

CROSSHAIR VI HERO Compatibility Test Report Rev.1.0

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Product	CROSSHAIR VI HERO mainboard Rev. 1.03B AMI UEFI BIOS Ver. 0601
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Specification Information

1. Main Features

Specifications Summary		
The following items describe the spec, function and feature of the motherboard; include the special attributes of the motherboard and the new technology it supports.		
Function Name	Content information	Remark/Special Setting
CPU	AMD platform:AM4 (1331pins) AMD CPU Support Type:Bristol/Summit/Raven Ridge AMD processor feature:4 cores/8 cores	
Chipset	AMD: X370	
BCLK	100 MHz	
Memory	288-pin un-buffered x4 ECC DDR4 2133/2200/2400/2600/2667MHz (Up to 64GB)	
AMD X370 Storage	SATA 6G * 8 M.2 PCIE/SATA * 1 RAID 0, RAID 1, RAID 10, RAID Ready, AHCI support	M.2: SATA Mode:(Bristol Ridge)
Audio	Realtek ALC1220 8-channel (Azalia Audio) Codec, Optical	
LAN	Intel I211AT Gigabit LAN * 1	
USB 2.0	USB 2.0 * 2 ports Mid-board USB 2.0 * 4 ports Back-panel	2* USB2.0 mid-board via ROG_EXT
USB 3.0	USB 3.0 * 8 ports Back-panel USB 3.0 * 2 ports Mid-board	
USB 3.1	ASM1143 USB3.1 (2 ports) Back-panel USB 3.1 * 1 port Mid-board	
Expansion Slots	1 * PCI-Ex16 and 1* PCI-Ex8 with AMD CrossFire at x8 ,x8 speed 1 * PCI-Ex16 and 1* PCI-Ex8 with nVIDIA SLI at x8, x8 speed 1 * PCI-Ex4, 3 * PCI-Ex1	Bristol Ridge: 2 Way CrossFire (X8/X4)
BIOS Features	16 MB Flash ROM, AMI BIOS	
Power Requirement	ATX power supply(with 24-pin and 8 pin 12V plugs)	
Form Factor	ATX form factor: 12 in x 9.6 in, 6 Layers	
ASUS Features	Chassis FAN Q-FAN, Q-Connector, Q-Shield, Q-LED, UEFI BIOS, Water PUMP+ FAN, Water_Flow, W_IN, W_OUT. AI Charger, DIP5 (Fan Xpert4, DIGI+ VRM, TPU, EPU, PC Cleaner, Turo App), AI Suite 3, AURA, USB BIOS Flashback, KeybotII, Sonic Studio III, Sonic Radar III, RAMCache II	

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PART A. SPECIFICATION TEST

1. System Specific Test

CPU & DIMM Usage List			
Try several CPU + DIMM settings and check frequency.			
AMD CPU		O.S. Environment	Status
BLK 100 vs DIMM 3466(OC)		BIOS	Pass Refer to Part D
		Win10-64 Pro. RS1	Pass Refer to Part D
BLK 100 vs DIMM 3300(OC)		BIOS	Pass Refer to Part D
		Win10-64 Pro. RS1	Pass Refer to Part D
BLK 100 vs DIMM 3200(OC)		BIOS	Pass Refer to Part D
		Win10-64 Pro. RS1	Pass Refer to Part D
BLK 100 vs DIMM 3000(OC)		BIOS	Pass Refer to Part D
		Win10-64 Pro. RS1	Pass Refer to Part D
BLK 100 vs DIMM 2933(OC)		BIOS	Pass Refer to Part D
		Win10-64 Pro. RS1	Pass Refer to Part D
BLK 100 vs DIMM 2800(OC)		BIOS	Pass Refer to Part D
		Win10-64 Pro. RS1	Pass Refer to Part D
BLK 100 vs DIMM 2666		BIOS	Pass
BLK 100 vs DIMM 2400		Win10-64 Pro. RS1	Pass
BLK 100 vs DIMM 2133		BIOS	Pass
		Win10-64 Pro. RS1	Pass
Memory Usage List			
Check memory information if using follow setting in all slots.			
DIMM_A1		BIOS	Pass
		Win10-64 Pro. RS1	Pass
DIMM_B1		BIOS	Pass
		Win10-64 Pro. RS1	Pass
DIMM_A1 and _B1		BIOS	Pass
		Win10-64 Pro. RS1	Pass
DIMM_A2 and _B2		BIOS	Pass
		Win10-64 Pro. RS1	Pass
Add-on Accessories			
Confirm all Accessories should not have mechanical conflict When PCIe16 PCIe1 long card is used.			
SATA	Stock Number	O.S. Environment	Status
SATA 6G Cable 50cm 2 in 1	14013-00022500	Win10-64 Pro. RS1	Pass
	14013-00021800	Win10-64 Pro. RS1	Pass
	14013-00021400	Win10-64 Pro. RS1	Pass
SATA 6G CABLE 7P G/F 500 2 in 1	14013-00023300	Win10-64 Pro. RS1	Pass
	14013-00024100	Win10-64 Pro. RS1	Pass
	14013-00025000	Win10-64 Pro. RS1	Pass

Add-on Accessories			
Confirm all Accessories should not have mechanical conflict When PCIe16 PCIe1 long card is used.			
I/O Shield	Stock Number	O.S. Environment	Status
IO: PS2/USB2.0*2/USB3.0*4/USB3.1(type A/type C)/Optical SPDIF/LAN/8-CH Audio (5 holes)/HDMI/DP/Wifi	13020-02972200	N/A	Pass
Others	Stock Number	O.S. Environment	Status
M.2 SCREW+SCREW HEX 2IN1 HM	13020-01810500 13020-01810600	N/A N/A	Pass Pass
ROG Q Connector	12005-00290100	N/A	Pass
ROG Cable	14011-01450300	Win10-64 Pro. RS1	Pass
2M HB SLI BRIDGE	60MC04R0-MC0A01	Win10-64 Pro. RS1	Pass
BIOS Flash ROM			
Flash the BIOS in different vender ROM.			
SPI		O.S. Environment	Status
WINBOND		MS-DOS V6.22	Pass
MXIC		MS-DOS V6.22	Pass
Back Panel Interface			
Check the back panel interface function should work normally under Windows 10.			
Name		O.S. Environment	Status
FLBK_CL_CMOS		Win10-64 Pro. RS1	Pass
USB3_1~4		Win10-64 Pro. RS1	Pass
USB2_11~14		Win10-64 Pro. RS1	Pass
USB3_5~8		Win10-64 Pro. RS1	Pass
LAN_USB3.1_EA3		Win10-64 Pro. RS1	Pass
USB3.1_EC2		Win10-64 Pro. RS1	Pass
AUDIO		Win10-64 Pro. RS1	Pass
Front Panel Interface			
Check the front panel interface function should work normally under Windows 10.			
Panel/F_Panel		O.S. Environment	Status
Power Button		BIOS POST	Pass
Restart Button		BIOS POST	Pass
Power LED		BIOS POST	Pass
HDD LED		BIOS POST	Pass
On-board Connectors			
Check the onboard connectors function should work normally under Windows 10.			
Name		O.S. Environment	Status
SOCKET1331		Win10-64 Pro. RS1	Pass
AAFP		Win10-64 Pro. RS1	Pass
BATTERY		Win10-64 Pro. RS1	Pass
F_PANEL		Win10-64 Pro. RS1	Pass
RGB_LED_STRIP		Win10-64 Pro. RS1	Pass
PCIEX16/X8_1, PCIEX8_2, PCIEX4_3		Win10-64 Pro. RS1	Pass
PCIEX1_1~3		Win10-64 Pro. RS1	Pass
DIMM_A1/A2, DIMM_B1/B2		Win10-64 Pro. RS1	Pass
SATA6G_1~8		Win10-64 Pro. RS1	Pass
EATXPWR		Win10-64 Pro. RS1	Pass
EATX12V_1, EATX12V_2		Win10-64 Pro. RS1	Pass
USB3_910		Win10-64 Pro. RS1	Pass
USB_1516		Win10-64 Pro. RS1	Pass
USB3.1_E1		Win10-64 Pro. RS1	Pass
CPU_FAN, CPU_OPT		Win10-64 Pro. RS1	Pass
W_PUMP+, AIO_PUMP		Win10-64 Pro. RS1	Pass
CHA_FAN1~3		Win10-64 Pro. RS1	Pass
W_FLOW, W_IN, W_OUT		Win10-64 Pro. RS1	Pass
T_SENOSR1		Win10-64 Pro. RS1	Pass
SPEAKER		Win10-64 Pro. RS1	Pass
M.2(SOCKET3)		Win10-64 Pro. RS1	Pass
M.2(WIFI)		Win10-64 Pro. RS1	Pass
On-board Jumpers			
Check the on-board jumpers function should work normally under Windows 10.			
Name		O.S. Environment	Status
LN2_MODE		BIOS Setup	Pass

On-board LED		
Check the on-board LED function should work normally under Windows 10.		
Name	O.S. Environment	Status
CPU_LED	BIOS POST	Pass
VGA_LED	BIOS POST	Pass
DRAM_LED	BIOS POST	Pass
BOOT_LED	BIOS POST	Pass
Q-Code	BIOS POST	Pass
PCH_LED	BIOS POST	Pass
CPU_Ready_LED	BIOS POST	Pass
PLUG_8PIN_PWR	BIOS POST	Pass
HD_LED	BIOS POST	Pass
	Win10-64 Pro. RS1	Pass
On-board Header		
Check the on-board header function should work normally under Windows 10.		
Name	O.S. Environment	Status
TPM Header	Win10-64 Pro. RS1	Pass
RGB_Header 1 , RGB_Header 2	BIOS POST	Pass
	Win10-64 Pro. RS1	Pass
On-board Button		
Check the on-board button function should work normally under Windows 10		
Name	O.S. Environment	Status
SW_POWER	BIOS POST	Pass
	Win10-64 Pro. RS1	Pass
CLR_CMOS	BIOS POST	Pass
	Win10-64 Pro. RS1	Pass
Flashback	BIOS POST	Pass
	Win10-64 Pro. RS1	Pass
SW_RESET	BIOS POST	Pass
	Win10-64 Pro. RS1	Pass
RETRY_BUTTON	BIOS POST	Pass
	Win10-64 Pro. RS1	Pass
SAFE_BOOT	BIOS POST	Pass
	Win10-64 Pro. RS1	Pass
On-board Switch		
Check the on-board button function should work normally under Windows 10		
Name	O.S. Environment	Status
SLOW_MODE	BIOS POST	Pass
	Win10-64 Pro. RS1	Refer to PART D
	Win10-64 Pro. RS1	Pass
Mechanical conflict		
Test the compatibility of packed into the case.		
I/O Shield	O.S. Environment	Status
I/O Shield	N/A	Pass
Mechanical	O.S. Environment	Status
CPU Cooler	N/A	Pass
PCIEX16	N/A	Pass
PCIEX1	N/A	Pass
SATA connector	N/A	Pass
On-board Connectors (USB, FAN, AAFP)	N/A	Pass
PCB and PES		
Check all the printed words are based on the ASUS Naming Rule and all PES items.		
PCB	O.S. Environment	Status
Corners	N/A	Pass
Logo	N/A	Pass
Painted name	N/A	Pass
PES	O.S. Environment	Status
All items	N/A	Pass
Option items	N/A	Pass
Code name	N/A	Pass
Chassis fitting		
Test the compatibility of packed into the case.		
Chassis fitting	O.S. Environment	Status
Chassis fitting	N/A	Pass

