

1.2. CRC Error Test

Test Environment

- Configure the test setup as shown in block diagram below

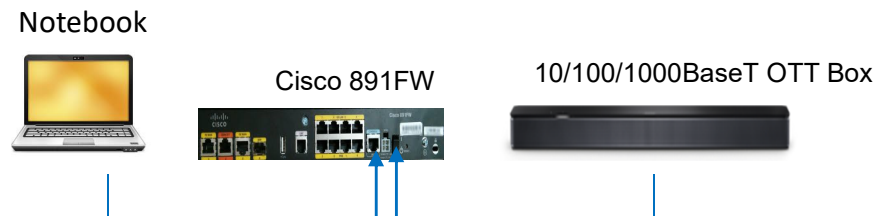


Figure 2: CRC Error Test

The performance specified in following paragraphs shall be guaranteed under the following conditions:

HW Version: 05(Motorcomm) , SW Version: 15.532.21moto-20220316								
Items #	Description	Result (3e:89)	Result (3e:bf)	Result (3e:ab)	Result (3e:88)	Result (3e:a4)	Result (3e:8b)	Result (3e:8f)
1	1000BaseT – Full duplex	PASS	PASS	PASS	PASS	PASS	PASS	PASS
2	100BaseT – Full duplex	PASS	PASS	PASS	PASS	PASS	PASS	PASS
3	10BaseT – Full duplex	PASS	PASS	PASS	PASS	PASS	PASS	PASS

Purpose: Verify the DUT can detect accidental changes to raw data.

■ 1000BaseT :

1. NB:

To run this test , we will open our command processor and input the following information.

“ iperf3.exe -c 192.168.144.5 -t 65536 ” or

“ iperf3.exe -c 192.168.144.5 -t 63336 -w 1m”

This should look like the following:

```
D:\iperf-3.1.3-win64>
D:\iperf-3.1.3-win64>iperf3.exe -c 192.168.144.5 -t 65536
Connecting to host 192.168.144.5, port 5201
[ 4] local 192.168.144.20 port 52241 connected to 192.168.144.5 port 5201
[ ID] Interval           Transfer     Bandwidth
[ 4] 0.00-1.00      sec    112 MBytes  939 Mbits/sec
[ 4] 1.00-2.00      sec    112 MBytes  939 Mbits/sec
[ 4] 2.00-3.00      sec    112 MBytes  940 Mbits/sec
[ 4] 3.00-4.00      sec    112 MBytes  936 Mbits/sec
[ 4] 4.00-5.00      sec    111 MBytes  929 Mbits/sec
[ 4] 5.00-6.00      sec    112 MBytes  936 Mbits/sec
[ 4] 6.00-7.00      sec    112 MBytes  939 Mbits/sec
[ 4] 7.00-8.00      sec    112 MBytes  939 Mbits/sec
[ 4] 8.00-9.00      sec    111 MBytes  935 Mbits/sec
[ 4] 9.00-10.00     sec    111 MBytes  925 Mbits/sec
[ 4] 10.00-11.00    sec    112 MBytes  939 Mbits/sec
[ 4] 11.00-12.00    sec    112 MBytes  938 Mbits/sec
[ 4] 12.00-13.00    sec    112 MBytes  937 Mbits/sec
[ 4] 13.00-14.00    sec    108 MBytes  908 Mbits/sec
[ 4] 14.00-15.00    sec    109 MBytes  918 Mbits/sec
[ 4] 15.00-16.00    sec    111 MBytes  931 Mbits/sec
[ 4] 16.00-17.00    sec    112 MBytes  939 Mbits/sec
```

2. DUT:

This command will run a iperf test for **24 hours**.

“iperf3.exe -s &”

```
console:/data # ./iperf3 -s &
[1] 8385
console:/data # -----
Server listening on 5201
-----
Accepted connection from 192.168.144.20, port 52240
[ 5] local 192.168.144.5 port 5201 connected to 192.168.144.20 port 52241
[ ID] Interval           Transfer     Bitrate
[ 5] 0.00-1.00      sec    108 MBytes  905 Mbits/sec
[ 5] 1.00-2.00      sec    112 MBytes  939 Mbits/sec
[ 5] 2.00-3.00      sec    112 MBytes  939 Mbits/sec
[ 5] 3.00-4.00      sec    112 MBytes  938 Mbits/sec
[ 5] 4.00-5.00      sec    111 MBytes  930 Mbits/sec
[ 5] 5.00-6.00      sec    111 MBytes  934 Mbits/sec
[ 5] 6.00-7.00      sec    112 MBytes  939 Mbits/sec
[ 5] 7.00-8.00      sec    112 MBytes  939 Mbits/sec
[ 5] 8.00-9.00      sec    111 MBytes  935 Mbits/sec
[ 5] 9.00-10.00     sec    111 MBytes  934 Mbits/sec
[ 5] 10.00-11.00    sec    111 MBytes  930 Mbits/sec
[ 5] 11.00-12.00    sec    112 MBytes  939 Mbits/sec
[ 5] 12.00-13.00    sec    112 MBytes  936 Mbits/sec
[ 5] 13.00-14.00    sec    108 MBytes  909 Mbits/sec
[ 5] 14.00-15.00    sec    111 MBytes  933 Mbits/sec
[ 5] 15.00-16.00    sec    109 MBytes  915 Mbits/sec
[ 5] 16.00-17.00    sec    112 MBytes  940 Mbits/sec
```

The test results are as follows:

```
console:/ #
console:/ # ethtool -S eth0 | grep crc
bad_crc_event: 0
```

■ 100MBaseT :

1. NB:

To run this test, we will open our command processor and input the following information.

“iperf3.exe -c 192.168.144.5 -t 3600 -w 20k”

DUT:

The test results are as follows :

```
console:/ #  
console:/ # ethtool -S eth0 | grep crc  
bad_crc_event: 0
```

■ 10MBaseT :

1. NB:

To run this test, we will open our command processor and input the following information.

“iperf3.exe -c 192.168.144.5 -t 3600 -w 10k”

DUT:

The test results are as follows:

```
console:/ #  
console:/ # ethtool -S eth0 | grep crc  
bad_crc_event: 0
```