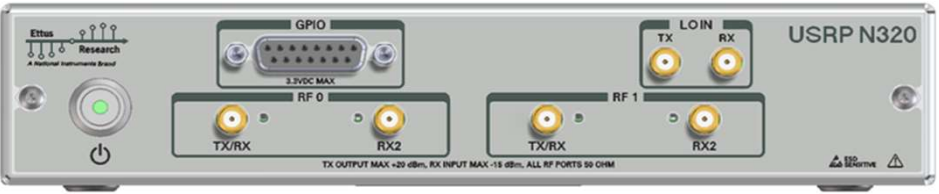


ORDERED	Tracking information	DELIVERED	Model	Supplier	PN	Description	QTY	Cost	Ext Cost	Notes
NI Products										
			OctoClock-G CDA-2990	NI	784306-01	CDA-2990 8 CHANNEL CLOCK DISTRIBUTION ACCESSORY WITH GPSDO	1		\$0.00	
Add part numbers to shopping cart here			OctoClock CDA-2990	NI	784305-01	CDA-2990,8 CHANNEL CLOCK DISTRIBUTION ACCESSORY	2		\$0.00	
Shopping Cart - National Instruments (ni.com)			USRP N320	NI	786503-01	USRP N320 (2 TX/RX CHANNELS, 200 MHZ BW) - ETTUS RESEARCH	10		\$0.00	
			USRP N321	NI	786504-01	USRP N321 (2 TX/RX CHANNELS, 200 MHZ BW, W/LO DISTRIBUTION) -	6		\$0.00	
			10Gb SFP Cables	NI	783343-01	10 GIGABIT SFP+ ETHERNET CABLE, 1 M - ETTUS RESEARCH	16		\$0.00	For the x710 Network Card
			.3M SMA to SMA Cable	NI	763444-01	SMA MALE TO SMA MALE CABLE, 50 OHM, 38.1 CM			\$0.00	
			0.6M SMA to SMA Cable & Attenuator	NI	782781-01	2 0.6M SMA-M to SMA-M cables and 2 SMA-F to SMA-M Attenuators			\$0.00	
			2M SMA to SMA Cables	NI	783470-01	CABLE ASSEMBLY, SMA TO SMA, 2M			\$0.00	
			RF Torque Screwdriver and SMA Driver Bit	NI	780895-01	RF Torque Screwdriver and SMA Driver Bit	1		\$0.00	
			USRP N3xx Rack Mount Accessory	NI	786467-01	USRP N3xx Rack Mount Accessory	8		\$0.00	
Server & Network Cards										
			Server	SuperMicro	4124GS-TNR	Dual AMD EPYC™ 7002 GPU Server	1		\$0.00	
			M.2 storage drive	Amazon	SB-RKT4P-2TB	Sabrent 2TB Rocket 4 Plus NVMe 4.0 Gen4 PCIe M.2 Internal SSD Extrr	8		\$0.00	
			M.2 PCIe controller	Highpoint	SSD7505	HighPoint SSD7505 PCIe 4.0 x16 4-Channel M.2 NVMe RAID Controller	2		\$0.00	
			Network Adapter x710 4 SFP+ Ports	CDW	X710DA4FH	Intel Ethernet Converged Network Adapter X710-DA4 - network adapte	4		\$0.00	Do not mix different network cards.
			Network Adapter e810 2 QSFP+ Ports	CDW	E810CQDA2	Intel Ethernet Network Adapter E810-CQDA2 - network adapter - PCIe	2		\$0.00	Do not mix different network cards.
			QSFP28 to SFP28	CDW	MCP7F00-A002R30N	Mellanox LinkX 100GBase direct attach cable - 6.6 ft	4		\$0.00	Use with E810-CQ card
Rack Assembly										
			42U Open Frame Rack Enclosure Server Cabinet 3000lb Capacity	CDW	SR42UBEXPND		1		\$0.00	
			1U Adjustable Mount Depth Heavy Duty Vented Rack Mount Shelf	CDW- StarTech	ADJSHELFHDV		2		\$0.00	
			APC rack shelf - 1U	CDW- APC	AR8125		2		\$0.00	
			Rackmount extension bracket	CDW	B018-000-1P5		8		\$0.00	
			HW1032-50 Cage	Rackmount Solutions	HW1032-50 Cage	Screws, Cage Nuts, Washers	5			
			Relay Rack or 4 Post Rack Cabinet.	IAENCLOSURES.C						
			Vented Server Rack Mount Shelf	OM	IAB103V10-1U	IAB103V10-1U 1U 3 Inch Rack Extender for Industrial Standard 19 Inch	8		\$0.00	
			Tripp Lite Rack Enclosure Server Blanking Panel Kit	StarTech	ADJSHELF	StarTech.com 1U Adjustable Vented Server Rack Mount Shelf - 175lbs	1		\$0.00	
			Side Panel for SR42UB Rack Enclosure with Key Lock Latch	CDW- Tripp-Lite	3849592	Tripp Lite Rack Enclosure Server Cabinet 4 Piece Blanking Panel Kit 19 in	1		\$0.00	
			Black Slotted-Duct Raceway	Amazon	SR42SIDE	Tripp Lite SR42SIDE Side Panel for SR42UB Rack Enclosure with Key Lock	4		\$0.00	
				Amazon	RMT312A	Black Box 2.25" H x 1.5" W, 72" L Black Slotted-Duct Raceway	2		\$0.00	
Rack Devices										
			Network Switch	Amazon	Cisco SG110-24		1		\$0.00	
			Basic Power Distribution Unit	CDW	PDU1220	Tripp Lite PDU Single Phase Basic Horizontal 120V 2.4kw 13 5-15/20R 2i	1		\$0.00	
			Switched Power Distribution Unit	CDW	PDU MH20NET	Tripp Lite PDU Switched 120V 20A 5-15/20R 16 Outlet 1URM	1		\$0.00	
			8 way power splitter/combiner	Mini Circuits	ZN8PD1-63W-S+		8		\$0.00	
			4 way power splitter/combiner	Mini Circuits	ZN4PD1-63HP-S+		2		\$0.00	
			Rack Console			KVM rack or equivalent				
			Stanley 31610 SurgeMax Pro 9 Outlet Metal Surge Protector, Black	Stanley / Amazon	31610	Stanley 31610 SurgeMax Pro 9 Outlet Metal Surge Protector, Black	2		\$0.00	
Cables & Management										
			Cat 6 RJ45 Cables	Amazon	160021-5x5		5		\$0.00	
			10' power cable	CDW	P006-010	Tripp Lite Computer Power Extension Cord Adapter 10A 18AWG 5-15P	12		\$0.00	
			6' power cable	CDW	P006-006	Tripp Lite Computer Power Extension Cord Adapter 10A 18AWG 5-15P	12		\$0.00	
			Cable ties	Amazon	91140	VELCRO Brand ONE-WRAP Cable Ties   100Pk   8 x 1/2" Black Cord Org	1		\$0.00	
			TR Industrial Multi-Purpose UV Resistant Black Cable Ties, 8 inches, 100 Pack	TR Industrial	TR88302	TR Industrial Multi-Purpose UV Resistant Black Cable Ties, 8 inches, 100	4		\$0.00	
			TR Industrial Multi-Purpose UV Resistant Black Cable Ties, 12 inches, 100 Pack	TR Industrial	TR88303	TR Industrial Multi-Purpose UV Resistant Black Cable Ties, 12 inches, 100	4		\$0.00	
			3M Double Sided Tape	3M	7.9387E+11	3M Double Sided Tape, 3M Heavy Duty Mounting Waterproof VHB Foam	2		\$0.00	