2. System BIOS Test for EFI

ASUS EZ Mode		
ASUS EZ-Mode System Information	O.S. Environment	Status
<i>Information</i>	BIOS setup	Pass
<i>CPU Temperature</i>	BIOS setup	Pass
<i>CPU Core Voltage</i>	BIOS setup	Pass
<i>Motherboard Temperature</i>	BIOS setup	Pass
<i>DRAM Status</i>	BIOS setup	Pass
<i>SATA Information</i>	BIOS setup	Pass
<i>FAN Profile</i>	BIOS setup	Pass
<i>CPU FAN</i>	BIOS setup	Pass
<i>EZ System Tuning</i>	BIOS setup	Pass
<i>Boot Priority</i>	BIOS setup	Pass
<i>System Date/Time</i>	BIOS setup	Pass
ASUS EZ-Mode Information	O.S. Environment	Status
<i>Model Name</i>	BIOS setup	Pass
<i>BIOS Version</i>	BIOS setup	Pass
<i>CPU Type/Speed</i>	BIOS setup	Pass
<i>Total Memory</i>	BIOS setup	Pass
ASUS EZ-Mode System Language	O.S. Environment	Status
<i>English</i>	BIOS setup	Pass
<i>France</i>	BIOS setup	Pass
<i>German</i>	BIOS setup	Pass
<i>Japanese</i>	BIOS setup	Pass
<i>Chinese (GB)</i>	BIOS setup	Pass
<i>Chinese (BIG5)</i>	BIOS setup	Pass
<i>Russian</i>	BIOS setup	Pass
<i>Spanish</i>	BIOS setup	Pass
<i>Korean</i>	BIOS setup	Pass
ASUS EZ-Mode EZ System Tuning	O.S. Environment	Status
<i>Power Saving Mode</i>	BIOS setup	Pass Refer to PART D
<i>Normal Mode</i>	BIOS setup	Pass
<i>ASUS Optimal Mode</i>	BIOS setup	Pass
ASUS EZ Tuning Wizard	O.S. Environment	Status
<i>OC Wizard</i>	BIOS setup	Pass
ASUS EZ-Mode Manual FAN Tuning	O.S. Environment	Status
<i>CPU FAN</i>	BIOS setup	Pass
<i>CHA1~3 FAN</i>	BIOS setup	Pass
<i>AIO PUMP</i>	BIOS setup	Pass
<i>W_PUMP+</i>	BIOS setup	Pass
<i>CPU_OPT</i>	BIOS setup	Pass
<i>W_FLOW</i>	BIOS setup	Pass
<i>Silent Mode</i>	BIOS setup	Pass
<i>Standard Mode</i>	BIOS setup	Pass
<i>Turbo Mode</i>	BIOS setup	Pass
<i>Full Speed Mode</i>	BIOS setup	Pass
<i>Manual Mode</i>	BIOS setup	Pass
<i>PWM Mode</i>	BIOS setup	Pass
<i>DC Mode</i>	BIOS setup	Pass
<i>FAN off</i>	BIOS setup	Pass
ASUS EZ-Mode Boot Priority	O.S. Environment	Status
<i>1st Boot Device</i>	BIOS setup	Pass
<i>2nd Boot Device</i>	BIOS setup	Pass
<i>3rd Boot Device</i>	BIOS setup	Pass
<i>4th Boot Device</i>	BIOS setup	Pass
<i>5th Boot Device</i>	BIOS setup	Pass
<i>Other Boot Device</i>	BIOS setup	Pass
ASUS EZ-Mode Hot-key	O.S. Environment	Status
<i>Default (F5)</i>	BIOS setup	Pass
<i>Advanced Mode (F7)</i>	BIOS setup	Pass
<i>Boot Menu (F8)</i>	BIOS setup	Pass
<i>Save & Exit (F10)</i>	BIOS setup	Pass
<i>EZ Tuning Wizard (F11)</i>	BIOS setup	Pass

Main		
Test all items of the main section with USB Keyboard and Mouse in BIOS setup utility.		
BIOS Information	O.S. Environment	Status
BIOS Vendor	BIOS setup	Pass
BIOS Version	BIOS setup	Pass
Build Date	BIOS setup	Pass
EC1 Version	BIOS setup	Pass
EC2 Version	BIOS setup	Pass
LED EC Version	BIOS setup	Pass
Keybot Version	BIOS setup	Pass
Processor Information	O.S. Environment	Status
Brand String	BIOS setup	Pass
Speed	BIOS setup	Pass
Total Memory	BIOS setup	Pass
Memory Frequency	BIOS setup	Pass
System Language	O.S. Environment	Status
English	BIOS setup	Pass
France	BIOS setup	Pass
German	BIOS setup	Pass
Japanese	BIOS setup	Pass
Chinese (GB)	BIOS setup	Pass
Chinese (BIG5)	BIOS setup	Pass
Russian	BIOS setup	Pass
Spanish	BIOS setup	Pass
Korean	BIOS setup	Pass
System Time/Date	O.S. Environment	Status
System Time	BIOS setup	Pass
System Date	BIOS setup	Pass
Security	O.S. Environment	Status
Administrator Password	BIOS setup	Pass
Clear Administrator Password	BIOS setup	Pass
User Password	BIOS setup	Pass
Change User Password	BIOS setup	Pass
Password Check	BIOS setup	Pass
Extreme Tweaker		
Test all items of the advanced section with USB Keyboard and Mouse in BIOS setup utility.		
Extreme Tweaker Configuration	O.S. Environment	Status
Targer CPU & DRAM Speed information	BIOS setup	Pass
Overclocking Presets	BIOS setup	Pass
Ai Overclock Tuner	BIOS setup	Pass Refer to PART D
Custom CPU Core Ratio	BIOS setup	Pass
CPU Core Ratio	BIOS setup	Pass Refer to PART D
Performance Bias	BIOS setup	Pass Refer to PART D
Memory Frequency	BIOS setup	Pass
Core Performance Boost	BIOS setup	Pass Refer to PART D
TPU	BIOS setup	Pass
EPU Power Saving Mode	BIOS setup	Pass
SMT mode	BIOS setup	Pass
DRAM Timing Control	BIOS setup	Pass
External Digi+ Power Control	BIOS setup	Pass
Tweaker's Paradise	BIOS setup	Pass
Voltage Check	BIOS setup	Pass
Overclocking Presets	O.S. Environment	Status
Load Gamer's OC Profile	BIOS setup	Pass
Load 4G OC Profile	BIOS setup	Pass Refer to PART D
Load 141 BCLK OC Profile	BIOS setup	Pass
Load 3600MHz DRAM OC Profile	BIOS setup	Pass

Extreme Tweaker			
Test all items of the advanced section with USB Keyboard and Mouse in BIOS setup utility.			
Overclocking Presets		O.S. Environment	Status
Load Moderate Extreme OC Profile		BIOS setup	Pass Refer to PART D
Load Aggressive Extreme OC Profile		BIOS setup	Pass Refer to PART D
DRAM Timing Control		O.S. Environment	Status
DRAM Timing Control After Training		BIOS Setup	Pass
DRAM CAS# Latency		BIOS Setup	Pass
DRAM RAS# to CAS# Read Delay		BIOS Setup	Pass
DRAM RAS# to CAS# Write Delay		BIOS Setup	Pass
DRAM RAS# PRE Time		BIOS Setup	Pass
DRAM RAS# ACT Time		BIOS Setup	Pass
Voltage Check		O.S. Environment	Status
CPU Core Voltage		BIOS Setup	Pass
CPU SOC Voltage		BIOS Setup	Pass
DRAM Voltage		BIOS Setup	Pass
1.8V PLL Voltage		BIOS Setup	Pass
1.05V SB Voltage		BIOS Setup	Pass
Digi+ Power Control			
Change different settings then boot into OS, it should match Digi+ Power Control AP in Ai-Suite3.			
Digi+ Power Control	Test item	O.S. Environment	Status
CPU Load-line Calibration	Auto, Level 1~5	BIOS Setup Win10-64 Pro. RS1	Pass
CPU Current Capability	Auto, 100%, 110%, 120%, 130%, 140%	BIOS Setup Win10-64 Pro. RS1	Pass
CPU VRM Switching Frequency	Auto, Manual	BIOS Setup Win10-64 Pro. RS1	Pass
VRM Spread Spectrum	Auto, Enable, Disable	BIOS Setup Win10-64 Pro. RS1	Pass
CPU Power Duty Control	T.Probe, Extreme	BIOS Setup Win10-64 Pro. RS1	Pass
CPU Power Phase control	Auto, Standard, Optimized, Extreme, Power Phase Response	BIOS Setup Win10-64 Pro. RS1	Pass
VDDSOC Load-line Calibration	Auto, Level 1~5	BIOS Setup Win10-64 Pro. RS1	Pass
VDDSOC Current Capability	Auto, 100%, 110%, 120%, 130%, 140%	BIOS Setup Win10-64 Pro. RS1	Pass
VDDSOC Switching Frequency	Auto, Manual	BIOS Setup Win10-64 Pro. RS1	Pass
VDDSOC Phase control	Auto, Standard, Optimized, Extreme, Power Phase Response	BIOS Setup Win10-64 Pro. RS1	Pass
DRAM Current Capability	100% ,110% ,120% ,130%	BIOS Setup Win10-64 Pro. RS1	Pass
DRAM Power Phase Control	Extreme, Optimized	BIOS Setup Win10-64 Pro. RS1	Pass
DRAM Switching Frequency	Auto, Manual	BIOS Setup Win10-64 Pro. RS1	Pass
CPU Power Thermal Control		BIOS Setup	Pass
DRAM VBoot Voltage		BIOS Setup	Pass
Advanced			
Test all items of the advanced section with USB Keyboard and Mouse in BIOS setup utility.			
CPU Configuration		O.S. Environment	Status
PSS Support		BIOS Setup Win10-64 Pro. RS1	Pass
NX mode		BIOS Setup Win10-64 Pro. RS1	Pass
SVM mode		BIOS Setup Win10-64 Pro. RS1	Pass
CPB mode		BIOS Setup Win10-64 Pro. RS1	Pass
C6 mode		BIOS Setup Win10-64 Pro. RS1	Pass
IOMMU		BIOS Setup	Pass
Bank interleaving		BIOS Setup Win10-64 Pro. RS1	Pass

