裕太微电子

YT6801网卡Window驱动发布验收测试报告

Revision History

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| --- | --- | --- | --- | --- |
| Revision | Release Date | IC Version | Summary | Author |
| V0.1 | 2023/11/21 | NTO ASIC | Initial release. | Shengyuan, Fangwei |
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# Introduction

YT6801(S), is a single gigabit port Ethernet controller chip for ethernet networks card. It integrates IEEE802.3 Ethernet media access controller (MAC), single triple speed physical layer (PHY) port, One Time Programmable (OTP) and PCIE Express x1 controller. It is highly compacted to 32 pin QFN 4x4 package.

This document targets to the functional and system level tests report.

# Dependency

[Description]

YT6801(S) DUT board is ready and successfully identified by Window system as PCIe NIC device.

[Test Bench]

|  |  |
| --- | --- |
| **Driver Version** | **NDIS 1.0.1.39** |
| **Test Owner** |  |
| **Test Date** | **2024.07.09** |
| **DUT board** | Schematic: |
| PCB: V1 |
| Board Num： |
| **Test Equipment** | Scope：无 |
| Power Supply：integrated into PC |
| **Test Condition** | Temperature：Room temperature |
| Voltage：n/c |
| Process： |
| **Test Topology** |  |

# Test Cases and Results

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **NO.** | **Case Description** | **Result** | **Comment** | **Owner** |
|  | [Stress] [Script] Driver install/ uninstall | N/A |  | N/A |
|  | [Stress] [Script] Device enable/ disable | PASS | 200 Cycles Intel Win11 | Shengli |
|  | [Stress] [Script] Ping 32-byte test | PASS | 200 Cycles Intel Win11 | Shengli |
|  | [Stress] [Script] Ping 65500-byte test | PASS |
|  | [Stress] [Script] OS suspend/resume S3 | PASS | 200 Cycles Intel Win11 | Shengli |
|  | [Stress] [Script] OS suspend/resume S4 | PASS | 200 Cycles Intel Win11 |
|  | [Stress] [Script] OS suspend/resume S5 (fastboot on) | PASS | 200 Cycles Intel Win11 |
|  | [Stress] [Script] OS suspend/resume S5 (fastboot off) | PASS(on) | 200 Cycles Intel Win11 | Shengli |
|  | [Stress] [Script] Iperf TCP transmit performance test | PASS | intel WIN11  performance:945Mbits/s | Shengli |
|  | [Stress] [Script] Iperf TCP receive performance test | PASS | intel WIN11  performance:950Mbits/s | Shengli |
|  | [Stress] [Script] Iperf UDP transmit performance test | PASS | intel WIN11  performance:956bits/s | Shengli |
|  | [Stress] [Script] Iperf UDP receive performance test | PASS | intel WIN11  performance:959Mbits/s | Shengli |
|  | [Platform Compatibility] [Manual] Iperf throughput test | PASS | intel WIN11  TCP: Sender:948Mbits/s Receiver:948Mbits/s | Shengli |
|  | [Function] [Script] Speed & Duplex | PASS | AMD WIn10  Fuxi Duplex/RTK Auto Negotiation  **1G Full Duplex:**  TCP: Sender:946Mbits/s Receiver:947Mbits/s  UDP: Sender:960Mbits/s Receiver:956Mbits/s  **100M Full Duplex:**  TCP: Sender: 96.4Mbits/s  Receiver: 95.1Mbits/s  UDP: Sender: 95.5Mbits/s  Receiver: 95.6Mbits/s  **100M Half Duplex:**  TCP: Sender: 90.7Mbits/s  Receiver: 89.7Mbits/s  UDP: Sender: 97.1Mbits/s  Receiver: 96.0Mbits/s  **10M Full Duplex:**  TCP Sender:10.1Mbits/s  Receiver: 9.49Mbits/s  UDP Sender:9.99Mbits/s  Receiver: 9.61Mbits/s  **10M Half Duplex:**  TCPSender: 9.69Mbits/s  Receiver: 8.95Mbits/s  UDPSender: 9.83Mbits/s  Receiver: 9.57Mbits/s | Shengli |
|  | [Stress] [Script] Iperf Bidirectional throughput test | PASS | TCP: Sender:858Mbits/s  Receiver:858Mbits/s | shengli |
|  | [Stress] [Script] Win7 OS | N/A |  |  |
|  | [Stress] [Script] Plug-In Test | N/A |  | N/A |
|  | [Manual] Wake On LAN | PASS | Intel Win11 | Shengli |
|  | [Stress][Script]Packet Loss Test | N/A |  | N/A |
|  | [Manual] L1ss & C8 Enter/ Percent | N/A |  | N/A |
|  | [Check] Digital Signature | PASS |  | fangwei |
|  | Production Tool Support | PASS |  | fangwei |
|  | WinDiag Tool Support | PASS |  | fangwei |
|  | Window Driver Display Information | PASS |  | fangwei |
|  | External loopback | PASS |  | fangwei |
|  |  |  |  |  |

# New Test Cases and Results

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **NO.** | **Case Description** | **Result** | **Comment** | **Owner** |
| 1. | verify fuxi link status when connet 2.5G switch (100m )  verify fuxi link status when connet 1G switch  (10m) | PASS |  |  |
| 2. |  |  |  |  |
| 3. |  |  |  |  |
| 4. |  |  |  |  |
| 5. |  |  |  |  |
| 6. |  |  |  |  |