

Release No: 08P010022

Product Model	FOX-80
Description	Multi-Purpose & Waterproof Panel PC with 8.4" TFT LCD
Test Configuration	<ul style="list-style-type: none"> <input checked="" type="checkbox"/>New product <input checked="" type="checkbox"/>System : TF-FOX- 80SIT-A1 <input checked="" type="checkbox"/>PCB : GENE-8310 Rev:1.12 <input checked="" type="checkbox"/>BIOS : FOX-80 BIOS Rev 1.0(11/06/2008) <input checked="" type="checkbox"/>Riser Card : N/A <input checked="" type="checkbox"/>Inverter : AU G084SN05 V3.HWA YOUN.QF82V4.90IS <input checked="" type="checkbox"/>Daughter Board : N/A <input checked="" type="checkbox"/>I/O Board : N/A <input checked="" type="checkbox"/>LCD : AU.Twinwill.EE010000300C0R.w/o Polarizer with R-Film <input checked="" type="checkbox"/>Touch Panel : (TF)L/R Touch Screen.8.48".4-Wire Analog Resistive.AMT.79507-09 <input checked="" type="checkbox"/>M/B Chipset : <input checked="" type="checkbox"/>North Bridge : Intel 852GM <input checked="" type="checkbox"/>South Bridge : Intel ICH4 <input checked="" type="checkbox"/>VGA Chipset : Intel 852GM integrated VGA <input checked="" type="checkbox"/>Audio Chipset : Fox-80 is no sound output <input checked="" type="checkbox"/>Ethernet Chipset : Intel 82562 10/100Mb <input checked="" type="checkbox"/>I/O Chipset : IT8712IX <input checked="" type="checkbox"/>TV Chipset : Fox-80 is no TV connector <p><input checked="" type="checkbox"/>Remark : FOX-80 QE NPDP P5 Report</p>
Test Result Summary	
<p><input type="checkbox"/> Fail</p> <p><input checked="" type="checkbox"/> Pass</p> <p><input type="checkbox"/> Pass with Deviation</p>	

2008/12/17

Issue date

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There are 3 test results in this document; they are described as follows:

Pass: Function worked perfectly

Fail: Function failed and must be modified in the next version

N/A: Outside of specification or no test equipment

Platform Information:

Item	Device Information	Test Item
System	TF-FOX- 80STT-A1	
PCB Model /Version	GENE-8310 Rev:1.12	
BIOS / Version	FOX-80 BIOS Rev 1.0(11/06/2008)	
CPU Type	Intel Celeron M processor 1.0GHz	
Memory Type	APACER 512MB.SO-DIMM.DDR400..76.9325G.113	
SATA	N/A	
Primary IDE Master	N/A	
Primary IDE Slave	N/A	
CRT	N/A	
LCD	TFT LCD.8.4".AU.Twinwill.EE010000300C0R.w/o Polarizer with R-Film	
Compact Flash	Compact Flash Card.2GB.	
Riser Card	N/A	
Inverter	N/A	
I/O Board	N/A	
Touch Panel	(TF)L/R Touch Screen.8.48".4-Wire Analog Resistive.AMT.79507-09	
Operating System	[<input type="checkbox"/>] Linux-RedHat 9.0 or [<input type="checkbox"/>] Fedora Core 4.0	N/A
	Windows Server 2003 English Version / Standard Edition 5.2.3790	N/A
	Windows Server 2003 English Version /Standard x64 Edition	N/A
	Windows XP Professional English Version V2003 Service Pack 3	1,2,3,4,5,6,7,8
	Windows XP Professional Simplified-Chinese Version V2002 Service Pack 2	N/A
	Windows XP Professional Japanese Version V2002 Service Pack 2	N/A
	Windows XP Professional English Version /Standard x64 Edition	N/A
	Windows 2000 Professional English Version V5.00.2195 Service Pack4	N/A
	Windows 2000 Professional Simplified-Chinese Version V5.00.2195 Service Pack4	N/A
	Windows 2000 Professional Japanese Version V5.00.2195 Service Pack4	N/A
	Windows Server 2000 English Version	N/A
	Windows 98SE English Version V4.10.2222A	N/A
	MS-DOS 6.22 English Version	N/A
Power Supply	ATX Power	N/A
	AT Power	N/A
	DC Power: SINPRO MPU100-108 9V~30V DC	1,3,4,5,6,7,8

