

FIRST INTERNATIONAL COMPUTER FW37T PCI/CNR SYSTEM NETWORK TEST REPORT

Document Number:
Product Version: PCB 1.1
BIOS Version: IBE41

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1. Overview

1.1. System Feature

Project Name	FW37T
CPU	Intel Pentium III/Celeron (Tualatin)
Chipset	82810E + 82801BA
Memory	PC133 SDRAM x2
Video	82810E
LAN Controller	Realtek 8100L
IDE Controller	82801BA (Support UDMA100)
Slots	PCI x3, CNR

1.2. Test Configuration

CPU	Intel Pentium III 800MHz
Memory	Micron 128MB PC133 SDRAM
HDD	Seagate 8.4GB UDMA66
CDROM	HP 32X CDROM

2. LOM Basic Function Test

2.1. Diagnostic Test

- Test Tools: rset8139.exe

Test Item	Comment	Result
I/O Registers Test	Tests registers by sending commands to the LAN controller.	PASS
EEPROM Test	Reads the EEPROM contents and confirms that the checksum is correct.	PASS
Loopback Test	Tests the LAN controller's ability to send and receive packets by sending packets to itself. This test uses both the MAC loopback and the Transceiver loopback modes.	PASS

2.2. Transmit & Receive Capability Test

- Test Tools: rset8139.exe

Test Item	Comment	Result
Transmit	Checks the cable connection and the LAN controller's transmit functionality via 100M UTP cable.	PASS
Receive	Checks the cable connection and the LAN controller's receive functionality via 100M UTP cable.	PASS

3. Wake on LAN Test

- Test Tools: winacpi.exe

Driver Version: 5.397.0823

Sleep Mode	Wakeup Method	Result			
		Win 98 SE	Win ME	Win 2K Pro	Win XP Pro
S1 (POS)	Magic Packet	PASS	PASS	PASS	PASS
	ARP Packet	PASS	PASS	PASS	PASS
S3 (STR)	Magic Packet	PASS	PASS	PASS	PASS
	ARP Packet	PASS	PASS	PASS	PASS
S4 (STD)	Magic Packet		PASS	PASS	PASS



	ARP Packet		PASS	PASS	PASS
S5	Magic Packet	PASS	PASS	PASS	PASS

4. Remote Boot Test

Boot Order	Comment	Result
INT 18h	Boot the devices ordered in BIOS setup.	PASS
INT 19h	Always boot network first, then local devices.	PASS
BBS	Boot ordered by BBS BIOS, if BBS BIOS present.	PASS
Disable Boot ROM	Network boot disabled, boot local devices.	PASS

5. Stress Test

- Test OS: Novell Netware 5.0
- Test Tools: NWtest.exe
- Test Configuration:
 - ◆ LOM: Realtek 8100L
 - ◆ PCI1: Intel 82559 NIC
 - ◆ PCI2: 3Com 3C905C NIC
 - ◆ PCI3: 3Com 3C905C NIC
- Test Clients: 16
- Test Utility: Nwtest.exe

Test Item	Comment	Result
NWtest	Run NWtest over 12 hours	PASS

6. Network Adaptor Compatibility Test

Vende	Model	Interfa	Speed	Result				
				Win98SE	WinME	WinNT WS	Win2K Pro	WinXP Pro
Intel	82559	PCI	10/100Mbps	PASS	PASS	PASS	PASS	PASS
3Com	3C905C	PCI	10/100Mbps	PASS	PASS	PASS	PASS	PASS
Realtek	8139C	PCI	10/100Mbps	PASS	PASS	PASS	PASS	PASS
Accton	1207F	PCI	10/100Mbps	PASS	PASS	PASS	PASS	PASS
CATC	U-ETH-NMO1	USB1.1	10Mbps	PASS	PASS	N/A	PASS	PASS