Advanced			
Test all items of the advanced section with USB Keyboard and Mouse in BIOS setup utility.			
CPU Configuration		O.S. Environment	Status
<i>Channel interleaving</i>		BIOS Setup Win10-64 Pro. RS1	Pass
ROG Effects		O.S. Environment	Status
<i>On-board LED</i>		BIOS Setup Win10-64 Pro. RS1	Pass
SATA Configuration		O.S. Environment	Status
<i>Hyper kit1 Mode</i>		BIOS Setup Win10-64 Pro. RS1	Pass
<i>SATA Port Enable</i>		BIOS Setup Win10-64 Pro. RS1	Pass
<i>SATA Mode</i>		BIOS Setup Win10-64 Pro. RS1	Pass
<i>SMART Self Test</i>		BIOS Setup	Pass
<i>Information Check</i>		BIOS Setup Win10-64 Pro. RS1	Pass
On-board Devices Configuration		O.S. Environment	Status
<i>HD Audio Controller</i>		BIOS Setup Win10-64 Pro. RS1	Pass
<i>PCIEX4_3 Bandwidth</i>		BIOS Setup Win10-64 Pro. RS1	Pass
<i>PCIEX16_1 Mode</i>		BIOS Setup Win10-64 Pro. RS1	Pass
<i>PCIEX8_2 Mode</i>		BIOS Setup Win10-64 Pro. RS1	Pass
<i>PCIEX4_3 Mode</i>		BIOS Setup Win10-64 Pro. RS1	Pass
<i>M.2 Link Mode</i>		BIOS Setup Win10-64 Pro. RS1	Pass
<i>SB Link Mode</i>		BIOS Setup Win10-64 Pro. RS1	Pass
<i>ASMedia USB3.1 Controller</i>		BIOS Setup Win10-64 Pro. RS1	Pass
<i>RGB LED lighting</i>		BIOS Setup Win10-64 Pro. RS1	Pass
<i>In sleep, hibernate and soft states</i>		BIOS Setup Win10-64 Pro. RS1	Pass
<i>Intel LAN Controller</i>		BIOS Setup Win10-64 Pro. RS1	Pass
<i>Intel LAN PXE Option ROM</i>		BIOS Setup Win10-64 Pro. RS1	Pass
<i>USB Type C Power Switch for USB3.1_E1</i>		BIOS Setup Win10-64 Pro. RS1	Pass
<i>USB Type C Power Switch for USB3.1_EC2</i>		BIOS Setup Win10-64 Pro. RS1	Pass
APM Configuration		O.S. Environment	Status
<i>ErP Ready</i>		BIOS Setup	Pass
<i>Restore on AC Power Loss</i>		BIOS Setup	Pass
<i>Power On By PCI-E/PCI</i>		BIOS Setup	Pass
<i>Power On By RTC</i>		BIOS Setup	Pass
Network Stack Configuration		O.S. Environment	Status
<i>Network Stack</i>		BIOS Setup	Pass
NVMe Configuration		O.S. Environment	Status
<i>NVMe Configuration</i>		BIOS Setup	Pass
HDD/SSD SMART Information		O.S. Environment	Status
<i>HDD/SSD SMART Information</i>		BIOS Setup	Pass
USB Configuration		O.S. Environment	Status
<i>Legacy USB Support</i>		BIOS Setup Win10-64 Pro. RS1	Pass
<i>XHCI Hand-off</i>		BIOS Setup Win10-64 Pro. RS1	Pass
<i>USB Mass Storage Driver Support</i>		BIOS Setup Win10-64 Pro. RS1	Pass
<i>USB Single Port Control</i>		BIOS Setup Win10-64 Pro. RS1	Pass
AMD CBS		O.S. Environment	Status
<i>AMD CBS</i>		BIOS Setup Win10-64 Pro. RS1	Pass Refer to PART D

Advanced		
Test all items of the advanced section with USB Keyboard and Mouse in BIOS setup utility.		
TPM Device Selection	O.S. Environment	Status
TPM Device Selection	BIOS Setup Win10-64 Pro. RS1	Pass
Monitor		
Test all items of the power section with USB Keyboard and Mouse in BIOS setup utility.		
Hardware Monitor	O.S. Environment	Status
CPU Temperature	BIOS Setup	Pass
MotherBoard Temperature	BIOS Setup	Pass
PCH Temperature	BIOS Setup	Pass
VRM Temperature	BIOS Setup	Pass
T_Sensor1 Temperature	BIOS Setup	Pass
CPU Fan Speed	BIOS Setup	Pass
Chassis Fan 1~3 Speed	BIOS Setup	Pass
W_PUMP+ Speed	BIOS Setup	Pass
CPU Optional Fan Speed	BIOS Setup	Pass
AIO PUMP Speed	BIOS Setup	Pass
WATER_FLOW Speed	BIOS Setup	Pass
WATER_IN Temperature	BIOS Setup	Pass
WATER_OUT Temperature	BIOS Setup	Pass
CPU Core Voltage	BIOS Setup	Pass
3.3V Voltage	BIOS Setup	Pass
5V Voltage	BIOS Setup	Pass
12V Voltage	BIOS Setup	Pass
Q-FAN Configuration	BIOS Setup	Pass
Q-Fan Configuration	O.S. Environment	Status
Qfan Tuning	BIOS Setup	Pass
CPU Q-Fan Control	BIOS Setup	Pass
CPU Fan Smoothing Up/ Down Time	BIOS Setup	Pass
CPU Fan Speed Lower Limit	BIOS Setup	Pass
CPU Fan Profile	BIOS Setup	Pass
Chassis Fan(s) Configuration	BIOS Setup	Pass
AIO_PUMP/W_PUMP+ Control	BIOS Setup	Pass
Chassis FAN 1~3 Q-FAN Control	BIOS Setup	Pass
Chassis FAN 1~3 Q-FAN Source	BIOS Setup	Pass
Chassis FAN 1~3 Smoothing Up/ Down Time	BIOS Setup	Pass
Chassis FAN 1~3 Speed Lower Limit	BIOS Setup	Pass
Chassis FAN 1~3 Profile	BIOS Setup	Pass
Boot		
Test all items of the boot section with USB Keyboard and Mouse in BIOS setup utility.		
Fast boot	O.S. Environment	Status
Fast Boot	BIOS Setup BIOS POST	Pass
Next Boot after AC Power Loss	BIOS Setup BIOS POST	Pass
Boot Settings Configuration	O.S. Environment	Status
Boot Logo Display	BIOS Setup BIOS POST	Pass
POST Delay Time	BIOS Setup BIOS POST	Pass
Boot up NumLock State	BIOS Setup BIOS POST	Pass
Wait For 'F1' If Error	BIOS Setup BIOS POST	Pass
Option ROM Message	BIOS Setup BIOS POST	Pass
Interrupt 19 Capture	BIOS Setup BIOS POST	Pass
Setup Mode	BIOS Setup BIOS POST	Pass
CSM (Compatibility Support Module)	BIOS Setup BIOS POST	Pass
Secure Boot	BIOS Setup BIOS POST	Pass

Boot			
Test all items of the boot section with USB Keyboard and Mouse in BIOS setup utility.			
Compatibility Support Module Configuration		O.S. Environment	Status
Launch CSM		Win10-64 Pro. RS1	Pass
Boot Device control		Win10-64 Pro. RS1	Pass
Boot from Network Devices		Win10-64 Pro. RS1	Pass
Boot from Storage Devices		Win10-64 Pro. RS1	Pass
Boot from PCI-E/PCI Expansion Devices		Win10-64 Pro. RS1	Pass
Security Boot Parameters		O.S. Environment	Status
OS Type		BIOS Setup	Pass
Key management		BIOS Setup	Pass
Boot Option Priorities		O.S. Environment	Status
1 st Boot Device		BIOS Setup BIOS POST	Pass
2 nd Boot Device		BIOS Setup BIOS POST	Pass
3 rd Boot Device		BIOS Setup BIOS POST	Pass
4 th Boot Device		BIOS Setup BIOS POST	Pass
5 th Boot Device		BIOS Setup BIOS POST	Pass
Other Boot Device		BIOS Setup BIOS POST	Pass
Hard Disk Drives		BIOS Setup	Pass
CD-ROM Drives		BIOS Setup	Pass
Removable Drives		BIOS Setup	Pass
Boot Override		O.S. Environment	Status
Boot Override From ODD		BIOS Setup BIOS POST	Pass
Boot Override From HDD		BIOS Setup BIOS POST	Pass
Boot Override From UEFI		BIOS Setup BIOS POST	Pass
CD/DVD ROM Drive BBS Priorities		BIOS Setup BIOS POST	Pass
Hard Drive BBS Priorities		BIOS Setup BIOS POST	Pass
Network Device BBS Priorities		BIOS Setup BIOS POST	Pass
Tools			
Test all items of the tools section with USB Keyboard and Mouse in BIOS setup utility.			
Tool		O.S. Environment	Status
ASUS EZ Flash 3 Utility		BIOS Setup	Pass Refer to PART D
Secure Erase		BIOS Setup	Pass
Setup Animator		BIOS Setup	Pass
ASUS Overclocking Profile		BIOS Setup	Pass
ROG OC Panel H-Key Configure		BIOS Setup	Pass
ASUS SPD Information		BIOS Setup	Pass
Graphics Card Information		BIOS Setup	Pass
ROG OC Panel H-Key Configure		O.S. Environment	Status
CPU Core Voltage		BIOS Setup	Pass
VDDSOC Voltage		BIOS Setup	Pass
BCLK Frequency		BIOS Setup	Pass
1.8V PLL Voltage		BIOS Setup	Pass
CPU Ratio		BIOS Setup	Pass
Load Default		BIOS Setup	Pass
Save Above Setting		BIOS Setup	Pass
Load from profile		BIOS Setup	Pass
ASUS EZ Flash3 Utility		O.S. Environment	Status
ASUS EZ Flash 3		BIOS Setup	Pass Refer to PART D
Secure Erase		O.S. Environment	Status
Secure Erase		BIOS Setup	Pass