Total \$0.00

32	Basic PDU		32	mount to back
31	Network Switch		31	mount to back
30	Server		30	
29			29	
28			28	
27			27	
26	KVM		26	
25		USRP N 320 1	25	
24	USRP N 320 0		24	
23		USRP N 320 3	23	
22	USRP N 320 2		22	
21	OctoClock CDA-2990 Unit 1		21	mount to back
20	Shelf for Cables Unit 0		20	mount to front
	8-way Splitter Unit 0	8-way Splitter Unit 1		
	8-way Splitter Unit 2	8-way Splitter Unit 3		
19		USRP N 320 5	19	
18	USRP N 320 4		18	
17		USRP N 320 7	17	
16	USRP N 320 6		16	
15	OctoClock CDA-2990 Unit 0		15	mount to back
14	Shelf for Cables Unit 1		14	mount to front
	4-way Splitter Unit 0	4-way Splitter Unit 1		
13		USRP N 320 9	13	
12	USRP N 320 8		12	
11		USRP N 320 11	11	
10	USRP N 320 10		10	
9	OctoClock CDA-2990 Unit 2		9	mount to back
8	Shelf for Cables Unit 2		8	mount to front
	8-way Splitter Unit 4	8-way Splitter Unit 5		
	8-way Splitter Unit 6	8-way Splitter Unit 7		
7		USRP N 320 13	7	
6	USRP N 320 12		6	
5		USRP N 320 15	5	
4	USRP N 320 14		4	
3			3	
2			2	
1	Switched PDU		1	

