

## ● Show version

```
root@sonic:/etc/sonic# show version
```

SONiC Software Version: SONiC.20200801.0-dirty-20200807.132826

Distribution: Debian 10.5

Kernel: 4.19.0-9-2-amd64

Build commit: dbb48ddc

Build date: Fri Aug 7 05:34:16 UTC 2020

Built by: cynthia@Jupiter

Platform: x86\_64-inventec\_d6356-r0

HwSKU: INVENTEC-D6356

ASIC: broadcom

Serial Number: AS57DK

Uptime: 08:08:11 up 22:39, 1 user, load average: 0.73, 0.94, 1.08

Docker images:

REPOSITORY	TAG	IMAGE ID	SIZE
docker-teamd	20200801.0-dirty-20200807.132826	e15625df6503	382MB
docker-teamd	latest	e15625df6503	382MB
docker-nat	20200801.0-dirty-20200807.132826	a405183488c5	385MB
docker-nat	latest	a405183488c5	385MB
docker-sonic-mgmt-framework	20200801.0-dirty-20200807.132826	e964afeaa8d1	478MB
docker-sonic-mgmt-framework	latest	e964afeaa8d1	478MB
docker-sflow	20200801.0-dirty-20200807.132826	60bd7742a2d2	386MB
docker-sflow	latest	60bd7742a2d2	386MB
docker-router-advertiser	20200801.0-dirty-20200807.132826	79d2998990c4	352MB
docker-router-advertiser	latest	79d2998990c4	352MB
docker-platform-monitor	20200801.0-dirty-20200807.132826	22c4536c4295	424MB
docker-platform-monitor	latest	22c4536c4295	424MB
docker-lldp	20200801.0-dirty-20200807.132826	c18423cc6e0a	379MB
docker-lldp	latest	c18423cc6e0a	379MB
docker-database	20200801.0-dirty-20200807.132826	e2eb60ebaafd	352MB
docker-database	latest	e2eb60ebaafd	352MB
docker-orchagent	20200801.0-dirty-20200807.132826	08d6ff9eb737	395MB
docker-orchagent	latest	08d6ff9eb737	395MB
docker-dhcp-relay	20200801.0-dirty-20200807.132826	98f5b2bd15b1	359MB
docker-dhcp-relay	latest	98f5b2bd15b1	359MB
docker-sonic-telemetry	20200801.0-dirty-20200807.132826	0aa33b0ff5a7	422MB
docker-sonic-telemetry	latest	0aa33b0ff5a7	422MB
docker-fpm-frr	20200801.0-dirty-20200807.132826	aaa2bd52103e	398MB
docker-fpm-frr	latest	aaa2bd52103e	398MB

docker-snmp	20200801.0-dirty-20200807.132826	691ad9e2bd8d	407MB
docker-snmp	latest	691ad9e2bd8d	407MB
docker-syncd-brcm	20200801.0-dirty-20200807.132826	aeee0d0c8da0	442MB
docker-syncd-brcm	latest	aeee0d0c8da0	442MB

root@sonic:/etc/sonic#

## ● Show system memory

root@sonic:~# show system-memory

	total	used	free	shared	buff/cache	available	
Mem:	7876	1728	4895		9	1252	5877
Swap:	0	0	0				

root@sonic:~#

## ● Bcmcmd version

root@sonic:~# bcmcmd version

version

Broadcom Command Monitor: Copyright (c) 1998-2020 Broadcom

Release: sdk-6.5.16 built 20200630 (Tue Jun 30 05:55:03 2020)

From sonicbld@4c91e7cb4cff:/var/sonicbld/workspace/Build/broadcom/broadcom\_sai/20-sai-build-brcm-3.7.5.1/output/x86-xgs5-deb80//sdk/bcmsdk

Platform: X86

OS: Unix (Posix)

Chips:

BCM56640\_A0,

BCM56850\_A0,

BCM56340\_A0,

BCM56960\_A0, BCM56860\_A0,

BCM56970\_A0, BCM56870\_A0,

BCM56980\_A0, BCM56980\_B0,

PHYS: BCM5400, BCM54182, BCM54185, BCM54180,  
BCM54140, BCM54192, BCM54195, BCM54190,  
BCM54194, BCM54210, BCM54220, BCM54280,  
BCM54282, BCM54240, BCM54285, BCM5428X,  
BCM54290, BCM54292, BCM54294, BCM54295,  
BCM54296, BCM8750, BCM8752, BCM8754,  
BCM84740, BCM84164, BCM84758, BCM84780,  
BCM84784, BCM84318, BCM84328, Sesto,  
copper sfp

drivshell>

root@sonic:~#

## ● Show platform syseeprom

root@sonic:~# show platform syseeprom

TlvInfo Header:

Id String: TlvInfo

Version: 1

Total Length: 137

TLV Name	Code	Len	Value
-----			
Product Name	0x21	6	BT2545
Part Number	0x22	12	1395A2737101
Serial Number	0x23	6	AS57DK
Base MAC Address	0x24	6	7C:D3:0A:92:11:4E
Manufacture Date	0x25	19	12/18/2018 12:00:00
Device Version	0x26	1	0
Platform Name	0x28	24	x86_64-inventec_d6556-r0
ONIE Version	0x29	17	uefi-201907240044
MAC Addresses	0x2A	2	73
Manufacturer	0x2B	8	Inventec
Vendor Name	0x2D	8	Inventec
CRC-32	0xFE	4	0x7E79B966