Test Result for Certification

1. I/O Peripheral Function Test

I/O Peripheral Function Test –I/O Function	Result		
	Pass	Fail	N/A
Floppy Connector / Driver A:			X
Primary IDE Master			X
Primary IDE Slave			X
Secondary IDE Master			X
Secondary IDE Slave			X
Third IDE Master			X
Third IDE Slave			X
RAID 0 Function Test			X
RAID 1 Function Test			X
SATA1 / Serial ATA Connector 1			X
SATA2 / Serial ATA Connector 2			X
SATA3 / Serial ATA Connector 3			X
SATA4 / Serial ATA Connector 4			X
Compact Flash – Type I			X
Compact Flash – Type II			X
DOC (Disk On Chip)			X
DOM (Disk On Module) – 40 Pin			X
DOM (Disk On Module) – 44 Pin			X
COM 1-232	X		
COM 2-232	X		
COM 2-422	X		
COM 2-485	X		
COM 2-Ring /+5V /+12V			X
COM 3-232			X
COM 4-232			X
COM 5-232			X
COM 6-232			X
PS/2 Mouse & Keyboard (Internal)			X
PS/2 Mouse & Keyboard (External)			X
Audio Connector			X
Audio 5.1 Channel / S/P DIF			X
LPT 1			X
LPT 2			X
SIR / 115.2 Kbps			X
FIR / 4M bps			X

USB 1Ports	X		
USB 2 Ports	X		
USB 5/6 Ports			X
USB 2.0 1/2 Ports			X
USB 2.0 3/4 Ports			X
USB 2.0 5/6 Ports			X
DVI Function			X
DIO Connector			X
Card Bus			X
PC/104			X
PC/104-Plus			X
PCI-104			X
CD-In Connector			X
TFT TTL LCD			X
TFT LVDS LCD			X
TV-out / S Terminal			X
TV-out / AV Terminal			X
Touch Screen – 8 Wire			X
Touch Screen – 5 Wire			X
DIMM Slots	X		
Watchdog IRQ n			X
Watchdog Software Control	X		
CPU FAN Connector			X
System FAN Connector			X
Front Panel (FP1 + FP2)	Result		
	Pass	Fail	N/A
Power On Button	X		
IDE LED			X
External Buzzer			X
On Board Buzzer			X
Power LED			X
Reset Switch			X
Keyboard Lock			X
Jumpers Function	Result		
	Pass	Fail	N/A
ATX simulates AT			X
Audio Out Selection (W/O & W/ Amplifier)			X
LCD Power Select			X
COM1-Ring/5V/12V Selection			X
COM2-Ring/5V/12V Selection			X
COM2 RS-232/422/485 Selection (Depends on BIOS)			X
COM3-Ring/5V/12V Selection			X
COM4-Ring/5V/12V Selection			X
Clear CMOS			X
Touch Screen Operating Mode Selection			X
Clock Shift of TFT LCD			X

Power Connector & Function		Result		
		Pass	Fail	N/A
DC Power Connector		X		
ATX 24 Pin Power Connector				X
ATX Power Connector				X
ATX Power_12V Connector				X
AT Power Connector				X
Big 4P Power Connector				X
Mini 4P Power Connector				X
External Power Connector(-12/-5V)				X
Option ATX Power Connector (PS-ON / +5VSB)				X
LAN Connector & Function		Result		
		Pass	Fail	N/A
LAN Speed LED	LAN1			X
	LAN2			X
LAN Active LED	LAN1			X
	LAN2			X
LAN Link LED	LAN1			X
	LAN2			X
LAN 10/100 Ethernet		X		
LAN 1G Ethernet				X
PCI Connector & Function		Result		
		Pass	Fail	N/A
Mini PCI Slots				X
PCI Slots				X
PCI Express				X

