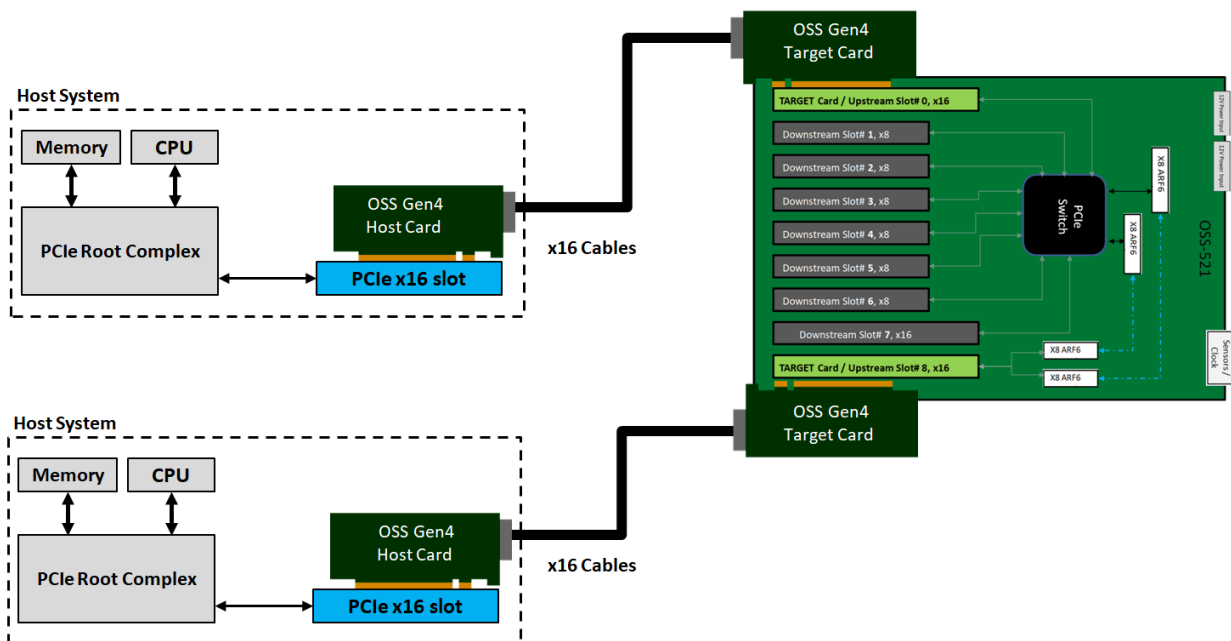
- 4 Downstream slots for **partition group 1**

- Slots # 1, 2, 3 and 4

- 3 Downstream slots for **partition group 2**

- Slots # 5, 6 and 7

Setup# 2: OSS-521 connected to two host computers



4 How to Get More Help

You can visit the Technical Support FAQ pages:

- Go to www.onestopsystems.com, click "Support" from the top menu and select "Knowledgebase and FAQ".

4.1 Contacting Technical Support

Our support department can be reached by phone at [1 \(760\) 745-9883](tel:1-760-745-9883). Support is available Monday through Friday, 8:00 AM to 5:00 PM PT. When contacting Technical Support make sure to include the following information:

1. Exact and correct serial #
2. Service Ticket or Case # (if you already submitted an online request)
3. Computer Type & Model: Operating System
4. Make & Model of PCI/PCIe cards: Application
5. Problem description

When submitting an online technical support request always provide a valid working e-mail address, phone number, shipping address and proper contact name. Check your e-mail for an automated response containing the case # and updates.

You can also visit our web site at <https://www.onestopsystems.com/pages/support> for a quick response, use the Technical Support and RMA Request Form available in the Support Section of the website. Simply complete the form with all required information. Please make sure that your problem description is sufficiently detailed to help us understand your problem.

Shipping or Transporting of Expansion Unit with PCI / PCIe cards

Any PCIe cards in **should be removed** (or not to be installed) prior to shipment to avoid or prevent possible damage. Note: Expansion board and PCIe / PCI cards that arrive damaged in shipment will not be covered under warranty.

4.2 Returning Merchandise

If factory service is required, a Service Representative will give you a Return Merchandise Authorization (RMA) number. Put this number and your return address on the shipping label when you return the item(s) for service. Please note that One Stop Systems WILL NOT accept COD packages, so be sure to return the product freight and duties-paid. Ship the well-packaged product to the address below:

Attention:RMA # _____, One Stop Systems
2235 Enterprise Street, #110
Escondido, CA 92029
USA

It is not required, though highly recommended, that you keep the packaging from the original shipment of your product. However, if you return a product for warranty repair/ replacement or take advantage of the 30-day money back guarantee, you will need to package the product in a manner similar to the manner in which it was received from our plant. We cannot be responsible for any physical damage to the product or component pieces of the product (such as the host or expansion interfaces for the expansion chassis) that are damaged due to inadequate packing. Physical damage sustained in such a situation will be repaired at the owner's expense in accordance with Out of Warranty Procedures. Please, protect your investment, a bit more padding in a good box will go a long way to insuring the device is returned to use in the same condition you shipped it in. Please call for an RMA number first.

4.3 Third Party Hardware & Software Support Policy

OSS tests, certifies and bundles many popular third party hardware and software products with OSS hardware for ease of use and guaranteed operation. OSS encourages customer innovation by combining OSS products in new and interesting ways with third party and customer developed hardware and software. Unfortunately, with virtually infinite combinations of hardware and software, OSS cannot test and validate every possible configuration. OSS is committed to supporting its products and identifying if any technical issue may be related to third-party hardware or software. In order to isolate technical issues, OSS may request that the system be returned to the same configuration that shipped from the OSS factory and any non-OSS supplied third-party hardware or software be removed from the system during troubleshooting.

We test, certify and support many third party hardware and software products along with OSS hardware and are happy to integrate a fully supported system. Ask us about that service and we would be happy to help. If an OSS product is fully functional and a support issue is related to third-party hardware or software that did not ship from the OSS factory, the customer requesting support should reach out to the third-party vendor for assistance to fully troubleshoot the issue.

4.4 Online Support Resources

If you need technical support, product assistance or have a technical inquiry we encourage you to submit it online using our Technical Support Form. Go to www.onestopsystems.com and click "Support" from the top menu.



2235 Enterprise Street, Suite#110, Escondido CA 92029

Toll-Free : +1(800)285-8900 US • Main: +1 (760) 745-9883 • Fax: +1 (760) 745-9824

www.onestopsystems.com