(checksum valid)

root@sonic:~#

## ● Show platform summary

root@sonic:~# show platform summary

Platform: x86\_64-inventec\_d6356-r0

HwSKU: INVENTEC-D6356

ASIC: broadcom

root@sonic:~#

## ● Ifconfig eth0

```
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 10.6.141.122 netmask 255.255.255.0 broadcast 10.6.141.255
    inet6 fe80::7ed3:aff:fe92:114e prefixlen 64 scopeid 0x20<link>
    ether 7c:d3:0a:92:11:4e txqueuelen 1000 (Ethernet)
    RX packets 5437 bytes 427403 (417.3 KiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 276 bytes 40822 (39.8 KiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
    device memory 0xfbe00000-fbe7ffff
```

root@sonic:~# root@

## ● Show environment

sonic:~# show environment

pmbus-virtual-0

Adapter: Virtual device

```
vin:          +117.25 V
vout1:        +12.08 V
fan1:         8800 RPM
temp1:        +25.2 C (high = +65.0 C)
temp2:        +34.8 C (high = +65.0 C)
temp3:        +35.0 C (high = +65.0 C)
pin:          137.75 W
pout1:        111.50 W (max = 880.00 W)
pout2:        111.50 W (max = 880.00 W)
iin:          +1.16 A (max = +13.00 A)
iout1:        +9.25 A (max = +76.00 A, crit max = +85.00 A)
iout2:        +9.27 A (crit max = +85.00 A)
```

tmp75-virtual-0

Adapter: Virtual device

```
temp1:        +27.4 C (high = +73.0 C, hyst = +68.0 C)
```

tmp75-virtual-0

Adapter: Virtual device

```
temp1:        +24.6 C (high = +61.0 C, hyst = +56.0 C)
```

inv\_cpld-virtual-0

Adapter: Virtual device

fan1: 7380 RPM  
fan2: 6780 RPM  
fan3: 7500 RPM  
fan4: 6900 RPM  
fan5: 7620 RPM  
fan6: 6840 RPM  
fan7: 7500 RPM  
fan8: 6780 RPM  
temp1: +51.0 C

pch\_haswell-virtual-0

Adapter: Virtual device

PCH Temperature: +52.5 C

pmbus-virtual-0

Adapter: Virtual device

vin: +0.00 V ALARM  
vout1: +0.00 V  
fan1: 0 RPM  
temp1: +28.0 C (high = +65.0 C)  
temp2: +26.5 C (high = +65.0 C)  
temp3: +0.0 C (high = +65.0 C)  
pin: 0.00 W ALARM  
pout1: 0.00 W (max = 880.00 W)  
pout2: 0.00 W (max = 880.00 W)  
iin: +0.00 A (max = +13.00 A)  
iout1: +0.00 A (max = +76.00 A, crit max = +85.00 A)  
iout2: +0.00 A (crit max = +85.00 A)

tmp75-virtual-0

Adapter: Virtual device

temp1: +31.9 C (high = +80.0 C, hyst = +75.0 C)

tmp75-virtual-0

Adapter: Virtual device

temp1: +38.2 C (high = +73.0 C, hyst = +68.0 C)

coretemp-isa-0000

Adapter: ISA adapter

Package id 0: +57.0 C (high = +82.0 C, crit = +104.0 C)

Core 0: +57.0 C (high = +82.0 C, crit = +104.0 C)

Core 1: +57.0 C (high = +82.0 C, crit = +104.0 C)  
Core 2: +57.0 C (high = +82.0 C, crit = +104.0 C)  
Core 3: +57.0 C (high = +82.0 C, crit = +104.0 C)

root@sonic:~#

### ● show platform psustatus

root@sonic:~# show platform psustatus

```
PSU    Status    LED
-----
PSU 1  NOT PRESENT off
PSU 2  OK           green
```

root@sonic:~#

### ● show platform fan

root@sonic:~# show platform fan

Drawer	LED	FAN	Speed	Direction	Presence	Status	Timestamp
N/A	off	PSU1-FAN1	N/A	N/A	Not Present	N/A	20200803 06:26:59
N/A	green	PSU2-FAN1	80.0%	N/A	Present	OK	20200803 06:26:59

root@sonic:~#

### ● show platform temperature

root@sonic:~# show platform temperature

Sensor	Temperature	High TH	Low TH	Crit High TH	Crit Low TH	Warning	Timestamp
CPU Board Temperature Sensor	38.375	N/A	N/A	N/A	N/A	False	20200803 06:26:59
FrontSide Temperature Sensor	24.812	N/A	N/A	N/A	N/A	False	20200803 06:26:59
NearASIC Temperature Sensor	32.062	N/A	N/A	N/A	N/A	False	20200803 06:26:59
PCH Temperature Sensor	52.5	N/A	N/A	N/A	N/A	False	20200803 06:26:59
RearSide Temperature Sensor	27.562	N/A	N/A	N/A	N/A	False	20200803 06:26:59

root@sonic:~#

### ● show interfaces status

root@sonic:~# show interfaces status

Interface	Lanes	Speed	MTU	FEC	Alias	Vlan	Oper	Admin	Type	Asym PFC
Ethernet0	1	25G	9100	N/A	Ethernet0	routed	up	up	N/A	N/A
Ethernet1	2	25G	9100	N/A	Ethernet1	routed	down	up	N/A	N/A
Ethernet2	3	25G	9100	N/A	Ethernet2	routed	down	up	N/A	N/A
Ethernet3	4	25G	9100	N/A	Ethernet3	routed	down	up	N/A	N/A
Ethernet4	5	25G	9100	N/A	Ethernet4	routed	down	up	N/A	N/A