N320 front



N320 back



N321 front



N321 back



OctoClock



8-way-splitter



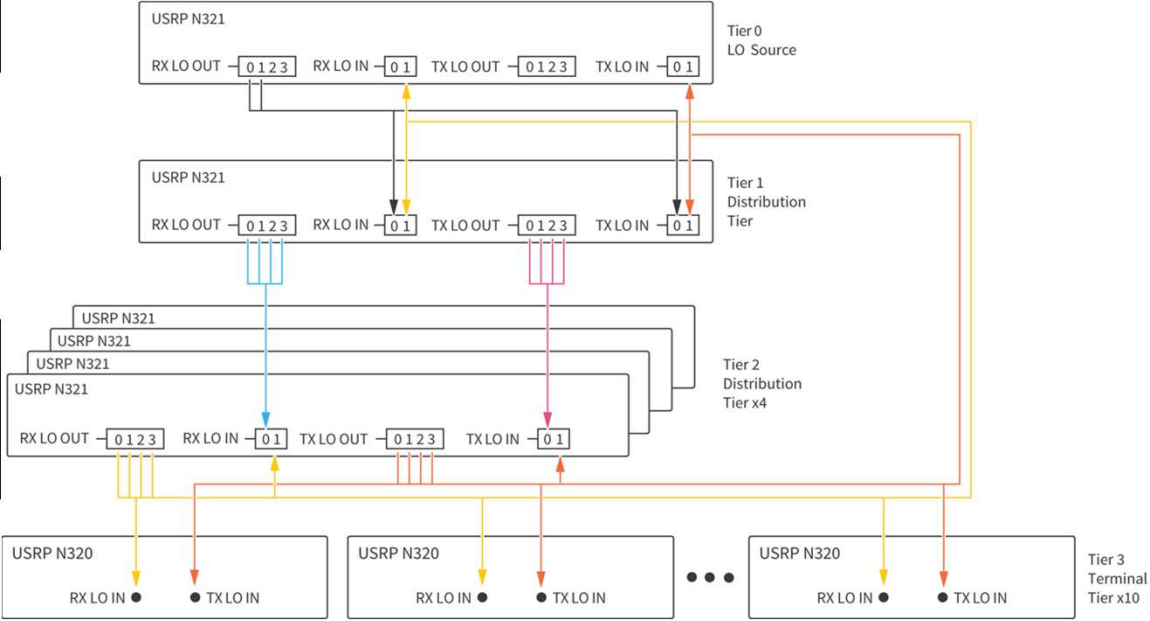
4-way-splitter



Source	USRP	Serial #	Ethernet	mgmt_addr	SFP0
	3		enp193s0f3	10.0.126.13	192.168.80.2

Distribution	USRP	Serial #	Ethernet	mgmt_addr	SFP0
	7		enp1s0fv3	10.0.126.20	192.168.20.2

Distribution	USRP	Serial #	Ethernet	mgmt_addr	SFP0
	1		enp193s0f1	10.0.126.21	192.168.60.2
	5		enp1s0f1	10.0.126.12	192.168.40.2
	9		enp37s0f1	10.0.126.36	192.168.12.2
	13		enp225s0f1	10.0.126.32	192.168.16.2



Terminal	USRP	Serial #	Ethernet	mgmt_addr	SFP0
	0		Enp193s0f0	10.0.126.14	192.168.50.2
	2		Enp193s0f2	10.0.126.22	192.168.70.2
	4		enp1s0f0	10.0.126.17	192.168.30.2
	6		enp1s0f2	10.0.126.23	192.168.10.2
	8		enp37s0f0	10.0.126.35	192.168.11.2

Terminal	USRP	Serial #	Ethernet	mgmt_addr	SFP0
	10		enp37s0f2	10.0.126.37	192.168.13.2
	11		enp37s0f3	10.0.126.34	192.168.14.2
	12		enp225s0f0	10.0.126.30	192.168.15.2
	14		enp225s0f2	10.0.126.28	192.168.17.2
	15		enp225s0f3	10.0.126.31	192.168.18.2

Status	Item	Serial Number	Rack Position
	OctoClock-G CDA-2990 unit0		15
	OctoClock CDA-2990 unit1		21
	OctoClock CDA-2990 unit2		9
	USRP_N320_0		24
	USRP_N321_1		25
	USRP_N320_2		22
	USRP_N321_3		23
	USRP_N320_4		18
	USRP_N321_5		19
	USRP_N320_6		16
	USRP_N321_7		17
	USRP_N320_8		12
	USRP_N321_9		13
	USRP_N320_10		10
	USRP_N320_11		11
	USRP_N320_12		6
	USRP_N321_13		7
	USRP_N320_14		4
	USRP_N320_15		5
	Server		27,28,29,30
	Network Switch		31
	Basic Power Distribution Unit		32
	Switched Power Distribution Unit		3
	KVM Rack Console		26
	APC rack shelf unit0	N/A	20
	APC rack shelf unit1	N/A	14
	APC rack shelf unit2	N/A	8
	8-way power splitter unit 0	N/A	20
	8-way power splitter unit 1	N/A	20
	8-way power splitter unit 2	N/A	20
	8-way power splitter unit 3	N/A	20
	8-way power splitter unit 4	N/A	8
	8-way power splitter unit 5	N/A	8
	8-way power splitter unit 6	N/A	8
	8-way power splitter unit 7	N/A	8
	4-way power splitter unit 0	N/A	14
	4-way power splitter unit 1	N/A	14