7. Operation System Compatibility Test

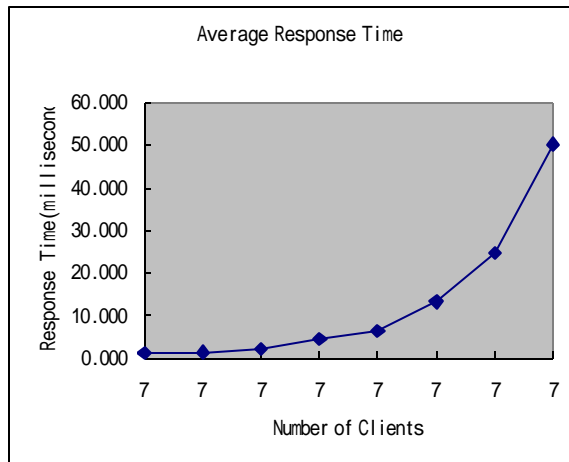
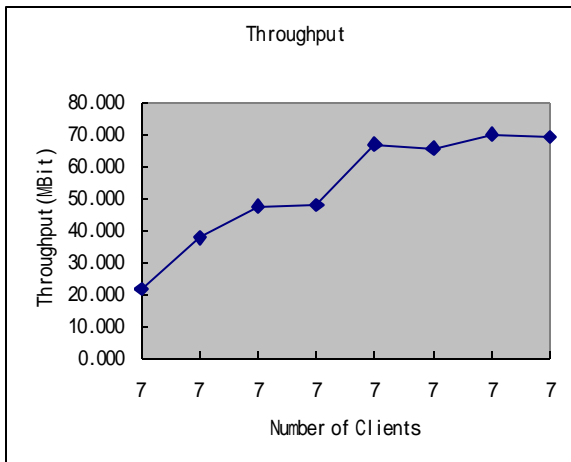
Test Item	Result				
	Win98SE	WinME	WinNT WS	Win2K Pro	WinXP Pro
Connect to Network Neighborhood	PASS	PASS	PASS	PASS	PASS
Logon File Server	PASS	PASS	PASS	PASS	PASS
Download files form File Server	PASS	PASS	PASS	PASS	PASS
Upload files to File Server	PASS	PASS	PASS	PASS	PASS
Browse Web Site	PASS	PASS	PASS	PASS	PASS
Send/Receive E-Mail	PASS	PASS	PASS	PASS	PASS
Print to Network Printer	PASS	PASS	PASS	PASS	PASS

8. Performance Test

- Test Utility: ZD NetBench 7.02
- Test Clients: 7

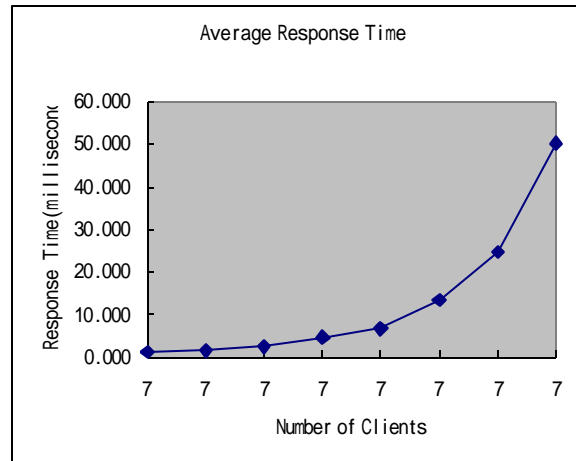
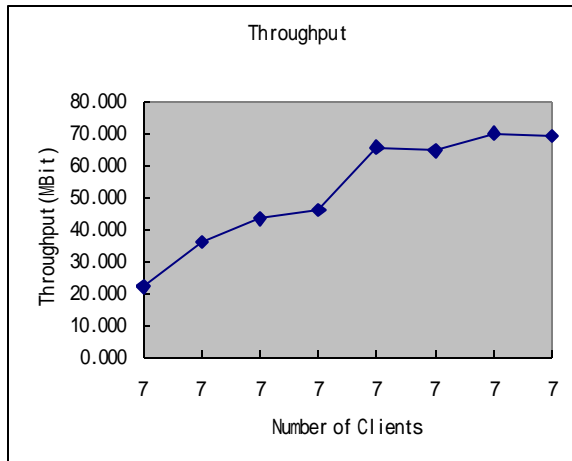
8.1. Microsoft Windows 98SE