Ethernet5	6	25G	9100	N/A	Ethernet5	routed	down	up	N/A	N/A
Ethernet6	7	25G	9100	N/A	Ethernet6	routed	down	up	N/A	N/A
Ethernet7	8	25G	9100	N/A	Ethernet7	routed	down	up	N/A	N/A
Ethernet8	13	25G	9100	N/A	Ethernet8	routed	down	up	N/A	N/A
Ethernet9	14	25G	9100	N/A	Ethernet9	routed	down	up	N/A	N/A
Ethernet10	15	25G	9100	N/A	Ethernet10	routed	down	up	N/A	N/A
Ethernet11	16	25G	9100	N/A	Ethernet11	routed	down	up	N/A	N/A
Ethernet12	21	25G	9100	N/A	Ethernet12	routed	down	up	N/A	N/A
Ethernet13	22	25G	9100	N/A	Ethernet13	routed	down	up	N/A	N/A
Ethernet14	23	25G	9100	N/A	Ethernet14	routed	down	up	N/A	N/A
Ethernet15	24	25G	9100	N/A	Ethernet15	routed	down	up	N/A	N/A
Ethernet16	29	25G	9100	N/A	Ethernet16	routed	down	up	N/A	N/A
Ethernet17	30	25G	9100	N/A	Ethernet17	routed	down	up	N/A	N/A
Ethernet18	31	25G	9100	N/A	Ethernet18	routed	down	up	N/A	N/A
Ethernet19	32	25G	9100	N/A	Ethernet19	routed	down	up	N/A	N/A
Ethernet20	33	25G	9100	N/A	Ethernet20	routed	down	up	N/A	N/A
Ethernet21	34	25G	9100	N/A	Ethernet21	routed	down	up	N/A	N/A
Ethernet22	35	25G	9100	N/A	Ethernet22	routed	down	up	N/A	N/A
Ethernet23	36	25G	9100	N/A	Ethernet23	routed	down	up	N/A	N/A
Ethernet24	41	25G	9100	N/A	Ethernet24	routed	down	up	N/A	N/A
Ethernet25	42	25G	9100	N/A	Ethernet25	routed	down	up	N/A	N/A
Ethernet26	43	25G	9100	N/A	Ethernet26	routed	down	up	N/A	N/A
Ethernet27	44	25G	9100	N/A	Ethernet27	routed	down	up	N/A	N/A
Ethernet28	49	25G	9100	N/A	Ethernet28	routed	down	up	N/A	N/A
Ethernet29	50	25G	9100	N/A	Ethernet29	routed	down	up	N/A	N/A
Ethernet30	51	25G	9100	N/A	Ethernet30	routed	down	up	N/A	N/A
Ethernet31	52	25G	9100	N/A	Ethernet31	routed	down	up	N/A	N/A
Ethernet32	57	25G	9100	N/A	Ethernet32	routed	down	up	N/A	N/A
Ethernet33	58	25G	9100	N/A	Ethernet33	routed	down	up	N/A	N/A
Ethernet34	59	25G	9100	N/A	Ethernet34	routed	down	up	N/A	N/A
Ethernet35	60	25G	9100	N/A	Ethernet35	routed	down	up	N/A	N/A
Ethernet36	61	25G	9100	N/A	Ethernet36	routed	down	up	N/A	N/A
Ethernet37	62	25G	9100	N/A	Ethernet37	routed	down	up	N/A	N/A
Ethernet38	63	25G	9100	N/A	Ethernet38	routed	down	up	N/A	N/A
Ethernet39	64	25G	9100	N/A	Ethernet39	routed	down	up	N/A	N/A
Ethernet40	65	25G	9100	N/A	Ethernet40	routed	down	up	N/A	N/A
Ethernet41	66	25G	9100	N/A	Ethernet41	routed	down	up	N/A	N/A
Ethernet42	67	25G	9100	N/A	Ethernet42	routed	down	up	N/A	N/A
Ethernet43	68	25G	9100	N/A	Ethernet43	routed	down	up	N/A	N/A
Ethernet44	69	25G	9100	N/A	Ethernet44	routed	down	up	N/A	N/A
Ethernet45	70	25G	9100	N/A	Ethernet45	routed	down	up	N/A	N/A
Ethernet46	71	25G	9100	N/A	Ethernet46	routed	down	up	N/A	N/A

Ethernet47	72	25G	9100	N/A	Ethernet47	routed	up	up	N/A	N/A
Ethernet48	85,86,87,88	100G	9100	N/A	Ethernet48	routed	down	up	N/A	N/A
Ethernet52	77,78,79,80	100G	9100	N/A	Ethernet52	routed	down	up	N/A	N/A
Ethernet56	93,94,95,96	100G	9100	N/A	Ethernet56	routed	down	up	N/A	N/A
Ethernet60	97,98,99,100	100G	9100	N/A	Ethernet60	routed	down	up	N/A	N/A
Ethernet64	113,114,115,116	100G	9100	N/A	Ethernet64	routed	down	up	N/A	N/A
Ethernet68	105,106,107,108	100G	9100	N/A	Ethernet68	routed	down	up	N/A	N/A
Ethernet72	121,122,123,124	100G	9100	N/A	Ethernet72	routed	down	up	N/A	N/A
Ethernet76	125,126,127,128	100G	9100	N/A	Ethernet76	routed	down	up	N/A	N/A