Connections				
From			To	
Device	Port	→	Device	Port
octo0	10M_in	→	NC	NC
octo0	PPS_in	→	NC	NC
octo0	GPS_ant	→	NC	NC
octo0	REF_switch	→	SET TO GPSDO	
octo0	10M_1	→	octo1	10M_in
octo0	10M_2	→	octo2	10M_in
octo0	10M_3	→	NC	NC
octo0	10M_4	→	NC	NC
octo0	10M_5	→	NC	NC
octo0	10M_6	→	NC	NC
octo0	10M_7	→	NC	NC
octo0	10M_8	→	NC	NC
octo0	PPS_1	→	octo1	PPS_in
octo0	PPS_2	→	octo2	PPS_in
octo0	PPS_3	→	NC	NC
octo0	PPS_4	→	NC	NC
octo0	PPS_5	→	NC	NC
octo0	PPS_6	→	NC	NC
octo0	PPS_7	→	NC	NC
octo0	PPS_8	→	NC	NC
octo0	ntwrk	→	NC	NC
octo1	10M_in	→	octo0	10M_1
octo1	PPS_in	→	octo0	PPS_1
octo1	GPS_ant	→	NC	NC
octo1	REF_switch	→	SET TO Ref In	
octo1	10M_1	→	usrp0	ref in
octo1	10M_2	→	usrp1	ref in
octo1	10M_3	→	usrp2	ref in
octo1	10M_4	→	usrp3	ref in
octo1	10M_5	→	usrp4	ref in
octo1	10M_6	→	usrp5	ref in
octo1	10M_7	→	usrp6	ref in
octo1	10M_8	→	usrp7	ref in
octo1	PPS_1	→	usrp0	pps in
octo1	PPS_2	→	usrp1	pps in
octo1	PPS_3	→	usrp2	pps in

Connections				
From			To	
Device	Port	→	Device	Port
octo1	PPS_4	→	usrp3	pps in
octo1	PPS_5	→	usrp4	pps in
octo1	PPS_6	→	usrp5	pps in
octo1	PPS_7	→	usrp6	pps in
octo1	PPS_8	→	usrp7	pps in
octo1	ntwrk	→	NC	NC
octo2	10M_in	→	octo0	10M_2
octo2	PPS_in	→	octo0	PPS_2
octo2	GPS_ant	→	NC	NC
octo2	REF_switch	→	SET TO Ref In	
octo2	10M_1	→	usrp8	ref in
octo2	10M_2	→	usrp9	ref in
octo2	10M_3	→	usrp10	ref in
octo2	10M_4	→	usrp11	ref in
octo2	10M_5	→	usrp12	ref in
octo2	10M_6	→	usrp13	ref in
octo2	10M_7	→	usrp14	ref in
octo2	10M_8	→	usrp15	ref in
octo2	PPS_1	→	usrp8	pps in
octo2	PPS_2	→	usrp9	pps in
octo2	PPS_3	→	usrp10	pps in
octo2	PPS_4	→	usrp11	pps in
octo2	PPS_5	→	usrp12	pps in
octo2	PPS_6	→	usrp13	pps in
octo2	PPS_7	→	usrp14	pps in
octo2	PPS_8	→	usrp15	pps in
octo2	ntwrk	→	NC	NC

usrp0	rf0:tx/rx	→	8way0	Port0
usrp0	rf1:tx/rx	→	8way0	Port1
usrp0	rf0:rx	→	8way4	Port0
usrp0	rf1:rx	→	8way4	Port1
usrp0	loin:tx	→	usrp1	txlo:out0
usrp0	loin:rx	→	usrp1	rxlo:out0
usrp0	ntwrk	→	N_Swch	port0
usrp0	ref in	→	octo1	10M_1
usrp0	pps in	→	octo1	PPS_1
usrp0	SFP+0	→	Server	port0
usrp0	SFP+1	→	NC	NC

Connections				
From			To	
Device	Port	→	Device	Port
usrp1	rxlo:out0	→	usrp0	rxlo:in1
usrp1	rxlo:out1	→	usrp1	rxlo:in1
usrp1	rxlo:out2	→	usrp2	rxlo:in1
usrp1	rxlo:out3	→	usrp3	rxlo:in1
usrp1	rxlo:in0	→	usrp7	rxlo:out0
usrp1	rxlo:in1	→	usrp1	rxlo:out1
usrp1	txlo:out0	→	usrp0	txlo:in1
usrp1	txlo:out1	→	usrp1	txlo:in1
usrp1	txlo:out2	→	usrp2	txlo:in1
usrp1	txlo:out3	→	usrp3	txlo:in1
usrp1	txlo:in0	→	usrp7	txlo:out0
usrp1	txlo:in1	→	usrp1	txlo:out1
usrp1	rf0:tx/rx	→	8way0	port7
usrp1	rf1:tx/rx	→	8way0	port8
usrp1	rf0:rx	→	8way4	port7
usrp1	rf1:rx	→	8way4	port8
usrp1	ntwrk	→	N_Swch	port1
usrp1	ref in	→	octo1	10M_2
usrp1	pps in	→	octo1	PPS_2
usrp1	SFP+0	→	Server	port1
usrp1	SFP+1	→	NC	NC
usrp2	rf0:tx/rx	→	8way0	port2
usrp2	rf1:tx/rx	→	8way0	port3
usrp2	rf0:rx	→	8way4	port2
usrp2	rf1:rx	→	8way4	port3
usrp2	loin:tx	→	usrp1	txlo:out2
usrp2	loin:rx	→	usrp1	rxlo:out2
usrp2	ntwrk	→	N_Swch	Port2
usrp2	ref in	→	octo1	10M_3
usrp2	pps in	→	octo1	PPS_2
usrp2	SFP+0	→	Server	port1
usrp2	SFP+1	→	NC	NC
usrp3	rxlo:out0	→	usrp7	rxlo:in1
usrp3	rxlo:out1	→	usrp7	txlo:in1
usrp3	rxlo:out2	→	NC	NC
usrp3	rxlo:out3	→	NC	NC
usrp3	rxlo:in0	→	NC	NC
usrp3	rxlo:in1	→	usrp1	rxlo:out3
usrp3	txlo:out0	→	NC	NC
usrp3	txlo:out1	→	NC	NC



