DAVICOM DM9000B Performance Report
for SIGMA DESIGNS EM8511 Platform

● Test Environment
Device 1.
Main-chip: EM8511 (200 MHz)
LAN chip: DM9000B EP
O.S.: 2.4.17-uc0 (uClinux)
IP: 192.168.11.33

Device 2.
PC
CPU: Celeron 500 MHz
RAM: 128MB
LAN chip: DAVICOM DM9102D
O.S.: Linux (kernel 2.6.9)
IP: 192.168.11.3

● TCP Packets Performance
When we want to measure TX performance, device1 acts client and device2 acts server.
When we want to measure RX performance, device2 acts client and device1 acts server.
Table 1 shows TX performance
Server-PC: # iperf –s –w 65k
Client-EM8511: # iperf_u –c 192.168.11.3 –w 65k –i 1 –t 30
Table 2 shows RX performance
Server-EM8511: # iperf –s –w 65k
Client-PC: # iperf_u –c 192.168.11.33 –w 65k –i 1 –t 30
DM9000B (version: 0720S D322W.93)

**Add Dumping resistance (33 Ohm)
(Units: Mbits/sec)

<table>
<thead>
<tr>
<th>Data Bus Current Driving/Sinking Capability</th>
<th>Tx</th>
<th>Rx</th>
</tr>
</thead>
<tbody>
<tr>
<td>2mA</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>4mA</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>6mA</td>
<td>24.3</td>
<td>44.8</td>
</tr>
<tr>
<td></td>
<td>24.5</td>
<td>44.9</td>
</tr>
<tr>
<td>8mA</td>
<td>24.6</td>
<td>44.5</td>
</tr>
<tr>
<td></td>
<td>24.8</td>
<td>44.4</td>
</tr>
</tbody>
</table>

PS. About Sigma Design EM8511 PB Timing:

Timing : Ta=0, Tb=0, Tc=1, Td=0