root@sonic:~#

- bcmcmd ps**

root@sonic:~# bcmcmd ps

ps

	ena/		speed/ link	auto	STP		ln	inter	max	cut	loop		
port	link	Ln	duplex	scan	neg?	state	pause	discrd	ops	face	frame	thru?	back
xe0( 1)	up	1	25G	FD	SW	No	Forward	None	F	SR	9122	No	
xe1( 2)	down	1	25G	FD	SW	No	Forward	None	F	SR	9122	No	
xe2( 3)	down	1	25G	FD	SW	No	Forward	None	F	SR	9122	No	
xe3( 4)	down	1	25G	FD	SW	No	Forward	None	F	SR	9122	No	
xe4( 5)	down	1	25G	FD	SW	No	Forward	None	F	SR	9122	No	
xe5( 6)	down	1	25G	FD	SW	No	Forward	None	F	SR	9122	No	
xe6( 7)	down	1	25G	FD	SW	No	Forward	None	F	SR	9122	No	
xe7( 8)	down	1	25G	FD	SW	No	Forward	None	F	SR	9122	No	
xe8(13)	down	1	25G	FD	SW	No	Forward	None	F	SR	9122	No	
xe9(14)	down	1	25G	FD	SW	No	Forward	None	F	SR	9122	No	
xe10(15)	down	1	25G	FD	SW	No	Forward	None	F	SR	9122	No	
xe11(16)	down	1	25G	FD	SW	No	Forward	None	F	SR	9122	No	
xe12(21)	down	1	25G	FD	SW	No	Forward	None	F	SR	9122	No	
xe13(22)	down	1	25G	FD	SW	No	Forward	None	F	SR	9122	No	
xe14(23)	down	1	25G	FD	SW	No	Forward	None	F	SR	9122	No	
xe15(24)	down	1	25G	FD	SW	No	Forward	None	F	SR	9122	No	
xe16(29)	down	1	25G	FD	SW	No	Forward	None	F	SR	9122	No	
xe17(30)	down	1	25G	FD	SW	No	Forward	None	F	SR	9122	No	
xe18(31)	down	1	25G	FD	SW	No	Forward	None	F	SR	9122	No	
xe19(32)	down	1	25G	FD	SW	No	Forward	None	F	SR	9122	No	
xe20(33)	down	1	25G	FD	SW	No	Forward	None	F	SR	9122	No	
xe21(34)	down	1	25G	FD	SW	No	Forward	None	F	SR	9122	No	
xe22(35)	down	1	25G	FD	SW	No	Forward	None	F	SR	9122	No	
xe23(36)	down	1	25G	FD	SW	No	Forward	None	F	SR	9122	No	
xe24(41)	down	1	25G	FD	SW	No	Forward	None	F	SR	9122	No	
xe25(42)	down	1	25G	FD	SW	No	Forward	None	F	SR	9122	No	
xe26(43)	down	1	25G	FD	SW	No	Forward	None	F	SR	9122	No	



```

xe27( 44) down 1 25G FD SW No Forward None F SR 9122 No
xe28( 49) down 1 25G FD SW No Forward None F SR 9122 No
xe29( 50) down 1 25G FD SW No Forward None F SR 9122 No
xe30( 51) down 1 25G FD SW No Forward None F SR 9122 No
xe31( 52) down 1 25G FD SW No Forward None F SR 9122 No
xe32( 57) down 1 25G FD SW No Forward None F SR 9122 No
xe33( 58) down 1 25G FD SW No Forward None F SR 9122 No
xe34( 59) down 1 25G FD SW No Forward None F SR 9122 No
xe35( 60) down 1 25G FD SW No Forward None F SR 9122 No
xe36( 61) down 1 25G FD SW No Forward None F SR 9122 No
xe37( 62) down 1 25G FD SW No Forward None F SR 9122 No
xe38( 63) down 1 25G FD SW No Forward None F SR 9122 No
xe39( 64) down 1 25G FD SW No Forward None F SR 9122 No
xe40( 67) down 1 25G FD SW No Forward None F SR 9122 No
xe41( 68) down 1 25G FD SW No Forward None F SR 9122 No
xe42( 69) down 1 25G FD SW No Forward None F SR 9122 No
xe43( 70) down 1 25G FD SW No Forward None F SR 9122 No
xe44( 71) down 1 25G FD SW No Forward None F SR 9122 No
xe45( 72) down 1 25G FD SW No Forward None F SR 9122 No
xe46( 73) down 1 25G FD SW No Forward None F SR 9122 No
xe47( 74) up 1 25G FD SW No Forward None F SR 9122 No
ce0( 87) down 4 100G FD SW No Forward None F SR4 9122 No
ce1( 79) down 4 100G FD SW No Forward None F SR4 9122 No
ce2( 95) down 4 100G FD SW No Forward None F SR4 9122 No
ce3( 99) down 4 100G FD SW No Forward None F SR4 9122 No
ce4(115) down 4 100G FD SW No Forward None F SR4 9122 No
ce5(107) down 4 100G FD SW No Forward None F SR4 9122 No
ce6(123) down 4 100G FD SW No Forward None F SR4 9122 No
ce7(127) down 4 100G FD SW No Forward None F SR4 9122 No

```

drivshell>

root@sonic:~#

## ● show interface transceiver presence

root@sonic:~# show interfaces transceiver presence

```

Port          Presence
-----
Ethernet0     Present
Ethernet1     Present
Ethernet2     Present
Ethernet3     Present
Ethernet4     Not present
Ethernet5     Not present