Tools		
Test all items of the tools section with USB Keyboard and Mouse in BIOS setup utility.		
ASUS Overclocking Profile	O.S. Environment	Status
Load from Profile	BIOS Setup	Pass
Profile Name	BIOS Setup	Pass
Save to Profile	BIOS Setup	Pass
Load/Save Profile from/to USB Drive	BIOS Setup	Pass
ASUS SPD Information	O.S. Environment	Status
ASUS SPD Information	BIOS Setup	Pass
Graphics Card Information	O.S. Environment	Status
GPU Post	BIOS Setup	Pass
Graphics Card Information	BIOS Setup	Pass
Exit		
Test all items of the exit section with USB Keyboard and Mouse in BIOS setup utility.		
Exit items	O.S. Environment	Status
Load Optimized Defaults	BIOS Setup	Pass
Save Changes & Reset	BIOS Setup	Pass
Discard Changes & Exit	BIOS Setup	Pass
Launch EFI Shell From USB drivers	BIOS Setup	Pass
Tool Bar		
Test all items of the exit section with USB Keyboard and Mouse in BIOS setup utility.		
Hotkey function	O.S. Environment	Status
My Favorite (F3)	BIOS Setup	Pass
Qfan Control (F6)	BIOS Setup	Pass
EZ Tuning Wizard (F11)	BIOS Setup	Pass
Hot Key	BIOS Setup	Pass
Special Keys		
Test all function keys with USB Keyboard and Mouse in BIOS setup utility.		
Function Key	O.S. Environment	Status
F1	BIOS Setup	Pass
F2	BIOS Setup	Pass
F3	BIOS Setup	Pass
F5	BIOS Setup	Pass
F6	BIOS Setup	Pass
F7	BIOS Setup	Pass
F10	BIOS Setup	Pass
F11	BIOS Setup	Pass
F12	BIOS Setup	Pass
Other Key	O.S. Environment	Status
← →	BIOS Setup	Pass
↑ ↓	BIOS Setup	Pass
+ -	BIOS Setup	Pass
Enter	BIOS Setup	Pass
PGDN	BIOS Setup	Pass
PGUP	BIOS Setup	Pass
HOME	BIOS Setup	Pass
END	BIOS Setup	Pass
ESC	BIOS Setup	Pass
POST Screen		
Check all the information provides and shows correctly with USB Keyboard and Mouse during POST screen.		
String	O.S. Environment	Status
Copyright	BIOS POST	Pass
CPU	BIOS POST	Pass
Memory	BIOS POST	Pass
SATA	BIOS POST	Pass
USB	BIOS POST	Pass
Boot Failure	BIOS POST	Pass
Hot Key	O.S. Environment	Status
DEL or F2	BIOS POST	Pass
F8	BIOS POST	Pass
Logo	O.S. Environment	Status
ASUS Full Screen Logo	BIOS POST	Pass
Windows 10 Logo	BIOS POST	Pass

Beep Code		
Check all the beep information shows correctly during POST screen with buzzer and PC speaker.		
Normal	O.S. Environment	Status
VGA Found	BIOS POST	Pass
System Boot	BIOS POST	Pass
Error	O.S. Environment	Status
No Memory Found	BIOS POST	Pass Refer to PART D
No Keyboard Found	BIOS POST	Pass
Hardware Monitor error	BIOS POST	Pass
BIOS all items		
Check BIOS all items should work normally.		
Normal	O.S. Environment	Status
All items	BIOS POST	Pass
UEFI OS Check		
Check after flash BIOS then it can enter OS normally.		
Normal	O.S. Environment	Status
UEFI OS Check	Win10-64 Pro. RS1	Pass

3. ASUS Feature Test

ASUS Feature		
Test all the functionalities of ASUS Feature.		
C.P.R.	O.S. Environment	Status
AC Power Loss	BIOS Setup BIOS POST	Pass
Power Button > 4 seconds	BIOS Setup BIOS POST	Pass
CrashFree BIOS 3	O.S. Environment	Status
CrashFree BIOS 3 function	BIOS Setup BIOS POST	Pass Refer to PART D
Crash in DOS flash tool or ASUS EZ flash 3	MS-DOS V6.22 BIOS POST	Pass
Crash in ASUS EZ Update	Win10-64 Pro.RS1 BIOS POST	Pass
ODD	MS-DOS V6.22 BIOS POST	Pass
USB	MS-DOS V6.22 BIOS POST	Pass
New CPU	O.S. Environment	Status
New CPU Installed	BIOS POST	Pass
Pressing F1 after changed CPU	BIOS POST	Pass
Thermal Shutdown	O.S. Environment	Status
CPU Over Heat	BIOS POST	Pass
USB Over Current	O.S. Environment	Status
5V Dual(USB2.0)	BIOS POST	Pass
5V Dual(USB3.0)	BIOS POST	Pass
5V Dual(USB3.1)	BIOS POST	Pass
EC Firmware recovery	O.S. Environment	Status
EC firmware update function	BIOS POST	Pass
EC firmware crash function	BIOS POST	Pass

4. System Utility Test

System Utility		
Use various ways to test the BIOS and run some utilities programs.		
Items	O.S. Environment	Status
Bupdater V1.31	MS-DOS V6.22	Pass Refer to PART D

5. System Diagnostic Test

System Diagnostics		
Run the different types of system diagnostics tests.		
Diagnostics	O.S. Environment	Status
Pass Mark Burn In Test PRO V8.1	Win10-64 Pro. RS1	Pass

6. Stress Test

Stress Test		
Run the aging programs over 12 hours to test system stable-ability under Windows 10.		
Items	O.S. Environment	Status
AMD SST	Win10-64 Pro. RS1	Pass
RTC	O.S. Environment	Status
Power On/Off test	MS-DOS V6.22	Pass

PART B. OPERATING SYSTEM ENVIRONMENT TEST

1. Microsoft Windows 10 64-Bit Operating System Test

1.1 Software Compatibility Test

1.1.1 Operating System Compatibility

Operating System Test		
Install all versions of Windows 10-64 (Windows 10-64 Pro. and make sure all necessary drivers can be installed. Then we must check all available connectors, jumpers, sockets and slots. Make sure the compatibility and functions of these features match the specific requirement.		
Package Name	O.S. Environment	Status
Preparatory items	Win10-64 Pro. RS1	Pass
UEFI OS Installation (Windows 10 Pro. X64)	Win10-64 Pro. RS1	Pass
Multi-Language	Win10-64 Pro. RS1	Pass
Log in check	Win10-64 Pro. RS1	Pass
Reboot test	Win10-64 Pro. RS1	Pass
Shutdown test	Win10-64 Pro. RS1	Pass
Maximum DIMM Install & test	Win10-64 Pro. RS1	Pass

1.1.2 Application Software Compatibility

Graphics / Image Processing / Multimedia Applications		
Install application then execute basic functions and uninstall it. And it must include resize function.		
Package Name	O.S. Environment	Status
Corel Draw X8	Win10-64 Pro. RS1	Pass
Ulead PhotoImpact X3	Win10-64 Pro. RS1	Pass
Utilities & Tools		
Install application then execute programs and uninstall it.		
Package Name	O.S. Environment	Status
Alcohol 120% V2.0	Win10-64 Pro. RS1	Pass
Nero 2017	Win10-64 Pro. RS1	Pass
Integrate Applications / Project Management		
Install application then execute programs and uninstall it.		
Package Name	O.S. Environment	Status
Open Office.org 4.1.3	Win10-64 Pro. RS1	Pass
AIDA64 V5.75	Win10-64 Pro. RS1	Pass
Ludashi 5.0	Win10-64 Pro. RS1	Pass
Communication / Remote Control / E-Mail		
Install application then execute programs and uninstall it.		
Package Name	O.S. Environment	Status
Microsoft Internet Explorer 11	Win10-64 Pro. RS1	Pass
Media Players		
Install application then execute programs and uninstall it.		
Package Name	O.S. Environment	Status
Microsoft Media Player 12	Win10-64 Pro. RS1	Pass
PowerDVD 15	Win10-64 Pro. RS1	Pass
Games		
Install application then play these games over 10 minutes.		
Package Name	O.S. Environment	Status
Over Watch	Win10-64 Pro. RS1	Pass
Middle Earth Shadow fo Mordor	Win10-64 Pro. RS1	Pass
The SIMS 4 LIMITED EDITION	Win10-64 Pro. RS1	Pass
NBA 2K16	Win10-64 Pro. RS1	Pass
Diablo 3	Win10-64 Pro. RS1	Pass
Tom Clancy's The Division	Win10-64 Pro. RS1	Pass
Far Cry Primal	Win10-64 Pro. RS1	Pass
Battleborn	Win10-64 Pro. RS1	Pass

On-Line Games		
Install application then play these games over 30 minutes.		
Package Name	O.S. Environment	Status
<i>World of Warcraft</i>	Win10-64 Pro. RS1	Pass
<i>League of Legends(LOL)</i>	Win10-64 Pro. RS1	Pass

1.1.3 Supporting Software Compatibility

Support CD For Win10-64 (DVD or 1 PCS CD)		
Install all drivers and utilities then check all available functions.		
Check Sum	O.S. Environment	Status
<i>MB PES Check</i>	Win10-64 Pro. RS1	Pass
<i>Release CD or DVD checksum number(M3447.12)</i>	Win10-64 Pro. RS1	Pass
<i>Release CD or DVD checksum MD5 number (M3447.12)</i>	Win10-64 Pro. RS1	Pass
Drivers Menu	O.S. Environment	Status
<i>Autorun test</i>	Win10-64 Pro. RS1	Pass
<i>Label & Icon check</i>	Win10-64 Pro. RS1	Pass
<i>Logo check</i>	Win10-64 Pro. RS1	Pass
<i>Bupdater test and version check</i>	Win10-64 Pro. RS1	Pass
<i>BIOS file check</i>	Win10-64 Pro. RS1	Pass
<i>ASUS InstAll – Recommend</i>	Win10-64 Pro. RS1	Pass
<i>Google Chrome Browser</i>	Win10-64 Pro. RS1	Pass
<i>AMD Chipset Driver</i>	Win10-64 Pro. RS1	Pass
<i>Realtek Audio Driver</i>	Win10-64 Pro. RS1	Pass
<i>Asmedia USB3.1/3.0 Driver</i>	Win10-64 Pro. RS1	Pass
<i>Intel LAN Driver</i>	Win10-64 Pro. RS1	Pass
<i>APRP</i>	Win10-64 Pro. RS1	Pass
Utilities Menu	O.S. Environment	Status
<i>Utilities Manual Icon</i>	Win10-64 Pro. RS1	Pass
<i>ASUS AI Suite 3</i>	Win10-64 Pro. RS1	Pass Refer to PART D
<i>ASUS Dual Intelligent Processors 5</i>	Win10-64 Pro. RS1	Pass Refer to PART D
<i>ASUS ROG Connect Plus</i>	Win10-64 Pro. RS1	Pass
<i>DAEMON Tools</i>	Win10-64 Pro. RS1	Pass
<i>WinZip</i>	Win10-64 Pro. RS1	Pass
<i>GameFirst IV</i>	Win10-64 Pro. RS1	Pass
<i>KeyBot II</i>	Win10-64 Pro. RS1	Pass Refer to PART D
<i>Mem Tweakt</i>	Win10-64 Pro. RS1	Pass Refer to PART D
<i>RAMCache II</i>	Win10-64 Pro. RS1	Pass Refer to PART D
<i>RAMDisk</i>	Win10-64 Pro. RS1	Pass
<i>ROG CPU-Z</i>	Win10-64 Pro. RS1	Pass Refer to PART D
<i>ASUS WebStorage</i>	Win10-64 Pro. RS1	Pass
<i>Clone Drive</i>	Win10-64 Pro. RS1	Pass Refer to PART D
<i>AURA</i>	Win10-64 Pro. RS1	Pass Refer to PART D
<i>Kaspersky Anti-Virus for ASUS</i>	Win10-64 Pro. RS1	Pass
<i>ASUS Ai Charger</i>	Win10-64 Pro. RS1	Pass
<i>Overwolf</i>	Win10-64 Pro. RS1	Pass
<i>ASUS EZ Installer</i>	Win10-64 Pro. RS1	Pass Refer to PART D