Connections				
From			To	
Device	Port	→	Device	Port
usrp3	txlo:out2	→	NC	NC
usrp3	txlo:out3	→	NC	NC
usrp3	txlo:in0	→	NC	NC
usrp3	txlo:in1	→	usrp1	txlo:out3
usrp3	rf0:tx/rx	→	8way0	port5
usrp3	rf1:tx/rx	→	8way0	port6
usrp3	rf0:rx	→	8way4	port5
usrp3	rf1:rx	→	8way4	port6
usrp3	ntwrk	→	N_Swch	Port3
usrp3	ref in	→	octo1	10M_4
usrp3	pps in	→	octo1	PPS_4
usrp3	SFP+0	→	Server	port3
usrp3	SFP+1	→	NC	NC

usrp4	rf0:tx/rx	→	8way1	Port4
usrp4	rf1:tx/rx	→	8way1	Port1
usrp4	rf0:rx	→	8way5	Port0
usrp4	rf1:rx	→	8way5	Port1
usrp4	loin:tx	→	usrp5	txlo:out0
usrp4	loin:rx	→	usrp5	rxlo:out0
usrp4	ntwrk	→	N_Swch	port4
usrp4	ref in	→	octo1	10M_5
usrp4	pps in	→	octo1	PPS_5
usrp4	SFP+0	→	Server	port4
usrp4	SFP+1	→	NC	NC
usrp5	rxlo:out0	→	usrp4	rxlo:in1
usrp5	rxlo:out1	→	usrp5	rxlo:in1
usrp5	rxlo:out2	→	usrp6	rxlo:in1
usrp5	rxlo:out3	→	usrp7	rxlo:in1
usrp5	rxlo:in0	→	usrp7	rxlo:out0
usrp5	rxlo:in1	→	usrp5	rxlo:out1
usrp5	txlo:out0	→	usrp4	txlo:in1
usrp5	txlo:out1	→	usrp5	txlo:in1
usrp5	txlo:out2	→	usrp6	txlo:in1
usrp5	txlo:out3	→	usrp7	txlo:in1
usrp5	txlo:in0	→	usrp7	txlo:out0
usrp5	txlo:in1	→	usrp5	txlo:out1
usrp5	rf0:tx/rx	→	8way1	port7
usrp5	rf1:tx/rx	→	8way1	port8

Connections				
From			To	
Device	Port	→	Device	Port
usrp5	rf0:rx	→	8way5	port7
usrp5	rf1:rx	→	8way5	port8
usrp5	ntwrk	→	N_Swch	port5
usrp5	ref in	→	octo1	10M_6
usrp5	pps in	→	octo1	PPS_6
usrp5	SFP+0	→	Server	port5
usrp5	SFP+1	→	NC	NC
usrp6	rf0:tx/rx	→	8way1	port2
usrp6	rf1:tx/rx	→	8way1	port3
usrp6	rf0:rx	→	8way5	port2
usrp6	rf1:rx	→	8way5	port3
usrp6	loin:tx	→	usrp5	txlo:out2
usrp6	loin:rx	→	usrp5	rxlo:out2
usrp6	ntwrk	→	N_Swch	Port6
usrp6	ref in	→	octo1	10M_7
usrp6	pps in	→	octo1	PPS_7
usrp6	SFP+0	→	Server	port6
usrp6	SFP+1	→	NC	NC
usrp7	rxlo:out0	→	usrp1	rxlo:in0
usrp7	rxlo:out1	→	usrp5	rxlo:in0
usrp7	rxlo:out2	→	usrp9	rxlo:in0
usrp7	rxlo:out3	→	usrp11	rxlo:in0
usrp7	rxlo:in0	→	usrp3	rxlo:out0
usrp7	rxlo:in1	→	usrp5	txlo:in0
usrp7	txlo:out0	→	usrp1	txlo:in0
usrp7	txlo:out1	→	usrp5	txlo:in0
usrp7	txlo:out2	→	usrp9	txlo:in0
usrp7	txlo:out3	→	usrp11	txlo:in0
usrp7	txlo:in0	→	usrp3	rxlo:out1
usrp7	txlo:in1	→	usrp5	txlo:out3
usrp7	rf0:tx/rx	→	8way1	port5
usrp7	rf1:tx/rx	→	8way1	port6
usrp7	rf0:rx	→	8way5	port5
usrp7	rf1:rx	→	8way5	port6
usrp7	ntwrk	→	N_Swch	Port7
usrp7	ref in	→	octo1	10M_8
usrp7	pps in	→	octo1	PPS_8
usrp7	SFP+0	→	Server	port7
usrp7	SFP+1	→	NC	NC