```

Ethernet6	Not present
Ethernet7	Not present
Ethernet8	Not present
Ethernet9	Not present
Ethernet10	Not present
Ethernet11	Not present
Ethernet12	Not present
Ethernet13	Not present
Ethernet14	Not present
Ethernet15	Not present
Ethernet16	Present
Ethernet17	Not present
Ethernet18	Not present
Ethernet19	Not present
Ethernet20	Not present
Ethernet21	Not present
Ethernet22	Present
Ethernet23	Not present
Ethernet24	Not present
Ethernet25	Not present
Ethernet26	Not present
Ethernet27	Not present
Ethernet28	Not present
Ethernet29	Not present
Ethernet30	Not present
Ethernet31	Not present
Ethernet32	Not present
Ethernet33	Not present
Ethernet34	Not present
Ethernet35	Not present
Ethernet36	Not present
Ethernet37	Not present
Ethernet38	Not present
Ethernet39	Not present
Ethernet40	Not present
Ethernet41	Not present
Ethernet42	Not present
Ethernet43	Not present
Ethernet44	Not present
Ethernet45	Not present
Ethernet46	Not present
Ethernet47	Not present

Ethernet48 Present  
 Ethernet52 Not present  
 Ethernet56 Not present  
 Ethernet60 Not present  
 Ethernet64 Not present  
 Ethernet68 Not present  
 Ethernet72 Not present  
 Ethernet76 Not present

## ● test vlan function

with transceiver on Ethernet48 and Ethernet72, both link up with IXIA

```
root@sonic:~# config vlan add 100
root@sonic:~# config vlan member add 100 Ethernet48 -u
root@sonic:~# config vlan member add 100 Ethernet72 -u
root@sonic:~# show vlan brief
```

```
+-----+-----+-----+-----+-----+
| VLAN ID | IP Address | Ports | Port Tagging | DHCP Helper Address |
+=====+=====+=====+=====+=====+
| 100 | | Ethernet48 | untagged | |
| | | Ethernet72 | untagged | |
+-----+-----+-----+-----+-----+
```

```
root@sonic:~# config save
Existing files will be overwritten, continue? [y/N]: y
Running command: /usr/local/bin/sonic-cfggen -d --print-data > /etc/sonic/config_db.json
```

Send packets from Ethernet48 and Ethernet72, can receive from the other side.

```
root@sonic:~# config vlan member del 100 Ethernet72
root@sonic:~# config vlan add 200
root@sonic:~# config vlan member add 200 Ethernet72 -u
root@sonic:~# show vlan brief
```

```
+-----+-----+-----+-----+-----+
| VLAN ID | IP Address | Ports | Port Tagging | DHCP Helper Address |
+=====+=====+=====+=====+=====+
| 100 | | Ethernet48 | untagged | |
+-----+-----+-----+-----+-----+
| 200 | | Ethernet72 | untagged | |
+-----+-----+-----+-----+-----+
```

```
root@sonic:~# config save -y
Running command: /usr/local/bin/sonic-cfggen -d --print-data > /etc/sonic/config_db.json
```

Send packets from Ethernet48 and Ethernet72, can not receive from the other side.

## ● Test mac learning

Send packets from Ethernet72, with increasing src mac address

```
root@sonic:/etc/sonic# show mac
```

```
No.    Vlan    MacAddress    Port    Type
```

```
-----
```

Total number of entries 0

```
root@sonic:/etc/sonic# show mac
```

```
No.    Vlan    MacAddress    Port    Type
```

```
-----
```

1	100	00:00:05:00:10:0B	Ethernet72	Dynamic
2	100	00:00:05:00:10:0F	Ethernet72	Dynamic
3	100	00:00:05:00:10:0A	Ethernet72	Dynamic
4	100	00:00:05:00:10:0D	Ethernet72	Dynamic
5	100	00:00:05:00:10:06	Ethernet72	Dynamic
6	100	00:00:05:00:10:08	Ethernet72	Dynamic
7	100	00:00:05:00:10:01	Ethernet72	Dynamic
8	100	00:00:05:00:10:0C	Ethernet72	Dynamic
9	100	00:00:05:00:10:07	Ethernet72	Dynamic
10	100	00:00:05:00:10:05	Ethernet72	Dynamic
11	100	00:00:05:00:10:09	Ethernet72	Dynamic
12	100	00:00:05:00:10:0E	Ethernet72	Dynamic
13	100	00:00:05:00:10:02	Ethernet72	Dynamic
14	100	00:00:05:00:10:00	Ethernet72	Dynamic
15	100	00:00:05:00:10:03	Ethernet72	Dynamic
16	100	00:00:05:00:10:04	Ethernet72	Dynamic

Total number of entries 16

```
root@sonic:/etc/sonic#
```

- sonic-clear fdb all

```
root@sonic:/etc/sonic# show mac
```

```
No.    Vlan    MacAddress    Port    Type
```

```
-----
```

1	100	00:00:05:00:03:0F	Ethernet72	Dynamic
2	100	00:00:05:00:03:07	Ethernet72	Dynamic
3	100	00:00:05:00:03:05	Ethernet72	Dynamic
4	100	00:00:05:00:03:08	Ethernet72	Dynamic
5	100	00:00:05:00:03:06	Ethernet72	Dynamic
6	100	00:00:05:00:03:0B	Ethernet72	Dynamic
7	100	00:00:05:00:03:0C	Ethernet72	Dynamic
8	100	00:00:05:00:03:0A	Ethernet72	Dynamic
9	100	00:00:05:00:03:03	Ethernet72	Dynamic
10	100	00:00:05:00:03:02	Ethernet72	Dynamic
11	100	00:00:05:00:03:0E	Ethernet72	Dynamic

```

12    100  00:00:05:00:03:04  Ethernet72  Dynamic
13    100  00:00:05:00:03:00  Ethernet72  Dynamic
14    100  00:00:05:00:03:09  Ethernet72  Dynamic
15    100  00:00:05:00:03:0D  Ethernet72  Dynamic
16    100  00:00:05:00:03:01  Ethernet72  Dynamic