2. Timer Accuracy Test

System Clock & RTC Clock Test				
Test Method	Margin for error	Result		
		Pass	Fail	N/A
RTC Clock in Power On Mode	±1 second during 24 hours	X		
RTC Clock in Power Off Mode	±1 second during 24 hours	X		
Watchdog Timer Test		Result		
		Pass	Fail	N/A
Time-out Interval	10 sec	X		
	60 sec	X		
	255 sec	X		

4. Network HUB / LAN Connection Test

Location		LED Type				Result		
						Pass	Fail	N/A
LAN1 LED		Active LED						X
		Link LED						X
		Speed LED						X
LAN2 LED		Active LED						X
		Link LED						X
		Speed LED						X
Location	Speed	HUB Type	Cable Length	HUB Speed	Onboard LAN Speed	Result		
						Pass	Fail	N/A
Onboard LAN1	10/100/1000 Mbps	HP J4095A 24 Ports	100M	100 MBps	100	X		
		D-Link DGS-1008T	100M	1GBps	1GBps			X
		SVEC FD916H (10 Mbps HUB)	100M	10 MBps	10	X		

5. Hardware Compatibility

CPU Compatible Test							
CPU Type		FSB	Prime95 Version		Result		
					Pass	Fail	N/A
Intel Celeron M processor 1.0GHz		X	V2414		X		
Memory Compatibility Test							
Memory Brand	Memory Chipset	Frequency	Size	MemTest86 Version	Result		
					Pass	Fail	N/A
Apacer	PC3200 DDR 266	266	1G	V1.70	X		
Audio Basic Function Test					Result		
					Pass	Fail	N/A
System Sound							X

CD_In					X	
CD_In Sound Recorder					X	
Play Sound Recorder					X	
Line Out					X	
Line In					X	
Line In Sound Record					X	
MIC Speaker	Dynamic				X	
	Condenser				X	
MIC Sound Recorder	Dynamic				X	
	Condenser				X	
Audio 5.1 Channel with S/P DIF Function Test			Result			
			Pass	Fail	N/A	
2-channel mode for stereo speaker output					X	
4-channel mode for 4 speaker output					X	
6-channel mode for 5.1 speaker output					X	
S/P DIF function Test	Input				X	
	Output				X	
On Board TV Function Test			Result			
			Pass	Fail	N/A	
NTSC	AV Terminal				X	
PAL					X	
NTSC	S Terminal				X	
PAL					X	
On Board LCD Function Test						
TFT LCD	Type	Voltage	Result			
			Pass	Fail	N/A	
LVDS	Sharp LQ12S1LG61 / 12"/800*600	3.3V	X			
	AUO G065VN01 V.0 / 6.5" / 640x480 / 18bit (4:3)	3.3V			X	
	AUO G065VN01 V.0 / 6.5" / 640x480 / 24bit (4:3)	3.3V			X	
	AU B104SN02 / 10.4" / 800*600 / 18bit (4:3)	3.3V			X	
	AU G150XG01 V.0 / 15" / 1024*768 / 18bit (4:3)	3.3V			X	
	AU M150XN07 V.2 / 15" / 1024x768 / 24bit (4:3)	3.3V			X	
	AU M170EG01 / 17" / 1280*1024 / 48bit (4:3)	5V			X	
	AU M170XW01 V.1 / 17" / 1280x768 / 24bit (16:9)	5V			X	
	AUO T260XW02 / 26" / 1366x768 / 24bit	5V			X	
	AU M201UN02 V.5 / 20.1" / 1600x1200x48bit	5V			X	
	AUO T370HW01 / 37" / 1920x1080 / 48bit	26V			X	
TTL	Toshiba LTM10C209A / 10.4" / 640*480 / 18bit (4:3)	5V			X	
	NEC NL8060AC31-12 / 12.1" / 800*600 / 18bit (4:3)	3.3/5V			X	
	Sharp LQ121S1DG11 / 12.1" / 800*600 / 18bit (4:3)	3.3V			X	
	LG LM151X2-C2TH / 15.1" / 1024x768 / 18bit (4:3)	3.3V			X	
	Fujitsu FLC38XGC6V-06 / 15" / 1024*768 / 36bit (4:3)	5V			X	
PCI Slot Function (PCI Adapter Card) Test						
Model		Type		Result		
				Pass	Fail	N/A