Connections				
From			To	
Device	Port	→	Device	Port

usrp8	rf0:tx/rx	→	8way2	Port4
usrp8	rf1:tx/rx	→	8way2	Port1
usrp8	rf0:rx	→	8way6	Port0
usrp8	rf1:rx	→	8way6	Port1
usrp8	loin:tx	→	usrp9	txlo:out0
usrp8	loin:rx	→	usrp9	rxlo:out0
usrp8	ntwrk	→	N_Swch	port8
usrp8	ref in	→	octo2	10M_1
usrp8	pps in	→	octo2	PPS_1
usrp8	SFP+0	→	Server	port8
usrp8	SFP+1	→	NC	NC
usrp9	rxlo:out0	→	usrp8	rxlo:in1
usrp9	rxlo:out1	→	usrp9	rxlo:in1
usrp9	rxlo:out2	→	usrp10	rxlo:in1
usrp9	rxlo:out3	→	usrp11	rxlo:in1
usrp9	rxlo:in0	→	usrp7	rxlo:out0
usrp9	rxlo:in1	→	usrp9	rxlo:out1
usrp9	txlo:out0	→	usrp8	txlo:in1
usrp9	txlo:out1	→	usrp9	txlo:in1
usrp9	txlo:out2	→	usrp10	txlo:in1
usrp9	txlo:out3	→	usrp11	txlo:in1
usrp9	txlo:in0	→	usrp7	txlo:out0
usrp9	txlo:in1	→	usrp9	txlo:out1
usrp9	rf0:tx/rx	→	8way2	port7
usrp9	rf1:tx/rx	→	8way2	port8
usrp9	rf0:rx	→	8way6	port7
usrp9	rf1:rx	→	8way6	port8
usrp9	ntwrk	→	N_Swch	port9
usrp9	ref in	→	octo2	10M_2
usrp9	pps in	→	octo2	PPS_2
usrp9	SFP+0	→	Server	port9
usrp9	SFP+1	→	NC	NC
usrp10	rf0:tx/rx	→	8way2	port2
usrp10	rf1:tx/rx	→	8way2	port3
usrp10	rf0:rx	→	8way6	port2
usrp10	rf1:rx	→	8way6	port3
usrp10	loin:tx	→	usrp9	txlo:out2
usrp10	loin:rx	→	usrp9	rxlo:out2

Connections				
From			To	
Device	Port	→	Device	Port
usrp10	ntwrk	→	N_Swch	Port10
usrp10	ref in	→	octo2	10M_3
usrp10	pps in	→	octo2	PPS_3
usrp10	SFP+0	→	Server	Port10
usrp10	SFP+1	→	NC	NC
usrp11	rf0:tx/rx	→	8way2	port2
usrp11	rf1:tx/rx	→	8way2	port3
usrp11	rf0:rx	→	8way6	port2
usrp11	rf1:rx	→	8way6	port3
usrp11	loin:tx	→	usrp9	txlo:out2
usrp11	loin:rx	→	usrp9	rxlo:out2
usrp11	ntwrk	→	N_Swch	Port11
usrp11	ref in	→	octo2	10M_4
usrp11	pps in	→	octo2	PPS_4
usrp11	SFP+0	→	Server	port11
usrp11	SFP+1	→	NC	NC

usrp12	rf0:tx/rx	→	8way3	Port4
usrp12	rf1:tx/rx	→	8way3	Port1
usrp12	rf0:rx	→	8way7	Port0
usrp12	rf1:rx	→	8way7	Port1
usrp12	loin:tx	→	usrp13	txlo:out0
usrp12	loin:rx	→	usrp13	rxlo:out0
usrp12	ntwrk	→	N_Swch	port12
usrp12	ref in	→	octo2	10M_5
usrp12	pps in	→	octo2	PPS_5
usrp12	SFP+0	→	Server	port12
usrp12	SFP+1	→	NC	NC
usrp13	rxlo:out0	→	usrp12	rxlo:in1
usrp13	rxlo:out1	→	usrp13	rxlo:in1
usrp13	rxlo:out2	→	usrp14	rxlo:in1
usrp13	rxlo:out3	→	usrp15	rxlo:in1
usrp13	rxlo:in0	→	usrp7	rxlo:out0
usrp13	rxlo:in1	→	usrp13	rxlo:out1
usrp13	txlo:out0	→	usrp12	txlo:in1
usrp13	txlo:out1	→	usrp13	txlo:in1
usrp13	txlo:out2	→	usrp14	txlo:in1
usrp13	txlo:out3	→	usrp15	txlo:in1
usrp13	txlo:in0	→	usrp7	txlo:out0