```

Total number of entries 16

```
root@sonic:/etc/sonic# sonic-clear fdb all
```

FDB entries are cleared.

```
root@sonic:/etc/sonic# show mac
```

```
No.   Vlan   MacAddress   Port   Type
-----
```

Total number of entries 0

```
root@sonic:/etc/sonic#
```

```
root@sonic:/etc/sonic# show arp
```

```
Address      MacAddress      Iface   Vlan
-----
```

```
10.6.141.254  d8:94:03:d5:0e:01  eth0   -
```

Total number of entries 1

```
root@sonic:/etc/sonic# show arp
```

```
Address      MacAddress      Iface   Vlan
-----
```

```
10.6.141.251  ca:ae:db:7a:d2:cb  eth0   -
```

```
10.6.141.254  d8:94:03:d5:0e:01  eth0   -
```

```
192.1.0.2     00:00:05:00:18:00  Ethernet0 -
```

Total number of entries 3

```
root@sonic:/etc/sonic#
```

send packets to learned IP, confirmed packets received by Ethernet0

```
root@sonic:/etc/sonic# portstat
```

Last cached time was 2020-08-07 08:18:23.396319

IFACE	STATE	RX_OK	RX_BPS	RX_UTIL	RX_ERR	RX_DRP	RX_OVR	TX_OK	TX_BPS	TX_UTIL	TX_ERR	
TX_DRP	TX_OVR											
Ethernet0	U	0	0.00 B/s	0.00%	0	0	0	100	352.39 B/s	0.00%	0	0
0												
Ethernet1	U	100	352.39 B/s	0.00%	0	0	0	0	0.00 B/s	0.00%	0	0
0												
Ethernet2	U	0	0.00 B/s	0.00%	0	0	0	0	0.00 B/s	0.00%	0	0
0												

Executing restart of service telemetry...

root@sonic:/etc/sonic# show acl table

Name	Type	Binding	Description	Stage
data-aclv4	L3	Ethernet3	data-aclv4	ingress

root@sonic:/etc/sonic# show acl rule

Table	Rule	Priority	Action	Match
data-aclv4	IPV4	1800	DROP	ETHER_TYPE: 0x0800

root@sonic:/etc/sonic#

root@sonic:/etc/sonic# show vlan brief

VLAN ID	IP Address	Ports	Port Tagging	DHCP Helper Address
100		Ethernet2	untagged	
		Ethernet3	untagged	

root@sonic:/etc/sonic# portstat -c

Cleared counters

root@sonic:/etc/sonic# portstat

Last cached time was 2020-08-09 09:43:04.720926

IFACE	STATE	RX_OK	RX_BPS	RX_UTIL	RX_ERR	RX_DRP	RX_OVR	TX_OK	TX_BPS	TX_UTIL		
TX_ERR	TX_DRP	TX_OVR										
Ethernet0	U	0	0.00 B/s	0.00%	0	0	0	0	0.00 B/s	0.00%	0	
0	0											
Ethernet1	U	0	0.00 B/s	0.00%	0	0	0	0	0.00 B/s	0.00%	0	
0	0											
Ethernet2	U	124,025,070	457.56 MB/s	8.94%	0	0	0	0	0.00 B/s	0.00%	0	
0	0											
Ethernet3	U	0	0.00 B/s	0.00%	0	0	0	124,025,070	457.56 MB/s	8.94%	0	
0	0											
Ethernet4	D	0	0.00 B/s	0.00%	0	0	0	0	0.00 B/s	0.00%	0	
0	0											
Ethernet5	D	0	0.00 B/s	0.00%	0	0	0	0	0.00 B/s	0.00%	0	
0	0											

root@sonic:/etc/sonic# vim config\_db.json

```
root@sonic:/etc/sonic# config reload -y
```

```
Executing stop of service telemetry...
```

```
Warning: Stopping telemetry.service, but it can still be activated by:
```

```
telemetry.timer
```

```
Executing stop of service swss...
```

```
Executing stop of service lldp...
```

```
Executing stop of service pmon...
```

```
Executing stop of service bgp...
```

```
Executing stop of service hostcfgd...
```

```
Executing stop of service nat...
```

```
Running command: /usr/local/bin/sonic-cfggen -j /etc/sonic/init_cfg.json -j /etc/sonic/config_db.json --write-to-db
```

```
Running command: /usr/bin/db_migrator.py -o migrate
```

```
Executing reset-failed of service bgp...
```

```
Executing reset-failed of service dhcp_relay...
```

```
Executing reset-failed of service hostcfgd...
```

```
Executing reset-failed of service hostname-config...
```

```
Executing reset-failed of service interfaces-config...
```

```
Executing reset-failed of service lldp...
```

```
Executing reset-failed of service nat...
```

```
Executing reset-failed of service ntp-config...
```

```
Executing reset-failed of service pmon...
```

```
Executing reset-failed of service radv...
```

```
Executing reset-failed of service rsyslog-config...
```

```
Executing reset-failed of service sflow...
```

```
Executing reset-failed of service snmp...
```

```
Executing reset-failed of service swss...
```

```
Executing reset-failed of service syncd...
```

```
Executing reset-failed of service teamd...
```

```
Executing reset-failed of service telemetry...
```

```
Executing restart of service hostname-config...
```

```
Executing restart of service interfaces-config...
```

```
Executing restart of service ntp-config...
```

```
Executing restart of service rsyslog-config...
```

```
Executing restart of service swss...
```

```
Executing restart of service bgp...
```

```
Executing restart of service pmon...
```

```
Executing restart of service lldp...
```

```
Executing restart of service hostcfgd...
```

```
Executing restart of service nat...
```

```
Executing restart of service telemetry...
```

```
root@sonic:/etc/sonic# show acl table
```