CHAINTECH NVIDIA GeForce4 MX440-8X	VGA Card			X
SC3000 CMI8738/C3DX	Sound Card			X
Takram DC-395U V1.02	SCSI Card			X
I-VIEW CP-1400AS (with Age STD-477FAI CCD)	Capture Card			X
Intel GD82559 10/100 Mbps Fast Ethernet Adapter	LAN Card			X
D-Link DWL-520+ Wireless LAN	LAN Card			X
ADAPTEC 1420SA RoHS 4-Port SATA II RAID	RAID Card			X
LEMEL MD V1456VQH-P2 PCI MODEM Card	Modem Card			X
D-Link DU-520 USB 2.0	USB Hub Card			X
Tekram TR-822 Serial ATA 150 [SA-001] + SATA HDD Seagate ST3120026AS 120GB	SATA Card			X
ISA Slot Function Test	Result			
	Pass	Fail	N/A	
Creative CT4170 Sound Blaster Sound Card				X
Adaptec AHA-1510/20/22B SCSI Card				X
PCI-Express Function Test				
Model	Result			
	Pass	Fail	N/A	
SUNIX SATA1414 VER 1.1 PCI-Express x1 SATA Card				X
SksKonnnect SK-9E21D 10/100/1000 Base-T Adapter PCI-Express x1 LAN Card				X
Adaptec AAR-1430SA SATAII HostRAID Controllers PCI-Express x4 RAID Card				X
ASUS EAX1600PRO/TD/256M/A (ATI Chipset) PCI-Express x16 VGA Card				X
WinFast PX6200 TC TDH PCI-Express x16 VGA Card				X
HDD Compatibility Test				
Model	Result			
	Pass	Fail	N/A	
FUJITSU MHV2040AC IDE 40G				X
CD/DVD-ROM Compatibility Test				
Model	Result			
	Pass	Fail	N/A	
LITE-ON LITEON DX-20A4PU (USB DVD-ROM)	X			
IDE Cable Function test				
IDE Model	Result			
	Pass	Fail	N/A	
40 Pin Cable ATA66				X
44 Pin Cable ATA33				X
80 Pin Cable ATA100				X
USB Function Test				
USB Basic Function Test	Result			
	Pass	Fail	N/A	
USB Controller	X			

USB 2.0 Controller	X			
USB Keyboard Support	X			
USB Mouse Support	X			
USB 1.1 Compatible Test	Result			
	Pass	Fail	N/A	
USB 1.1 Compatible Test	X			
USB 2.0 Compatible Test	Result			
	Pass	Fail	N/A	
USB 2.0 Compatible Test	X			
USB 2.0 Function Test	Result			
	Pass	Fail	N/A	
Install Windows XP Professional from HighSpeed Device: USB2.0 DRW-1604P-D/WHT/G/ASUS	X			
USB Device Test	Result			
Model	Pass	Fail	N/A	
USB HDD 20GB	X			
USB Card Reader			X	
USB Mouse	X			
USB Thumb drive Sandisk 1G	X			
Floppy Disk Controller Function Test	Result			
	Pass	Fail	N/A	
Copy and compare file between C: and A / B:			X	
Change Floppy to None value			X	
Swap FDD			X	
Peripheral Compatibility-Storage Device				
Model	Interface	Result		
		Pass	Fail	N/A
FUJITSU MCB3064SS	SCSI		X	
IOMega ZIP 100 parallel port	Parallel		X	
IOMega ZIP100MB Internal ATAPI Drive	IDE		X	
DOC			X	
Type-I CF	Fix / PIO Mode		X	
Type-I CF	Fix / UDMA Mode		X	
Digital I/O Connector Test	Result			
	Pass	Fail	N/A	
Input Address:			X	
Output Address:			X	
VCC: (5V)			X	
DIO-1 Function Test			X	
DIO-2 Function Test			X	
Adapter Compatibility- Industry Control Card PC/104, PC/104+, PCI-104 Modules				
Interface	Model	Type	Result	
			Pass	Fail