Support CD For Win10-64 (DVD or 1 PCS CD)		
Install all drivers and utilities then check all available functions.		
Manual Menu	O.S. Environment	Status
<i>Manual</i>	Win10-64 Pro. RS1	Pass
<i>ASUS Motherboard Installation Guide</i>	Win10-64 Pro. RS1	Pass
<i>MB Europe Warranty Card</i>	Win10-64 Pro. RS1	Pass
<i>Pick Up and Return (PUR) Service</i>	Win10-64 Pro. RS1	Pass
Other Information	O.S. Environment	Status
<i>ROG branding video Link</i>	Win10-64 Pro. RS1	Pass
<i>Help</i>	Win10-64 Pro. RS1	Pass
<i>File list</i>	Win10-64 Pro. RS1	Pass
CrashFree Function	O.S. Environment	Status
<i>Crash-Free Function Test</i>	Win10-64 Pro. RS1	Pass
Multi-Language Support	O.S. Environment	Status
<i>English</i>	Win10-64 Pro. RS1	Pass
<i>Chinese-Simplified</i>	Win10-64 Pro. RS1	Pass Refer to PART D
<i>Chinese-Traditional</i>	Win10-64 Pro. RS1	Pass
<i>Japanese</i>	Win10-64 Pro. RS1	Pass Refer to PART D
<i>German</i>	Win10-64 Pro. RS1	Pass Refer to PART D
<i>Spanish</i>	Win10-64 Pro. RS1	Pass Refer to PART D
<i>Russia</i>	Win10-64 Pro. RS1	Pass Refer to PART D
<i>French</i>	Win10-64 Pro. RS1	Pass
<i>Korean</i>	Win10-64 Pro. RS1	Pass Refer to PART D

1.1.4 ASUS Utilities Functional Compatibility

ASUS AI Suite 3		
Follow the test procedure to test AI Suite 3 and make sure all the functions are normal.		
Package Name	O.S. Environment	Status
<i>Driver</i>	Win10-64 Pro. RS1	Pass
<i>Multi-Language</i>	Win10-64 Pro. RS1	Pass
<i>Function test</i>	Win10-64 Pro. RS1	Pass
<i>Function button test</i>	Win10-64 Pro. RS1	Pass
<i>Uninstall</i>	Win10-64 Pro. RS1	Pass
Utility Function	O.S. Environment	Status
<i>Tool</i>	<i>Dual Intelligent Processors 5</i>	Win10-64 Pro. RS1 Pass Refer to PART D
	<i>PC Cleaner</i>	Win10-64 Pro. RS1 Pass Refer to PART D
	<i>System Information</i>	Win10-64 Pro. RS1 Pass
<i>Monitor</i>	<i>CPU Frequency</i>	Win10-64 Pro. RS1 Pass
	<i>Voltage</i>	Win10-64 Pro. RS1 Pass
	<i>Temperature</i>	Win10-64 Pro. RS1 Pass
	<i>Fan</i>	Win10-64 Pro. RS1 Pass
<i>Update</i>	<i>EZ Update</i>	Win10-64 Pro. RS1 Fail Refer to PART D
	<i>Mylogo</i>	Win10-64 Pro. RS1 Fail Refer to PART D
	<i>USB BIOS Flashback</i>	Win10-64 Pro. RS1 Pass
System Information	O.S. Environment	Status
<i>MB</i>	Win10-64 Pro. RS1	Pass
<i>CPU</i>	Win10-64 Pro. RS1	Pass
<i>SPD</i>	Win10-64 Pro. RS1	Pass

ASUS AI Suite 3

Follow the test procedure to test AI Suite 3 and make sure all the functions are normal.

Setting	O.S. Environment	Status
Application Status	Win10-64 Pro. RS1	Pass
Bar	Win10-64 Pro. RS1	Pass
Skin	Win10-64 Pro. RS1	Pass

1.1.5 System Special Functional Compatibility

ACPI BIOS Test

Follow the test procedure to test to ACPI and make sure all the functions are normal.

Package Name	O.S. Environment	Status
FAN work	Win10-64 Pro. RS1	Pass
Power Button	Win10-64 Pro. RS1	Pass
Hybrid sleepTest	Win10-64 Pro. RS1	Pass
Power supply fanwork	Win10-64 Pro. RS1	Pass
Timer Power Saving	Win10-64 Pro. RS1	Pass
Suspend Simulation	Win10-64 Pro. RS1	Pass
External Signal to Wake up (S3)	Win10-64 Pro. RS1	Pass
External Signal to Wake up (S4)	Win10-64 Pro. RS1	Pass
External Signal to Wake up (S5)	Win10-64 Pro. RS1	Pass
External Signal to Wake up (S5)(Enable ErP funtion)	Win10-64 Pro. RS1	Pass

1.2 Hardware Compatibility Test

1.2.1 System device functionality and Capability

On-board Audio

Follow the test procedure to test on-board Audio driver and make sure all the functions are normal.

Package Name	O.S. Environment	Status
Install new driver & Check WHQL	Win10-64 Pro. RS1	Pass
Disable audio under BIOS	Win10-64 Pro. RS1	Pass
Check Driver SSID & PCI SSID	Win10-64 Pro. RS1	Pass
Uninstall driver	Win10-64 Pro. RS1	Pass
Noise check	O.S. Environment	Status
Pop sound check	Win10-64 Pro. RS1	Pass Refer to PART D
Back Output-playing	O.S. Environment	Status
Play MP3 with Media player	Win10-64 Pro. RS1	Pass
Play Dolby Digital 5.1	Win10-64 Pro. RS1	Pass
Play LPCM 7.1	Win10-64 Pro. RS1	Pass
Content protection	Win10-64 Pro. RS1	Pass
Check Balance Controller function	Win10-64 Pro. RS1	Pass
Work after resume from S3	Win10-64 Pro. RS1	Pass
Work after resume from S4	Win10-64 Pro. RS1	Pass
Impedance sensing	Win10-64 Pro. RS1	Pass
DirectX Diagnostic Tool	Win10-64 Pro. RS1	Pass
RMAA Tool	Win10-64 Pro. RS1	Pass
Back Input-recording	O.S. Environment	Status
Playback volume control	Win10-64 Pro. RS1	Pass
Recording function	Win10-64 Pro. RS1	Pass
Check Balance Controller function	Win10-64 Pro. RS1	Pass
Work after resume from S3	Win10-64 Pro. RS1	Pass
Work after resume from S4	Win10-64 Pro. RS1	Pass
Boost function	Win10-64 Pro. RS1	Pass
Output-SPDIF	O.S. Environment	Status
Play MP3 with Media Play	Win10-64 Pro. RS1	Pass
Play Dolby Digital 5.1	Win10-64 Pro. RS1	Pass
Set Sample rate as 48KHz / Bit Depth as 16/24	Win10-64 Pro. RS1	Pass
Set Sample rate as 96KHz / Bit Depth as 16/24	Win10-64 Pro. RS1	Pass
Set Sample rate as 192KHz / Bit Depth as 16/24	Win10-64 Pro. RS1	Pass
Power on/off system 3 times	Win10-64 Pro. RS1	Pass
Work after resume from S3	Win10-64 Pro. RS1	Pass
Communication software	O.S. Environment	Status
Skype	Win10-64 Pro. RS1	Pass
On-Line Vide http://jason.onweb.idv.tw/radiogo.asp?ID=206&N=12	Win10-64 Pro. RS1	Pass

On-board Audio

Follow the test procedure to test on-board Audio driver and make sure all the functions are normal.

Front Output-playing		O.S. Environment	Status
Play DRM WMA with Media player		Win10-64 Pro. RS1	Pass
Check Balance Controller function		Win10-64 Pro. RS1	Pass
Work after resume from S3		Win10-64 Pro. RS1	Pass
Jack-retasking		Win10-64 Pro. RS1	Pass
Jack-detection		Win10-64 Pro. RS1	Pass
Multi-streaming		Win10-64 Pro. RS1	Pass
Impedance sensing		Win10-64 Pro. RS1	Pass
AMP function		Win10-64 Pro. RS1	Pass
UI new function for Headphone&Speaker		Win10-64 Pro. RS1	Pass
Front Panel Type		O.S. Environment	Status
BIOS HD	AC97 Panel	Win10-64 Pro. RS1	Pass
	HD Panel	Win10-64 Pro. RS1	Pass
AMP function		O.S. Environment	Status
On/Off		Win10-64 Pro. RS1	Pass

On-board Intel I211AT LAN

Follow the test procedure to test on-board LAN driver and make sure all the functions are normal.