Name	Type	Binding	Description	Stage
------	------	---------	-------------	-------

```
data-aclv4 L3 Ethernet3 data-aclv4 ingress
```

```
root@sonic:/etc/sonic# show acl rule
```

Table	Rule	Priority	Action	Match
-------	------	----------	--------	-------

data-aclv4	IPV4	1800	DROP	ETHER_TYPE: 0x0800
------------	------	------	------	--------------------

```
root@sonic:/etc/sonic# portstat -c
```

Cleared counters

(send IPv4 packets with same setting)

```
root@sonic:/etc/sonic# portstat
```

Last cached time was 2020-08-09 09:52:00.795615

IFACE	STATE	RX_OK	RX_BPS	RX_UTIL	RX_ERR	RX_DRP	RX_OVR	TX_OK	TX_BPS	TX_UTIL	TX_ERR	TX_DRP	TX_OVR
Ethernet0	D	0	0.00 B/s	0.00%	0	0	0	4	52.24 B/s	0.00%	0	0	0
Ethernet1	U	0	0.00 B/s	0.00%	0	0	0	4	52.24 B/s	0.00%	0	0	0
Ethernet2	D	168,065,648	838.65 MB/s	16.38%	0	168,065,648	0	0	0.00 B/s	0.00%	0	0	0
Ethernet3	D	0	0.00 B/s	0.00%	0	0	0	0	0.00 B/s	0.00%	0	0	0
Ethernet4	D	0	0.00 B/s	0.00%	0	0	0	0	0.00 B/s	0.00%	0	0	0
Ethernet5	D	0	0.00 B/s	0.00%	0	0	0	0	0.00 B/s	0.00%	0	0	0

(confirmed packets dropped)

## ● Test LAG function

```
root@sonic:/etc/sonic# show interfaces portchannel
```

Flags: A - active, I - inactive, Up - up, Dw - Down, N/A - not available,

S - selected, D - deselected, \* - not synced

No.	Team Dev	Protocol	Ports
01	PortChannel01	LACP(A)(Up)	Ethernet0(S) Ethernet1(S)

```
root@sonic:/etc/sonic# show vlan brief
```

VLAN ID	IP Address	Ports	Port Tagging	DHCP Helper Address
100		Ethernet3	untagged	
		Ethernet48	untagged	
200		Ethernet2	untagged	
		PortChannel01	untagged	

```
root@sonic:/etc/sonic# portstat -c
```

Cleared counters



(send packets with increment MAC address)

root@sonic:/etc/sonic# portstat

Last cached time was 2020-08-09 14:30:35.677766

IFACE	STATE	RX_OK	RX_BPS	RX_UTIL	RX_ERR	RX_DRP	RX_OVR	TX_OK	TX_BPS	TX_UTIL	TX_ERR	TX_DRP
Ethernet0	U	1	3.36 B/s	0.00%	0	0	0	22,408,359	35.92 MB/s	0.70%	0	0
Ethernet1	U	1	3.36 B/s	0.00%	0	0	0	22,318,903	35.77 MB/s	0.70%	0	0
Ethernet2	U	44,727,258	71.69 MB/s	1.40%	0	0	0	1	6.22 B/s	0.00%	0	0
Ethernet3	U	0	0.00 B/s	0.00%	0	0	0	0	0.00 B/s	0.00%	0	0
Ethernet4	D	0	0.00 B/s	0.00%	0	0	0	0	0.00 B/s	0.00%	0	0
Ethernet5	D	0	0.00 B/s	0.00%	0	0	0	0	0.00 B/s	0.00%	0	0

(skip)

(confirmed packets is equally divided to 2 ports in LAG)

( Change setting to test with QSFP )

root@sonic:~# show vlan brief

```

+-----+-----+-----+-----+-----+
| VLAN ID | IP Address | Ports          | Port Tagging | DHCP Helper Address |
+=====+=====+=====+=====+=====+
| 100     |           | Ethernet2     | untagged     |                     |
|         |           | PortChannel02 | untagged     |                     |
+-----+-----+-----+-----+-----+
| 200     |           | PortChannel01 | untagged     |                     |
+-----+-----+-----+-----+-----+

```

root@sonic:~# show interfaces portchannel

Flags: A - active, I - inactive, Up - up, Dw - Down, N/A - not available, S - selected, D - deselected, \* - not synced

No.	Team Dev	Protocol	Ports
01	PortChannel01	LACP(A)(Dw)	Ethernet0(D) Ethernet1(D)
02	PortChannel02	LACP(A)(Up)	Ethernet56(S) Ethernet48(S)

root@sonic:~# portstat -c

Cleared counters

root@sonic:~# portstat

Last cached time was 2020-08-10 06:49:23.821328

IFACE	STATE	RX_OK	RX_BPS	RX_UTIL	RX_ERR	RX_DRP	RX_OVR	TX_OK	TX_BPS	TX_UTIL	TX_ERR	TX_DRP
Ethernet0	U	0	0.00 B/s	0.00%	0	0	0	22	133.25 B/s	0.00%	0	0
Ethernet1	U	0	0.00 B/s	0.00%	0	0	0	22	138.41 B/s	0.00%	0	0
Ethernet2	U	42,388,659	122.42 MB/s	2.39%	0	42,389	0	1	11.21 B/s	0.00%	0	0

