聯傑國際股份有限公司(DAVICOM Semiconductor, Inc.)

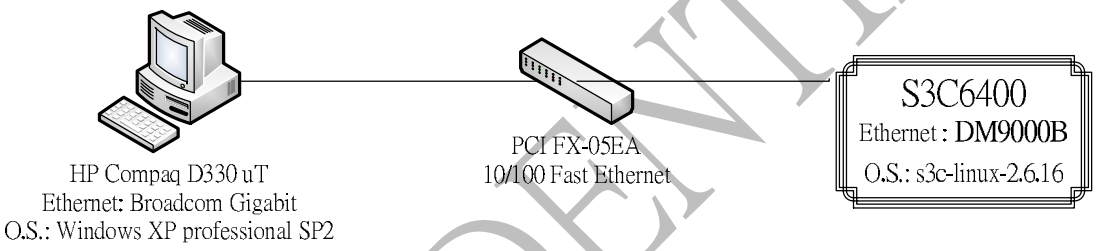
Samsung S3C6400+DM9000BEP Performance Report

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.

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

Server：#./iperf –s

Client：#./iperf –c $IP –t 30

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

Ø Appendix

- 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

- TX performance：

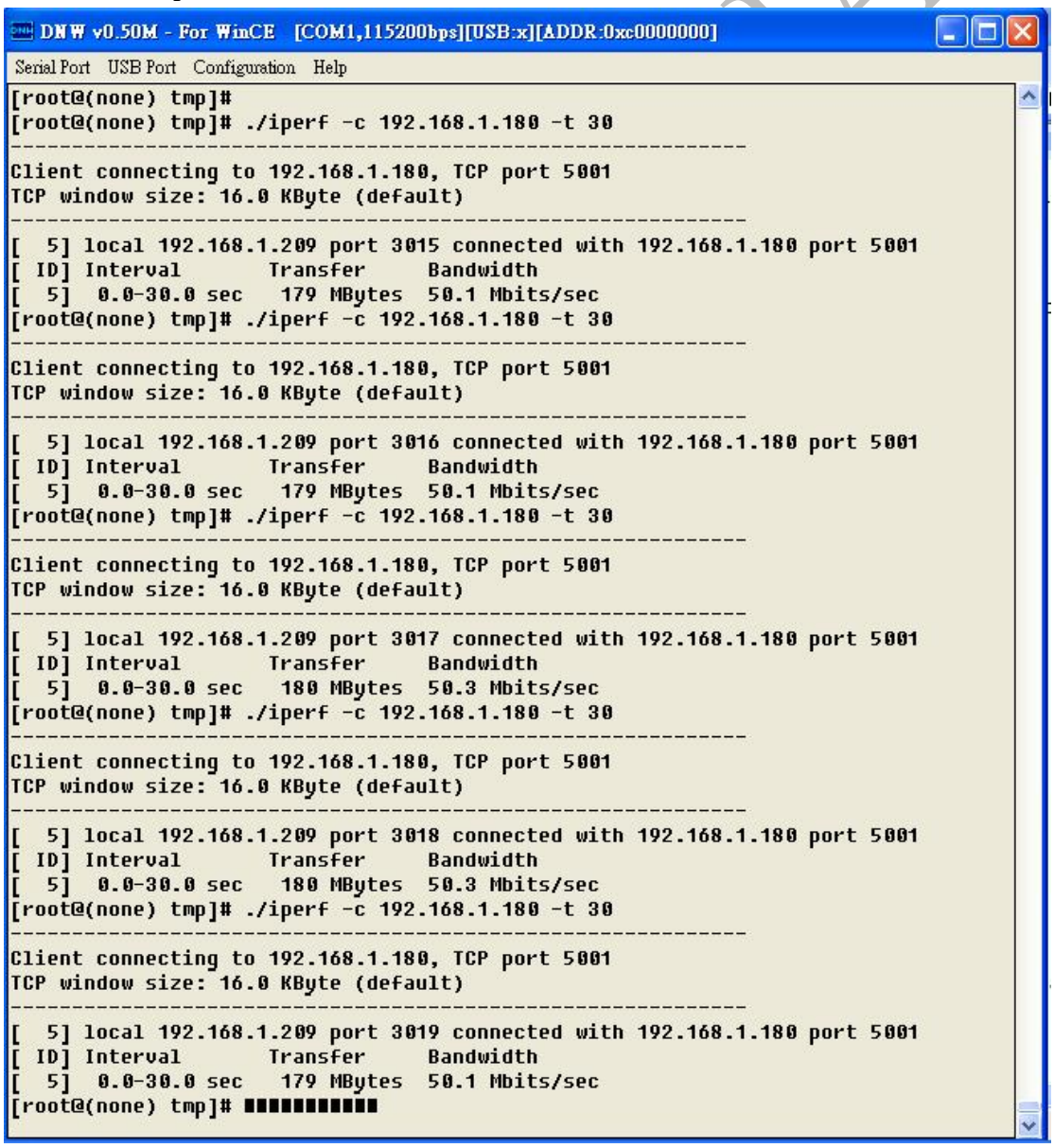


Fig. 1

- RX performance：

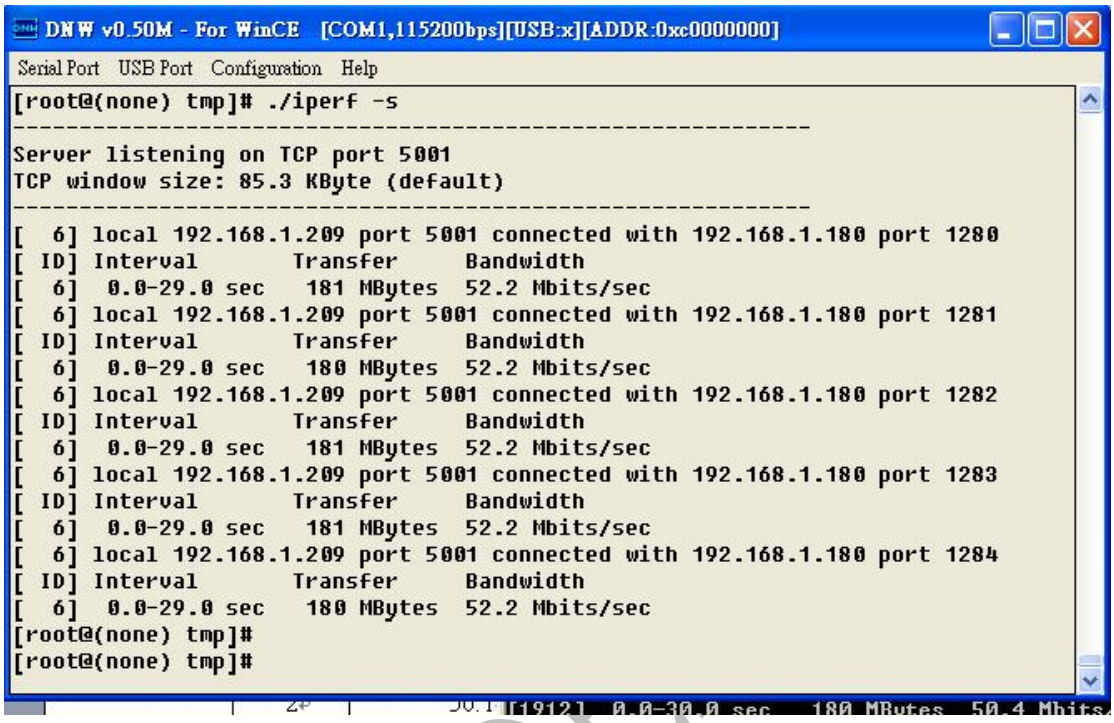


Fig. 2