PC/104	AAEON PCM-5600	Modem Module			X
	AAEON PCM-3115B	PCMCIA Module			X
PC/104+	AAEON PCM-3430	SCSI Module			X
PCI-104	AAEON PCM-FA00	Mini-PCI Converter			X
	AAEON PCM-3794	SCSI Module			X
	AAEON PCM-3730	Intel 82559 LAN Module			X
On-Board RAID Function Test					
Model	Interface	Result			
		Pass	Fail	N/A	
Set SATA HDDs as RAID 0	SATA			X	
Set SATA HDDs as RAID 1	SATA			X	
Set SATA HDDs as RAID 10	SATA			X	
Set SATA HDDs as RAID 5	SATA			X	
Disk On Module [DOM] Compatibility Test					
Model	Interface	Result			
		Pass	Fail	N/A	
Transcend / TS512MDOM40V / 512MB	IDE 40 Pin			X	
Transcend / TS512MDOM44V / 512MB	IDE 44 Pin			X	
Mini PCI Card Compatibility Test					
Model (Use PCI-104 transform board: MBC-1TM Rev.A1.0)	Interface	Result			
		Pass	Fail	N/A	
GM-100 WLAN 11g Mini PCI Card (Model: Sky Thru GC-100)	LAN			X	
GM-101 WLAN 11b/g 54Mbps Mini PCI Card (Model: VNT6655AM)	LAN			X	
PER-C20S SATA RAID MiniPCI Card (Silicon Image Sil3512ECTU128 QF7227.1-1)	SATA			X	
COM/LPT Ports & RS-232/422/485 Function Test		Result			
		Pass	Fail	N/A	
RS-422 for COM2		X			
RS-485 for COM2		X			
COM1		X			
COM2		X			
LPT1				X	
LPT2				X	
Card Bus(PCMCIA) Compatibility Function Test					
Model	Result				
	Pass	Fail	N/A		
Intel PRO/Wireless 2011B LAN PC Card (WPC2011BWW)			X		
PQI 16MB Compact Flash Adapter (64MB PQI CF Card inserting)			X		
Kingston datapack DP-PCM2 / 2GB (PC Card TypeII HDD)			X		
PCi GW-NS54SG Cardbus Adapter Wireless LAN Type-II			X		

