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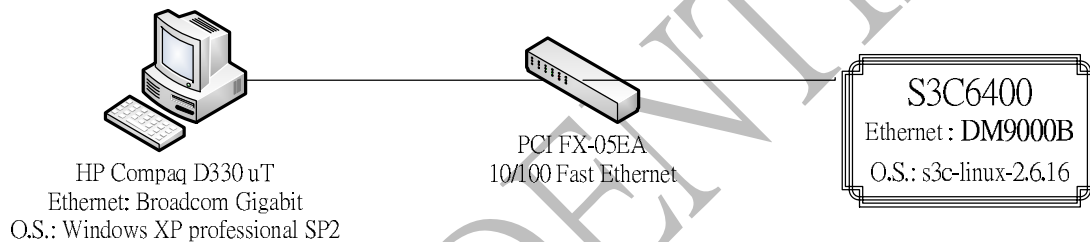
Samsung S3C6400+DM9000BEP Performance Report

Ø Test Result

DM9000B Performance

	Performance
TX (Mbit/second)	50.18
RX (Mbit/second)	52.2

Ø Test Environment



Ø Test Tool

Iperf 1.7.0 (<http://dast.nlanr.net/Projects/Iperf/>)

Iperf is a free tool and open source code you can get from <http://dast.nlanr.net/Projects/iperf/>. It is a tool to measure maximum TCP bandwidth, allowing the tuning of various parameters and UDP characteristics. It reports bandwidth, delay jitter, datagram loss. Iperf uses client-server mode to measure network performance. The client site sends many large packets during test time. And the server site sends ACK packets at that time. We measure the TX and RX performance separately.

- I TX performance : DM9000B acts client and PC acts server.
- I RX performance : DM9000B acts server and PC acts client.

Server : #./iperf -s

Client : #./iperf -c \$IP -t 30



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Unit : Mbits/sec.

times	TX	RX
1	50.1	52.2
2	50.1	52.2
3	50.3	52.2
4	50.3	52.2
5	50.1	52.2
Average	50.18	52.2

Table 1



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Ø Appendix

- n Bank1 timing setting for DM9000B (How to configure this setting, please refer to S3C6400 datasheet for the detail.)

Tacs = 1	//1 clock
Tcos = 0	//0 clock
Tacc = 6	//7 clock
Tcoh = 0	//0 clock
Tach = 1	//1 clock
Tacp = 0	//0 clock

- n TX performance :

```
Serial Port USB Port Configuration Help
[root@(none) tmp]#
[root@(none) tmp]# ./iperf -c 192.168.1.180 -t 30
-----
Client connecting to 192.168.1.180, TCP port 5001
TCP window size: 16.0 KByte (default)
-----
[ 5] local 192.168.1.209 port 3015 connected with 192.168.1.180 port 5001
[ ID] Interval      Transfer    Bandwidth
[ 5] 0.0-30.0 sec  179 MBytes  50.1 Mbits/sec
[root@(none) tmp]# ./iperf -c 192.168.1.180 -t 30
-----
Client connecting to 192.168.1.180, TCP port 5001
TCP window size: 16.0 KByte (default)
-----
[ 5] local 192.168.1.209 port 3016 connected with 192.168.1.180 port 5001
[ ID] Interval      Transfer    Bandwidth
[ 5] 0.0-30.0 sec  179 MBytes  50.1 Mbits/sec
[root@(none) tmp]# ./iperf -c 192.168.1.180 -t 30
-----
Client connecting to 192.168.1.180, TCP port 5001
TCP window size: 16.0 KByte (default)
-----
[ 5] local 192.168.1.209 port 3017 connected with 192.168.1.180 port 5001
[ ID] Interval      Transfer    Bandwidth
[ 5] 0.0-30.0 sec  180 MBytes  50.3 Mbits/sec
[root@(none) tmp]# ./iperf -c 192.168.1.180 -t 30
-----
Client connecting to 192.168.1.180, TCP port 5001
TCP window size: 16.0 KByte (default)
-----
[ 5] local 192.168.1.209 port 3018 connected with 192.168.1.180 port 5001
[ ID] Interval      Transfer    Bandwidth
[ 5] 0.0-30.0 sec  180 MBytes  50.3 Mbits/sec
[root@(none) tmp]# ./iperf -c 192.168.1.180 -t 30
-----
Client connecting to 192.168.1.180, TCP port 5001
TCP window size: 16.0 KByte (default)
-----
[ 5] local 192.168.1.209 port 3019 connected with 192.168.1.180 port 5001
[ ID] Interval      Transfer    Bandwidth
[ 5] 0.0-30.0 sec  179 MBytes  50.1 Mbits/sec
[root@(none) tmp]#
```



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Fig. 1

n RX performance :

```
DNW v0.50M - For WinCE [COM1,115200bps][USB:x][ADDR:0xc0000000]
Serial Port  USB Port  Configuration  Help
[root@(none) tmp]# ./iperf -s
-----
Server listening on TCP port 5001
TCP window size: 85.3 KByte (default)
-----
[ 6] local 192.168.1.209 port 5001 connected with 192.168.1.180 port 1280
[ ID] Interval      Transfer    Bandwidth
[ 6] 0.0-29.0 sec  181 MBytes  52.2 Mbits/sec
[ 6] local 192.168.1.209 port 5001 connected with 192.168.1.180 port 1281
[ ID] Interval      Transfer    Bandwidth
[ 6] 0.0-29.0 sec  180 MBytes  52.2 Mbits/sec
[ 6] local 192.168.1.209 port 5001 connected with 192.168.1.180 port 1282
[ ID] Interval      Transfer    Bandwidth
[ 6] 0.0-29.0 sec  181 MBytes  52.2 Mbits/sec
[ 6] local 192.168.1.209 port 5001 connected with 192.168.1.180 port 1283
[ ID] Interval      Transfer    Bandwidth
[ 6] 0.0-29.0 sec  181 MBytes  52.2 Mbits/sec
[ 6] local 192.168.1.209 port 5001 connected with 192.168.1.180 port 1284
[ ID] Interval      Transfer    Bandwidth
[ 6] 0.0-29.0 sec  180 MBytes  52.2 Mbits/sec
[root@(none) tmp]#
[root@(none) tmp]#
```

Fig. 2