Data Size	Result	
	Throughput	Average Response Time
512	21.778Mb	1.206ms
1K	37.710Mb	1.400ms
2K	47.564Mb	2.247ms
4K	48.308Mb	4.476ms
8K	67.139Mb	6.446ms
16K	65.909Mb	13.211ms
32K	70.350Mb	24.820ms
64K	69.259Mb	50.389ms



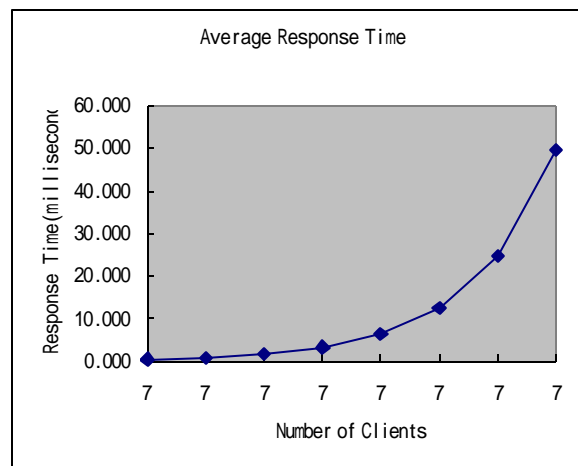
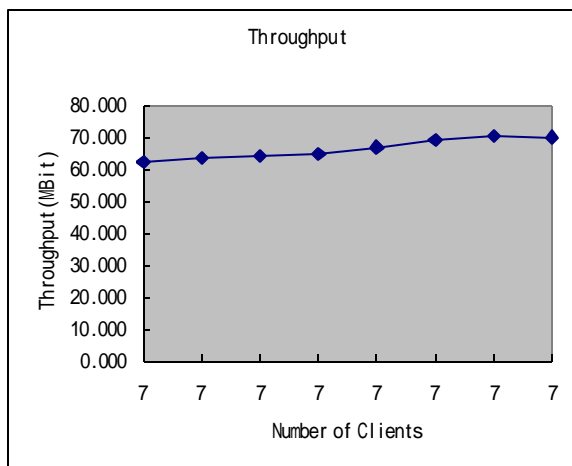
8.2. Microsoft Windows ME

Data Size	Result	
	Throughput	Average Response Time
512	22.095Mb	1.188ms
1K	35.969Mb	1.471ms
2K	43.401Mb	2.467ms
4K	46.205Mb	4.681ms
8K	65.885Mb	6.584ms
16K	64.666Mb	13.478ms
32K	70.385Mb	24.830ms
64K	69.320Mb	50.304ms



8.3. Microsoft Windows 2000 Professional with SP2

Data Size	Result	
	Throughput	Average Response Time
512	62.575Mb	0.410ms
1K	63.664Mb	0.827ms
2K	64.234Mb	1.663ms
4K	64.863Mb	3.322ms
8K	67.040Mb	6.474ms
16K	69.648Mb	12.513ms
32K	70.788Mb	24.727ms
64K	70.266Mb	49.605ms



8.4. Microsoft Windows XP Professional

Data Size	Result	
	Throughput	Average Response Time
512	62.694Mb	0.410ms
1K	63.865Mb	0.825ms
2K	62.592Mb	1.705ms
4K	64.675Mb	3.334ms
8K	61.849Mb	7.011ms



16K	69.002Mb	12.628ms
32K	68.925Mb	25.314ms
64K	70.939Mb	49.265ms