6. O.S. Compatibility Test

Installation Operation System Compatibility Test			Result		
			Pass	Fail	N/A
[] Linux-RedHat 9.0 or [] Fedora Core 4.0 [] Fedora Core 7.0					X
Windows Server 2003 English Version / Standard Edition 5.2.3790					X
Windows Server 2003 English Version /Standard x64 Edition					X
Windows XP Professional English Version V2002 Service Pack 3			X		
Windows XP Professional English Version /Standard x64 Edition					X
Windows 2000 Professional English Version V5.00.2195 Service Pack4					X
Windows Server 2000 English Version					X
Windows 98SE English Version V4.10.2222A					X
DOS 6.22 English Version					X
Utility and Driver Test					
OS	Drivers Version		Result		
			Pass	Fail	N/A
Linux-Red-Hat 9.0 / Kernel 2.4.20-8	Chipset Software	N/A			X
	Graphics Media	N/A			X
	LAN Driver	N/A			X
	Audio Driver	N/A			X
Windows Server 2003 English Version Standard Edition 5.2.3790	Chipset Software	N/A			X
	Graphics Media	N/A			X
	LAN Driver	N/A			X
	Audio Driver	N/A			X
Windows Server 2003 English Version Standard x64 Edition	Chipset Software	N/A			X
	Graphics Media	N/A			X
	LAN Driver	N/A			X
	Audio Driver	N/A			X
Windows XP Professional English Version V2002 Service Pack 2	Chipset Software	6.0.1.1002	X		
	Graphics Media	6.14.10.4020	X		
	LAN Driver	7.1.2.0	X		
	Audio Driver	5.10.0.5630	X		
Windows XP Professional x64 Edition English Version Service Pack 2 V2002	Chipset Software	N/A			X
	Graphics Media	N/A			X
	LAN Driver	N/A			X
	Audio Driver	N/A			X
Windows 2000 Professional English Version V5.00.2195 Service Pack 4	Chipset Software	N/A			X
	Graphics Media	N/A			X
	LAN Driver	N/A			X
	Audio Driver	N/A			X
Windows Server 2000 English Version	Chipset Software	N/A			X
	Graphics Media	N/A			X
	LAN Driver	N/A			X
	Audio Driver	N/A			X
Windows 98SE	Chipset Software	N/A			X

English Version V4.10.2222A	Graphics Media	N/A			X
	LAN Driver	N/A			X
	Audio Driver	N/A			X

7. BIOS Function Test

Test Item	Result		
	Pass	Fail	N/A
Memory Beep Test			X
Standard CMOS Setup Test	X		
Boot Sequence Test	X		
Power Management Test			
APM Power Management Test			X
ACPI Power Management Test	X		
Power On Function Test			X
Wake Up Event Test			X
Power On after Power Failure Test	X		
CMOS Backup / Clear CMOS Test	X		
TV Standard Function Test			X
Init Display First Function Test	X		
On-Chip Serial ATA Function Test			X
SATA Mode-IDE/RAID Function Test			X
PC Health Status			
Voltage Monitor Test	X		
FAN Speed Monitor Test			X
Temperature Monitor Test	X		
Swap Floppy Drive & Boot up Floppy Seek Function Test			X
USB Onboard Device Function Test	X		
COM Address / IRQ Test	X		
LPT Address / IRQ Test			X
BIOS AWDFLASH Program Test	X		

8. Performance Test

PCB Model / Version	TF-FOX- 80STT-A1
BIOS	FOX-80 BIOS Rev 1.0 (11/06/2008)
Operating System	Windows XP Professional SP3
CPU	Intel Celeron M processor 1.0GHz
Memory	APACER 512MB.SO-DIMM.DDR400..76.9325G.113
SATA HDD	N/A
Primary IDE Master	N/A
Primary IDE Slave	N/A
CRT	N/A
LCD	AU.Twinwill.EE010000300C0R.w/o Polarizer with R-Film
Compact Flash	Compact Flash Card.2GB.
Backplane	N/A
Riser Card	N/A
Chipset Software	Intel Chipset software Installation Utility--6.0.1.1002--2004/03/07
Graphics Media	Intel 82852/82855 GM/GME Graphics controller--6.14.10.4020--2005/01/23
LAN Driver	Intel PRO10/100 VE Network connection--7.1.2.0--2004/02/10
Audio Driver	Realtek AC'97 Semiconductor Corp--5.10.0.5630--2004/07/01
Touchscreen Driver	Touchscreen Controller—4.3.7.3203—2006/08/03
Power Supply	SINPRO MPU100-108 9V~30V DC

Test result:

Final Reality V1.01—BenchMark Test (Reality Marks)		
2D Image	20.15	
3D	6.32	
Bus transfer	25.23	
Overall	13.30	Reality marks
3Dmark2001SE Pro (Demo version)		
3DMark2001SE Build 330_Benchmark mode	1311	
PCMark2002		
CPU	5015	
Memory	3657	
HDD	594	
PCMark05		
PCMark	N/A	

CPU	2363	
Memory	1705	
Graphics	N/A	
HDD	2292	