Connections				
From			To	
Device	Port	→	Device	Port
usrp13	txlo:in1	→	usrp13	txlo:out1
usrp13	rf0:tx/rx	→	8way3	port7
usrp13	rf1:tx/rx	→	8way3	port8
usrp13	rf0:rx	→	8way7	port7
usrp13	rf1:rx	→	8way7	port8
usrp13	ntwrk	→	N_Swch	port13
usrp13	ref in	→	octo2	10M_6
usrp13	pps in	→	octo2	PPS_6
usrp13	SFP+0	→	Server	port13
usrp13	SFP+1	→	NC	NC
usrp14	rf0:tx/rx	→	8way3	port2
usrp14	rf1:tx/rx	→	8way3	port3
usrp14	rf0:rx	→	8way7	port2
usrp14	rf1:rx	→	8way7	port3
usrp14	loin:tx	→	usrp13	txlo:out2
usrp14	loin:rx	→	usrp13	rxlo:out2
usrp14	ntwrk	→	N_Swch	Port14
usrp14	ref in	→	octo2	10M_7
usrp14	pps in	→	octo2	PPS_7
usrp14	SFP+0	→	Server	port14
usrp14	SFP+1	→	NC	NC
usrp15	rf0:tx/rx	→	8way3	port2
usrp15	rf1:tx/rx	→	8way3	port3
usrp15	rf0:rx	→	8way7	port2
usrp15	rf1:rx	→	8way7	port3
usrp15	loin:tx	→	usrp13	txlo:out2
usrp15	loin:rx	→	usrp13	rxlo:out2
usrp15	ntwrk	→	N_Swch	Port15
usrp15	ref in	→	octo2	10M_8
usrp15	pps in	→	octo2	PPS_8
usrp15	SFP+0	→	Server	port15
usrp15	SFP+1	→	NC	NC

8way0	port0	→	usrp0	rf0:tx/rx
8way0	port1	→	usrp0	rf1:tx/rx
8way0	port2	→	usrp1	rf0:tx/rx
8way0	port3	→	usrp1	rf1:tx/rx
8way0	port4(sum)	→	4way0	port0
8way0	port5	→	usrp2	rf0:tx/rx
8way0	port6	→	usrp2	rf1:tx/rx

Connections				
From			To	
Device	Port	→	Device	Port
8way0	port7	→	usrp3	rf0:tx/rx
8way0	port8	→	usrp3	rf1:tx/rx
8way1	port0	→	usrp4	rf0:tx/rx
8way1	port1	→	usrp4	rf1:tx/rx
8way1	port2	→	usrp5	rf0:tx/rx
8way1	port3	→	usrp5	rf1:tx/rx
8way1	port4(sum)	→	4way0	port1
8way1	port5	→	usrp6	rf0:tx/rx
8way1	port6	→	usrp6	rf1:tx/rx
8way1	port7	→	usrp7	rf0:tx/rx
8way1	port8	→	usrp7	rf1:tx/rx
8way2	port0	→	usrp8	rf0:tx/rx
8way2	port1	→	usrp8	rf1:tx/rx
8way2	port2	→	usrp9	rf0:tx/rx
8way2	port3	→	usrp9	rf1:tx/rx
8way2	port4(sum)	→	4way0	port3
8way2	port5	→	usrp10	rf0:tx/rx
8way2	port6	→	usrp10	rf1:tx/rx
8way2	port7	→	usrp11	rf0:tx/rx
8way2	port8	→	usrp11	rf1:tx/rx
8way3	port0	→	usrp12	rf0:tx/rx
8way3	port1	→	usrp12	rf1:tx/rx
8way3	port2	→	usrp13	rf0:tx/rx
8way3	port3	→	usrp13	rf1:tx/rx
8way3	port4(sum)	→	4way0	port4
8way3	port5	→	usrp14	rf0:tx/rx
8way3	port6	→	usrp14	rf1:tx/rx
8way3	port7	→	usrp15	rf0:tx/rx
8way3	port8	→	usrp15	rf1:tx/rx

8way4	port0	→	usrp0	rf0:rx
8way4	port1	→	usrp0	rf1:rx
8way4	port2	→	usrp1	rf0:rx
8way4	port3	→	usrp1	rf1:rx
8way4	port4(sum)	→	4way1	port0
8way4	port5	→	usrp2	rf0:rx
8way4	port6	→	usrp2	rf1:rx
8way4	port7	→	usrp3	rf0:rx
8way4	port8	→	usrp3	rf1:rx
8way5	port0	→	usrp4	rf0:rx