Ethernet3	U	0	0.00 B/s	0.00%	0	0	0	1	11.21 B/s	0.00%	0	0	0
<b>(skip)</b>													
Ethernet47	D	0	0.00 B/s	0.00%	0	0	0	0	0.00 B/s	0.00%	0	0	0
Ethernet48	U	1	6.06 B/s	0.00%	0	0	0	21,151,942	61.09 MB/s	1.19%	0	0	0
Ethernet52	D	0	0.00 B/s	0.00%	0	0	0	0	0.00 B/s	0.00%	0	0	0
Ethernet56	U	1	6.06 B/s	0.00%	0	0	0	21,194,332	61.21 MB/s	1.20%	0	0	0
Ethernet60	D	0	0.00 B/s	0.00%	0	0	0	0	0.00 B/s	0.00%	0	0	0

**(confirmed packets is equally divided to 2 ports in LAG)**

## ● Test mtu

root@sonic:/etc/sonic# show interfaces status

Interface	Lanes	Speed	MTU	FEC	Alias	Vlan	Oper	Admin	Type	Asym PFC
Ethernet0	1	25G	9100	N/A	Ethernet0	trunk	up	up	SFP/SFP+/SFP28	N/A
Ethernet1	2	25G	500	N/A	Ethernet1	trunk	up	up	SFP/SFP+/SFP28	N/A
Ethernet2	3	25G	9100	N/A	Ethernet2	trunk	up	up	SFP/SFP+/SFP28	N/A
Ethernet3	4	25G	9100	N/A	Ethernet3	trunk	up	up	SFP/SFP+/SFP28	N/A
Ethernet4	5	25G	9100	N/A	Ethernet4	routed	down	up	N/A	N/A
Ethernet5	6	25G	9100	N/A	Ethernet5	routed	down	up	N/A	N/A

**(skip)**

root@sonic:/etc/sonic# show vlan brief

```

+-----+-----+-----+-----+-----+
| VLAN ID | IP Address | Ports | Port Tagging | DHCP Helper Address |
+=====+=====+=====+=====+=====+
| 100 | | Ethernet0 | untagged | |
| | | Ethernet1 | untagged | |
| | | Ethernet2 | untagged | |
| | | Ethernet3 | untagged | |
+-----+-----+-----+-----+

```

root@sonic:/etc/sonic# portstat -c

Cleared counters

**(send packets with size 64)**

root@sonic:/etc/sonic# portstat

Last cached time was 2020-08-10 07:57:13.114353

IFACE	STATE	RX_OK	RX_BPS	RX_UTIL	RX_ERR	RX_DRP	RX_OVR	TX_OK	TX_BPS	TX_UTIL	TX_ERR	TX_DRP
Ethernet0	U	0	0.00 B/s	0.00%	0	0	0	92,909,586	159.95 MB/s	3.12%	0	0
Ethernet1	U	92,909,585	159.95 MB/s	3.12%	0	0	0	1	6.68 B/s	0.00%	0	0
Ethernet2	U	0	0.00 B/s	0.00%	0	0	0	92,909,585	159.95 MB/s	3.12%	0	0

Ethernet3	U	0	0.00 B/s	0.00%	0	0	0	92,909,585	159.95 MB/s	3.12%	0	0	0
Ethernet4	D	0	0.00 B/s	0.00%	0	0	0	0	0.00 B/s	0.00%	0	0	0
Ethernet5	D	0	0.00 B/s	0.00%	0	0	0	0	0.00 B/s	0.00%	0	0	0
Ethernet6	D	0	0.00 B/s	0.00%	0	0	0	0	0.00 B/s	0.00%	0	0	0

(confirmed packets can successfully received)

root@sonic:/etc/sonic# portstat -c

Cleared counters

(send packets with size 1000)

root@sonic:/etc/sonic# portstat

Last cached time was 2020-08-10 07:59:03.056682

IFACE	STATE	RX_OK	RX_BPS	RX_UTIL	RX_ERR	RX_DRP	RX_OVR	TX_OK	TX_BPS	TX_UTIL	TX_ERR	TX_DRP	TX_OVR
Ethernet0	U	0	0.00 B/s	0.00%	0	0	0	1	22.09 B/s	0.00%	0	0	0
Ethernet1	U	0	876.68 MB/s	17.12%	9,860,695	0	0	0	0.00 B/s	0.00%	0	0	0
Ethernet2	U	0	0.00 B/s	0.00%	0	0	0	0	0.00 B/s	0.00%	0	0	0
Ethernet3	U	0	0.00 B/s	0.00%	0	0	0	0	0.00 B/s	0.00%	0	0	0
Ethernet4	D	0	0.00 B/s	0.00%	0	0	0	0	0.00 B/s	0.00%	0	0	0
Ethernet5	D	0	0.00 B/s	0.00%	0	0	0	0	0.00 B/s	0.00%	0	0	0
Ethernet6	D	0	0.00 B/s	0.00%	0	0	0	0	0.00 B/s	0.00%	0	0	0

(confirmed packets can successfully blocked)