Package Name		O.S. Environment	Status
LAN adapter driver		Win10-64 Pro. RS1	Pass
Disable Function		Win10-64 Pro. RS1	Pass
Works after resume from suspend S3		Win10-64 Pro. RS1	Pass
Works after resume from suspend S4		Win10-64 Pro. RS1	Pass
Uninstall LAN driver		Win10-64 Pro. RS1	Pass
MAC Address		O.S. Environment	Status
Update MAC address by DOS tool		Win10-64 Pro. RS1	Pass
Assign MAC address by Windows		Win10-64 Pro. RS1	Pass
Check MAC address after changing HDD		Win10-64 Pro. RS1	Pass
Protocol		O.S. Environment	Status
TCP/IP		Win10-64 Pro. RS1	Pass
Speed		O.S. Environment	Status
10Mbps function test		Win10-64 Pro. RS1	Pass
100Mbps function test		Win10-64 Pro. RS1	Pass
1000Mbps function test		Win10-64 Pro. RS1	Pass
LAN LED		O.S. Environment	Status
LAN Active LED Check		Win10-64 Pro. RS1	Pass
LAN 10Mbps LED Check		Win10-64 Pro. RS1	Pass
LAN 100Mbps LED Check		Win10-64 Pro. RS1	Pass
LAN 1000Mbps LED Check		Win10-64 Pro. RS1	Pass
ErP Ready		Win10-64 Pro. RS1	Pass
Throughput Test		O.S. Environment	Status
PCIe GigaLAN Throughput		Win10-64 Pro. RS1	Pass
Collision LED		O.S. Environment	Status
Hub/Switch 10Mbps and Collision LED Check		Win10-64 Pro. RS1	Pass
Hub/Switch 100Mbps and Collision LED Check		Win10-64 Pro. RS1	Pass
Hub/Switch 1000Mbps and Collision LED Check		Win10-64 Pro. RS1	Pass
LAN Boot ROM Test		O.S. Environment	Status
LAN Boot ROM Checks		Win10-64 Pro. RS1	Pass
Remote installation O.S to SB Serial ATA HDD through Boot ROM		Win10-64 Pro. RS1	Fail Refer to PART D
PXE Ghost to SB Serial ATA HDD through Boot ROM		Win10-64 Pro. RS1	Fail Refer to PART D
Remote installation O.S to SB Serial ATA HDD through Boot ROM (UEFI Network Card IPV4)		Win10-64 Pro. RS1	Pass
Remote installation O.S to SB Serial ATA HDD through Boot ROM (UEFI Network Card IPV6)		Win10-64 Pro. RS1	Fail Refer to PART D
LAN Cable		O.S. Environment	Status
120 meter cable connection		Win10-64 Pro. RS1	Pass
DATA Transfer		O.S. Environment	Status
LAN Full Loading Files access		Win10-64 Pro. RS1	Pass
VCD/DVD through LAN		Win10-64 Pro. RS1	Pass
Dial-up over LAN		Win10-64 Pro. RS1	Pass

On-board Intel I211AT LAN

Follow the test procedure to test on-board LAN driver and make sure all the functions are normal.

LAN Device Type	O.S. Environment	Status	
Switch	Win10-64 Pro. RS1	Pass	
Router	Win10-64 Pro. RS1	Pass	
Aging Test		O.S. Environment	Status
PassMark Sleep	Win10-64 Pro. RS1	Pass	
PassMark Rebooter	Win10-64 Pro. RS1	Pass	

On-board USB 2.0 Controller

Follow the test procedure to test on-board USB and make sure all the functions are normal.

Package Name	O.S. Environment	Status	
Install Windows with USB keyboard and mouse	Win10-64 Pro. RS1	Pass	
Install Windows with USB ODD	Win10-64 Pro. RS1	Pass	
Full loading USB	Win10-64 Pro. RS1	Pass	
Hot-plug	Win10-64 Pro. RS1	Pass	
File access via 5 meter cable	Win10-64 Pro. RS1	Pass	
Tray icon	Win10-64 Pro. RS1	Pass	
USB 2.0 Type		O.S. Environment	Status
USB1112	Win10-64 Pro. RS1	Pass	
USB1314	Win10-64 Pro. RS1	Pass	
USB1516	Win10-64 Pro. RS1	Pass	

On-board USB 3.0 Controller

Follow the test procedure to test on-board USB and make sure all the functions are normal.

Package Name	O.S. Environment	Status	
USB 3.0 driver	Win10-64 Pro. RS1	Pass	
Firmware	Win10-64 Pro. RS1	Pass	
Factory test	Win10-64 Pro. RS1	Pass	
Install Windows via AMD USB3.0 port with USB ODD, USB keyboard and USB mouse	Win10-64 Pro. RS1	Pass	
Full loading USB	Win10-64 Pro. RS1	Pass	
USB Throughput Speed	Win10-64 Pro. RS1	Pass	
Over Current	Win10-64 Pro. RS1	Pass	
Tray Icon	Win10-64 Pro. RS1	Pass	
Hot-plug	Win10-64 Pro. RS1	Pass	
File access via 3 meter cable	Win10-64 Pro. RS1	Pass	
USB 2.0 Type		O.S. Environment	Status
USB3_1	Win10-64 Pro. RS1	Pass	
USB3_2	Win10-64 Pro. RS1	Pass	
USB3_3	Win10-64 Pro. RS1	Pass	
USB3_4	Win10-64 Pro. RS1	Pass	
USB3_5	Win10-64 Pro. RS1	Pass	
USB3_6	Win10-64 Pro. RS1	Pass	
USB3_7	Win10-64 Pro. RS1	Pass	
USB3_8	Win10-64 Pro. RS1	Pass	
USB3_9	Win10-64 Pro. RS1	Pass	
USB3_10	Win10-64 Pro. RS1	Pass	
USB 3.0 Type		O.S. Environment	Status
USB3_1	Win10-64 Pro. RS1	Pass	
USB3_2	Win10-64 Pro. RS1	Pass	
USB3_3	Win10-64 Pro. RS1	Pass	
USB3_4	Win10-64 Pro. RS1	Pass	
USB3_5	Win10-64 Pro. RS1	Pass	
USB3_6	Win10-64 Pro. RS1	Pass	
USB3_7	Win10-64 Pro. RS1	Pass	
USB3_8	Win10-64 Pro. RS1	Pass	
USB3_9	Win10-64 Pro. RS1	Pass	
USB3_10	Win10-64 Pro. RS1	Pass	
Aging		O.S. Environment	Status
Data Transfer Test	Win10-64 Pro. RS1	Pass	
Suspend Test	Win10-64 Pro. RS1	Pass	
RTC Test	Win10-64 Pro. RS1	Pass	

On-board USB 3.1 Controller

Follow the test procedure to test on-board USB and make sure all the functions are normal.

Package Name	O.S. Environment	Status
Factory test	Win10-64 Pro. RS1	Pass
Install Windows via AMD USB3.1 port	Win10-64 Pro. RS1	Pass
System Install with USB flash	Win10-64 Pro. RS1	Pass
Full loading USB	Win10-64 Pro. RS1	Pass
Over Current	Win10-64 Pro. RS1	Pass
Tray Icon	Win10-64 Pro. RS1	Pass
USB Throughput Speed	Win10-64 Pro. RS1	Pass
USB 2.0 Type	O.S. Environment	Status
USB3.1_E1	Win10-64 Pro. RS1	Pass
USB 3.0 Type	O.S. Environment	Status
USB3.1_E1	Win10-64 Pro. RS1	Pass
USB 3.1 Type	O.S. Environment	Status
USB3.1_E1	Win10-64 Pro. RS1	Pass
Aging	O.S. Environment	Status
Data Transfer Test	Win10-64 Pro. RS1	Pass
Suspend Test	Win10-64 Pro. RS1	Pass
RTC Test	Win10-64 Pro. RS1	Pass

On-board Asmedia USB 3.1 Controller

Follow the test procedure to test on-board USB and make sure all the functions are normal.

Package Name	O.S. Environment	Status
USB 3.1 driver	Win10-64 Pro. RS1	Pass
Firmware	Win10-64 Pro. RS1	Pass
Factory test	Win10-64 Pro. RS1	Pass
Install Windows via AsMedia USB3.1 port	Win10-64 Pro. RS1	Pass
System Install with USB flash	Win10-64 Pro. RS1	Pass
Device ID	Win10-64 Pro. RS1	Pass
SVID	Win10-64 Pro. RS1	Pass
Full loading USB	Win10-64 Pro. RS1	Pass
Over Current	Win10-64 Pro. RS1	Pass
Tray Icon	Win10-64 Pro. RS1	Pass
USB Throughput Speed	Win10-64 Pro. RS1	Pass
USB 2.0 Type	O.S. Environment	Status
USB3.1_EC2	Win10-64 Pro. RS1	Pass
LAN_USB3.1_EA3	Win10-64 Pro. RS1	Pass
USB 3.0 Type	O.S. Environment	Status
USB3.1_EC2	Win10-64 Pro. RS1	Pass
LAN_USB3.1_EA3	Win10-64 Pro. RS1	Pass
USB 3.1 Type	O.S. Environment	Status
USB3.1_EC2	Win10-64 Pro. RS1	Pass
LAN_USB3.1_EA3	Win10-64 Pro. RS1	Pass
Aging	O.S. Environment	Status
Data Transfer Test	Win10-64 Pro. RS1	Pass
Suspend Test	Win10-64 Pro. RS1	Pass
RTC Test	Win10-64 Pro. RS1	Pass

On-board South Bridge Serial ATA Controller

Follow the test procedure to test on-board South Bridge Serial ATA Controller driver and make sure all the functions are normal.

AHCI Mode Test 1	O.S. Environment	Status
System Install on SATA Port	Win10-64 Pro. RS1	Pass
AHCI Driver	Win10-64 Pro. RS1	Pass
Hybrid Sleeper test	Win10-64 Pro. RS1	Pass
Hot-plug Disable Function	Win10-64 Pro. RS1	Pass
SATA Hot-plug (Maximum Number of Drives with AHCI mode)	Win10-64 Pro. RS1	Pass
Aging Test (All SATA)	Win10-64 Pro. RS1	Pass
TRIM function check	Win10-64 Pro. RS1	Pass
AHCI Performance test	Win10-64 Pro. RS1	Pass
AHCI Mode Test 2	O.S. Environment	Status
System Install in SSD	Win10-64 Pro. RS1	Pass

On-board South Bridge Serial ATA Controller

Follow the test procedure to test on-board South Bridge Serial ATA Controller driver and make sure all the functions are normal.