Connections				
From			To	
Device	Port	→	Device	Port
8way5	port1	→	usrp4	rf1:rx
8way5	port2	→	usrp5	rf0:rx
8way5	port3	→	usrp5	rf1:rx
8way5	port4(sum)	→	4way1	port1
8way5	port5	→	usrp6	rf0:rx
8way5	port6	→	usrp6	rf1:rx
8way5	port7	→	usrp7	rf0:rx
8way5	port8	→	usrp7	rf1:rx
8way6	port0	→	usrp8	rf0:rx
8way6	port1	→	usrp8	rf1:rx
8way6	port2	→	usrp9	rf0:rx
8way6	port3	→	usrp9	rf1:rx
8way6	port4(sum)	→	4way1	port3
8way6	port5	→	usrp10	rf0:rx
8way6	port6	→	usrp10	rf1:rx
8way6	port7	→	usrp11	rf0:rx
8way6	port8	→	usrp11	rf1:rx
8way7	port0	→	usrp12	rf0:rx
8way7	port1	→	usrp12	rf1:rx
8way7	port2	→	usrp13	rf0:rx
8way7	port3	→	usrp13	rf1:rx
8way7	port4(sum)	→	4way1	port4
8way7	port5	→	usrp14	rf0:rx
8way7	port6	→	usrp14	rf1:rx
8way7	port7	→	usrp15	rf0:rx
8way7	port8	→	usrp15	rf1:rx

4way0	port0	→	8way0	port4(sum)
4way0	port1	→	8way1	port4(sum)
4way0	port2(sum)	→	4way1	port2(sum)
4way0	port3	→	8way2	port4(sum)
4way0	port4	→	8way3	port4(sum)
4way1	port0	→	8way4	port4(sum)
4way1	port1	→	8way5	port4(sum)
4way1	port2(sum)	→	4way0	port2(sum)
4way1	port3	→	8way6	port4(sum)
4way1	port4	→	8way7	port4(sum)

N_Swch	port0	→	usrp0	ntwrk
N_Swch	port1	→	usrp1	ntwrk

Connections				
From			To	
Device	Port	→	Device	Port
N_Swch	port2	→	usrp2	ntwrk
N_Swch	port3	→	usrp3	ntwrk
N_Swch	port4	→	usrp4	ntwrk
N_Swch	port5	→	usrp5	ntwrk
N_Swch	port6	→	usrp6	ntwrk
N_Swch	port7	→	usrp7	ntwrk
N_Swch	port8	→	usrp8	ntwrk
N_Swch	port9	→	usrp9	ntwrk
N_Swch	port10	→	usrp10	ntwrk
N_Swch	port11	→	usrp11	ntwrk
N_Swch	port12	→	usrp12	ntwrk
N_Swch	port13	→	usrp13	ntwrk
N_Swch	port14	→	usrp14	ntwrk
N_Swch	port15	→	usrp15	ntwrk

Server	port0	→	usrp0	Sfp+0
Server	port1	→	usrp1	Sfp+0
Server	port2	→	usrp2	Sfp+0
Server	port3	→	usrp3	Sfp+0
Server	port4	→	usrp4	Sfp+0
Server	port5	→	usrp5	Sfp+0
Server	port6	→	usrp6	Sfp+0
Server	port7	→	usrp7	Sfp+0
Server	port8	→	usrp8	Sfp+0
Server	port9	→	usrp9	Sfp+0
Server	port10	→	usrp10	Sfp+0
Server	port11	→	usrp11	Sfp+0
Server	port12	→	usrp12	Sfp+0
Server	port13	→	usrp13	Sfp+0
Server	port14	→	usrp14	Sfp+0
Server	port15	→	usrp15	Sfp+0



Name Reference	
Device Name	Device Type
octo0	<a href="#">octoclock-G CDA-2990</a>
octo1	<a href="#">octoclock-G CDA-2990</a>
octo2	<a href="#">octoclock-G CDA-2990</a>
usrp0	<a href="#">USRP N320</a>
usrp1	<a href="#">USRP N321</a>
usrp2	<a href="#">USRP N320</a>
usrp3	<a href="#">USRP N321</a>
usrp4	<a href="#">USRP N320</a>
usrp5	<a href="#">USRP N321</a>
usrp6	<a href="#">USRP N320</a>
usrp7	<a href="#">USRP N321</a>
usrp8	<a href="#">USRP N320</a>
usrp9	<a href="#">USRP N321</a>
usrp10	<a href="#">USRP N320</a>
usrp11	<a href="#">USRP N320</a>
usrp12	<a href="#">USRP N320</a>
usrp13	<a href="#">USRP N321</a>
usrp14	<a href="#">USRP N320</a>
usrp15	<a href="#">USRP N320</a>
8way0	<a href="#">8 way power splitter</a>
8way1	<a href="#">8 way power splitter</a>
8way2	<a href="#">8 way power splitter</a>
8way3	<a href="#">8 way power splitter</a>
8way4	<a href="#">8 way power splitter</a>
8way5	<a href="#">8 way power splitter</a>
8way6	<a href="#">8 way power splitter</a>
8way7	<a href="#">8 way power splitter</a>
4way0	<a href="#">4 way power splitter</a>
4way1	<a href="#">4 way power splitter</a>
N_Swch	<a href="#">Network Switch</a>