RAID 1 Test		O.S. Environment	Status
RAID Wizard		Win10-64 Pro. RS1	Pass Refer to PART D
System Install		Win10-64 Pro. RS1	Pass
RAID Driver		Win10-64 Pro. RS1	Pass
Check RAID 1 build Finished		Win10-64 Pro. RS1	Pass
HDD Bootable Test		Win10-64 Pro. RS1	Pass
Rebuild RAID 1 Test (By SoftRAID Utility)		Win10-64 Pro. RS1	Pass Refer to PART D
Mix Mode for Intel		Win10-64 Pro. RS1	Pass
RAID Utility or Diagnostic Program		Win10-64 Pro. RS1	Pass
Hybrid Sleeper test		Win10-64 Pro. RS1	Pass
Aging Test		Win10-64 Pro. RS1	Pass
RAID 0 Test		O.S. Environment	Status
RAID Wizard		Win10-64 Pro. RS1	Pass
System Install		Win10-64 Pro. RS1	Pass
RAID Driver		Win10-64 Pro. RS1	Pass
Create DataRAID size over 2TB		Win10-64 Pro. RS1	Pass
Hybrid Sleeper test		Win10-64 Pro. RS1	Pass
Aging Test		Win10-64 Pro. RS1	Pass
RAID Utility or Diagnostic Program		Win10-64 Pro. RS1	Pass
High performance		Win10-64 Pro. RS1	Pass Refer to PART D
Maximum Number of Drives with RAID mode		Win10-64 Pro. RS1	Pass
RAID 10 Test		O.S. Environment	Status
RAID Wizard		Win10-64 Pro. RS1	Pass Refer to PART D
System Install		Win10-64 Pro. RS1	Pass
RAID Driver		Win10-64 Pro. RS1	Pass
Check RAID 10 build Finished		Win10-64 Pro. RS1	Pass
HDD Bootable Test		Win10-64 Pro. RS1	Pass
Rebuild RAID 10 Test		Win10-64 Pro. RS1	Pass Refer to PART D
RAID Utility or Diagnostic Program		Win10-64 Pro. RS1	Pass
Hybrid Sleeper test		Win10-64 Pro. RS1	Pass
Aging Test		Win10-64 Pro. RS1	Pass

On-board M.2 Controller

Follow the test procedure to test on-board M.2 Controller driver and make sure all the functions are normal.

M.2 SATA mode		O.S. Environment	Status
Device information		Win10-64 Pro. RS1	Pass
System installation at AHCI mode		Win10-64 Pro. RS1	Pass
System installation at RAID mode		Win10-64 Pro. RS1	Pass
M.2 SATA Performance check		Win10-64 Pro. RS1	Pass
Stress Test		Win10-64 Pro. RS1	Pass
System installation at RAID mode		Win10-64 Pro. RS1	Pass
M.2 PCIe Performance		Win10-64 Pro. RS1	Pass
M.2 PCIe device check		Win10-64 Pro. RS1	Pass
GEN2 x4			
M.2 PCIe device check		Win10-64 Pro. RS1	Pass
GEN3 x4			
Stress Test		Win10-64 Pro. RS1	Pass
M.2 NVMe mode		O.S. Environment	Status
Device information		Win10-64 Pro. RS1	Pass
System installation at AHCI mode		Win10-64 Pro. RS1	Pass
System installation at RAID mode		Win10-64 Pro. RS1	Pass
M.2 NVMe Performance		Win10-64 Pro. RS1	Pass Refer to PART D
PCIe storage RAID performance		Win10-64 Pro. RS1	Pass

On-board M.2 Controller

Follow the test procedure to test on-board M.2 Controller driver and make sure all the functions are normal.

M.2 NVMe mode		O.S. Environment	Status
M.2 NVMe device check GEN3 x4		Win10-64 Pro. RS1	Pass
Intel NVMe DC 750 SSD		Win10-64 Pro. RS1	Pass
Stress Test		Win10-64 Pro. RS1	Pass
Hyper Kit		Win10-64 Pro. RS1	Pass
M.2 PCIe Test		O.S. Environment	Status
Device information		Win10-64 Pro. RS1	Pass
System installation at AHCI mode		Win10-64 Pro. RS1	Pass
System installation at RAID mode		Win10-64 Pro. RS1	Pass
Stress Test		Win10-64 Pro. RS1	Pass
PCIe storage RAID performance		Win10-64 Pro. RS1	Pass
M.2 PCIe device check GEN3 x4		Win10-64 Pro. RS1	Pass
Hyper Kit		Win10-64 Pro. RS1	Pass

On-board PCIEX1 Slot

Test the on-board PCIEX1 Slot to ensure the performance, functionalities and verify the driver support.

Package Name		O.S. Environment	Status
Works after resume from suspend S3		Win10-64 Pro. RS1	Pass
Works after resume from suspend S4		Win10-64 Pro. RS1	Pass
PCIEX1 Slot basic function		Win10-64 Pro. RS1	Pass
PCIEX1 2.0 device test		Win10-64 Pro. RS1	Pass

On-board PCIEX16 Slot

Test the on-board PCIEX16 Slot to ensure the performance, functionalities and verify the driver support.

Package Name		O.S. Environment	Status
Full loading PCIEX16(nVIDIA Single GPU VGA)(BIOS Version:0204) (Driver Version: V375.70)		Win10-64 Pro. RS1	Pass
Full loading PCIEX16(AMD Single GPU VGA)(BIOS Version: 0204) (Driver Version: V16.9.2)		Win10-64 Pro. RS1	Pass
SLI		O.S. Environment	Status
2 Slots (BIOS Version: 0801) (Driver Version: V376.33)	2 GPU(2 cards)	Win10-64 Pro. RS1	Pass
Performance compare		Win10-64 Pro. RS1	Pass
CrossFireX		O.S. Environment	Status
2 Slots (BIOS Version: 0204) (Driver Version: V16.9.2)	2 GPU(2 cards)	Win10-64 Pro. RS1	Pass
Performance compare		Win10-64 Pro. RS1	Pass
PCIEX8 / PCIEX16 Share Lane Component		O.S. Environment	Status
PCIEX8 slot	PCIEX16 slot	Win10-64 Pro. RS1	Pass
PCIEX16/X8_1 slot test		O.S. Environment	Status
PCIEX1 2.0 device test		Win10-64 Pro. RS1	Pass
PCIEX1 3.0 device test		Win10-64 Pro. RS1	Pass
PCIEX4 device test		Win10-64 Pro. RS1	Pass
PCIEX8 device test		Win10-64 Pro. RS1	Pass
PCIEX8 3.0 device test		Win10-64 Pro. RS1	Pass
PCIEX16 3.0 device test		Win10-64 Pro. RS1	Pass
PCIEX16 Throughput Speed		Win10-64 Pro. RS1	Pass
PCIEX8_2 slot test		O.S. Environment	Status
PCIEX1 2.0 device test		Win10-64 Pro. RS1	Pass
PCIEX1 3.0 device test		Win10-64 Pro. RS1	Pass
PCIEX4 device test		Win10-64 Pro. RS1	Pass
PCIEX8 device test		Win10-64 Pro. RS1	Pass
PCIEX8 3.0 device test		Win10-64 Pro. RS1	Pass
PCIEX16 2.0 device test		Win10-64 Pro. RS1	Pass
PCIEX16 3.0 device test		Win10-64 Pro. RS1	Pass
PCIEX4_3 slot test		O.S. Environment	Status
PCIEX1 2.0 device test		Win10-64 Pro. RS1	Pass
PCIEX4 device test		Win10-64 Pro. RS1	Pass
PCIEX8 device test		Win10-64 Pro. RS1	Pass
PCIEX8 3.0 device test		Win10-64 Pro. RS1	Pass
PCIEX16 2.0 device test		Win10-64 Pro. RS1	Pass
PCIEX16 3.0 device test		Win10-64 Pro. RS1	Pass

On-board Infineon TPM

Follow the test procedure to test on-board Infineon TPM and make sure all the functions are normal.

Package Name	O.S. Environment	Status
<i>Install OS with TPM</i>	Win10-64 Pro. RS1	Pass
<i>Works after resume from suspend S3</i>	Win10-64 Pro. RS1	Pass
<i>Works after resume from suspend S4</i>	Win10-64 Pro. RS1	Pass
<i>Windows System Rebooting</i>	Win10-64 Pro. RS1	Pass
<i>Enable BitLocker with TPM only</i>	Win10-64 Pro. RS1	Pass
<i>Enable BitLocker with TPM + Pin</i>	Win10-64 Pro. RS1	Pass
<i>Enable BitLocker with TPM + USB flash</i>	Win10-64 Pro. RS1	Pass

1.3 Stress Test

Stress Test

Run the aging programs to test system stable-ability.

Benchmark	O.S. Environment	Status
<i>3Dmark</i>	Win10-64 Pro. RS1	Pass
Reboot test	O.S. Environment	Status
<i>Reboot test</i>	Win10-64 Pro. RS1	Pass
Suspend test	O.S. Environment	Status
<i>Suspend test (S3+S4)</i>	Win10-64 Pro. RS1	Pass
<i>Suspend test (S3+S4) nVIDIA VGA card</i>	Win10-64 Pro. RS1	Pass
<i>Suspend test (S3+S4) AMD VGA card</i>	Win10-64 Pro. RS1	Pass
<i>Suspend test (S3 only)</i>	Win10-64 Pro. RS1	Pass
Data access test	O.S. Environment	Status
<i>Maximum Loading test</i>	Win10-64 Pro. RS1	Pass

PART C. QUALIFIED VENDORS LIST – DEVICE

1. Power Supplies

Model	
AcBel	ipower90 500W
	R88 PC7063 700W
Aero Cool	STRIKE-X 600W
Antec	EA-650 EarthWatts Green 650W
	EDG750 750W
	HCP-1300 1300W
	TP-750C 750W
Be quiet	BQ L8-500W
	BQT L7-530W
BitFenix	FURY 650G 650W
BUBALUS	PG800AAA 700W
CoolerMaster	MPZ-C001-AFBAT 1200W
	RS-450-AMAA-B1 450W
	RS-750-AFBA-G1 750W
	RS-850-AFBA-G1 850W
Corsair	75-002019 (CX750M) 750W
	AX1500i 75-001971 1500W
	CS850M 75-010929
	CX450M 450W
	CX750 750W
	RPS0007 (RM650i) 650W
	RPS0017(RM850X) 850W
	RPS0018(RM1000X) 1000W
	SF450 450W
	SF600 600W
Vengeance 550M	
Cougar	GX-1050 1050W
D.HIGH	DHP-200KGH-80P 1000W
EnerMAX	ERV1200EWT-G 1200W
	ERX730AWT 730W
	ETL450AWT-M 450W
EVGA	220-P2-1200-X1 1200W
	SuperNova-750-G2 750W
FSP	HydroX-450 450W
	PT-650M 650W
	RAIDER 650W
	RAIDER-II 450W
Huntkey	WD600 600W
OCZ	OCZ-FTY750W 750W
Power Man	IP-S450HQ7-0 450W
Rosewill	HIVE-850S 850W
	PHOTON-1200 1200W

Model	
Seasonic	SS-1200XP3 Active PFC F3 1200W
	SS-400FL 400W
	SSR-450RM Active PFC F3 450W
Seventeam	PAT-800W
	ST-550P-AD 550W
Silverstone	SST-ST85F-GS 850W
Super Flower	SF-1000F14MP 1000W
Thermaltake	Smart DPS G 650 650W
	Toughpower TPX775 775W
	TPD-1200M 1200W
	TPG-0850D 850W
ZUMAX	ZU-500G-JP 500W

2. Hard Drives

2.1. HDD Devices

Type	Model	
SATA 6G	Hitachi	HDN726060ALE610
	Seagate	ST2000NX0243
		ST8000AS0002
	WD	WD6001FZWX
		WD60PURX
		WD60EZRX
		WD10J31X

2.2. SSD Devices

Type	Model	
SATA 6G	Adata	ASX930SS3 240GB
		SU800 128GB
	AMD	RADEON R7-240GB
		RADEON R3-120GB
	Apacer	THUNDERBIRDAST680S 240GB
	Crucial	MX200-250GB
		MX300-525GB
	Fujitsu	F300 Series 240GB
		FSX 120GB
	Intel	540s Series 240GB
	Kingston	SKC400S37 256GB (KC400)
		SUV400S37 240GB (UV400)
	OCZ	ARC100 240GB
		VTX460A 25SAT3 240GB
		TRN150 25SAT3 240GB
	Plextor	PX-256M7VC 256GB
	SanDisk	SDSSDHII 240GB
	Samgsung	850 EVO 1TB
	Seagate	Nytro XF1230-1A0960 SSD 960GB
	SiliconPower	S70 120GB

Type	Model	
SATA 6G	Team	DARK L3 SSD 240GB
		L3 EVO SSD 480GB
	Toshiba	Toshiba Q300 PRO 256GB
	TIGO	TIGO S300 60GB
	WD	Blue PC SSD 500GB
		Green PC SSD 120GB

2.3. M.2 SSD

Type	Model	
SATA	APACER	AS2260 240GB
	BIWIN	G6322 512GB
	CRUCIAL	MX200 250GB
	INTEL	SSDSCKJW360H6 360GB (535 SERIES)
		SSDSCKKW010X6X1 1TB (540s SERIES)
	SANDISK	X300 512GB
		X400 1TB
		Z400S 256GB
	SAMSUNG	MZ-N5E250BW 250GB
	V-COLOR	VLM100 240GB
	WD	WDS100T1B0B 1TB
WDS120G1G0B 120GB		
PCIe	APACER	AP240GZ280 240GB (Z280) (For NVMe mode)
	HYPERX	PREDATOR SSD 960GB (For AHCI mode)
	INTEL	SSDPEKKW512G7 512GB (600P SERIES) (For NVMe mode)
	OCZ	RVD400-M22280 512GB (RD400) (For NVMe mode)
	PLEXTOR	PLEXTOR-PX-G512M6e-512GB (M6e) (For AHCI mode)
	SAMSUNG	MZ-HPV5120 512GB (SM951) (For AHCI mode)
		MZ-VPV2560 256GB (SM951) (For NVMe mode)
		MZ-VKV512-512GB (950 PRO) (For NVMe mode)
		MZ-VPW2560-SM961-256GB (SM961) (For NVMe mode)
		MZ-V6E500-500GB (960 EVO) (For NVMe mode)
	MZ-V6P512 512GB (960 PRO) (For NVMe mode)	
WD	WDS512G1X0C 512GB (For NVMe mode)	

2.4. PCIe SSD

Type	Model	
PCIe	ASUS	RAIDR EXPRESS 240G
	KINGSTON	HYPERX PREDATOR SSD 480GB
	OCZ	REVODRIVE350 480GB

3. Peripheral

3.1. USB Storage

3.1.1. Card Readers

Type	Model	
USB 2.0	InfoThink	IT-925U Smart Card Reader
	KINYO	KCR-318 Multi Card Reader

Type	Model	
USB 3.0	AFT	PRO-77U USB 3.0 HUB and Card Reader
	Kingston	FCR-HS4 USB 3.0 Media Reader
	Sandisk	Extreme PRO UHS-II SD Card Reader
USB 3.0 Type-C	Delock	91720 All in One Card Reader
	Transcend	TS-RDC2K

3.1.2. External Enclosures

Type	Model	
USB 3.0	ADATA	SE720 128G SSD
	ASUS	Wireless Duo 500GB
	ICY Dock	MB561U3S-4S
	OWLTECH	OWL-ESL25S/U3(B)
	PQI	Air Bank 1TB
	Silcon Power	ARMOR A30
	SinapisTek	M.2 SSD 128GB
	Transcend	STOREJET 25H3 2TB
	WD	My BOOK 3.0-4TB
USB 3.0 Type C	SinapisTek	M.2 SSD 128GB
	Transcend	STOREJET 25MC 1TB
USB 3.1	ADATA	SE730 250GB
	AKiTiO	Neutrino Bridge
		NT2 U3.1
	APACER	AS720-AP120GAS720
	ASUS	Macan
	Century	CROSU31S
		CSS25U31BK
	CFD	GW2.5FST-SU3.1
	CyberSlim	M2
		S1-USB3.1
	Digifusion	HD-M2U31 M.2 SSD
	GODO	GD25702
	HighPoint	RocketStor 3122B
	HORNETTEK	HT-219AP3
	J2C	REMOVABLE HDD
	SSI	SSI-2226US31
	SanDisk	Extreme 900 Portable SSD 480GB
	Sunrich	U-1040
	SUPERTALENT	PORTABLE SSD 512GB
	Thunderwing	TW-SN802
		TW-SNR01
	UNITEK	Y-3605
	UPTECH	EHE207
Vantec	NST-270A31	

Type	Model	
USB 3.1 Type C	AKiTiO	NEUTRINO U3.1
	CyberSlim	M2
	DELOCK	2.5 SATA SSD TYPE C-42556
	Digifusion	HD-M2U31 M.2 SSD
	IOCREST	IO-STC567
	SanDisk	Extreme 900 Portable SSD 480GB
	Sunrich	U-1150
	Thunderwing	TW-SNR01
Wifi	ASUS	Wireless Duo 500GB
	PQI	Air Bank 1TB

3.1.3. USB Pen Drives

Type	Model	
USB 3.0	APACER	AH450 32GB
	CORSAIR	VOYAGER GTX 128GB
	KINGMAX	UI-06 32GB
	Kingston	HSX3 128GB
	LEXAR	S33 32GB
	MACH XTREME	MX-ES 32GB
	PATRIOT	SUPERSONIC MAGNUM 256GB
	PNY	TURBO PLUS 128GB
	SanDisk	SDCZ88 128GB
	SILICON POWER	MARVEL M60 64GB
	SUPERTALENT	EXPRESS RC4 128GB
	TEAM	T132 64GB
	TOSHIBA	EXII 64GB
USB 3.1 Gen1 Type-C	ADATA	UC350 64GB
	Kingston	DTDUO3C 32GB
	PNY	UCD20 32GB
	PQI	CONNECT 313 32GB
	Sandisk	SDCZ450 32GB
	SONY	USM32CA1 32GB
	Transcend	TS64GJF890S 64GB

3.1.4. USB Hubs

Type	Model	
PCIEX1	DTECH	PC0149C
	SUNIX	USB2311C
	SYBA	FG-EN101-4E1I
PCIEX4	ASUS	USB 3.1 Type-C Card
	DigiFusion	PTU312A
USB 2.0	ESENSE	U4 4 Port HUB
	UNITEK	Y-2167BK
USB 3.0	Amazon	USBN 3.0 10 port HUB
	SIIG	JU-H40512-S2
	TekRepublic	TUH300
TUH3400		
USB 3.1 Type-C	KUGI	USB 3.1 Type-C Hub

3.2. Audio

3.2.1. Audio Decoder

Type	Model	
SPDIF	DENON	AVR-E200
	Yamaha	RX-V379

3.2.2. Earphone Devices

Type	Model	
Line Out	Audio-technica	ATH-XS7
	Sony	MDR-ZX100
		STEREO HEADSET DR-ZX102DPV
	Sennheiser	HD650
		CX300-II
	AKG	612
	TDK	ST750
RAZER	TIAMAT 7.1	

3.2.3. Sound Adapters

Type	Model	
PCIEX1	ASUS	XONAR D2X
	Creative	SB Audigy FX
USB 2.0	ASUS	STRIX DSP
		XONAR U7
	Creative	Sound Blaster E1
		Sound Blaster Omni Surround 5.1 SB1560

3.2.4. Speaker

Type	Model	
Line out	Creative	A550
	Logitech	Z623
		Z-506 5.1CH
	ALTEC	BX1220 USB-Powered Speaker System

3.3. Controller Cards

3.3.1 Graphic Cards

Type	Model	
AMD Chipset	ASUS	R7360-OC-2GD5 (VBIOS: V015.049.000.001 AS02)
		R9FURYX-4GHBM-3SI (VBIOS: V7300HB.15.48.0.66.AS01)
		RX480 (15.50.0.0.AS01)
		STRIX-R9390-DC3OC-8GD5-GAMING (BIOS: 015.049.000.004.AS11)
		STRIX-R9FURY-DC3-4G-GAMING (VBIOS: V015.049.000.004 AS02)
		STRIX-RX460-O4G GAMING (15.50..0.0.AS22)

Type	Model	
AMD Chipset	ASUS	STRIX-RX470-O4G GAMING (15.50.0.0.AS06)
		STRIX-RX480-O8G GAMING (15.50.0.0.AS11)
	AMD	R9NANO (VBIOS:015.049.000.004)
	GIGABYTE	GV-R938XG GAMING-4GD
nVidia Chipset	ASUS	STRIX GTX750Ti-DC2OC-4GD5 (VBIOS: V82.07.55.00.AS06)
		GT740-DF-2GD5 (80.07.D9.00.39.AS09)
		710-1-SL (BIOS:80.28.A6.00.01)
		GTX 1080 (86.04.17.00.01.AS01)
		STRIX-GTX950-DC2OC-2GD5-GAMING (VBIOS:V84.06.2F.00.AS02)
		STRIX-GTX1060-O6G-GAMING (86.06.0E.00.0A)
		STRIX-GTX1070-O4G-GAMING (86.04.26.00.62)
		TURBO-GTX970-OC-4GD5 (VBIOS: V84.04.36.00.85)
		GTX980Ti-6GD5-DI3S (VBIOS: V84.00.32.00.AS01)
		GTXTITANX-12GD5-DI3S (VBIOS: V84.00.1F.00.AS01)
	MSI	GT740-2GD5 (80.07.D9.00.39.AS20)
		GTX 960 GAMING 2G (VBIOS:84.06.0D00.F1)

3.3.2. SATA/SAS RAID Controller Cards

Type	Model	
PCIEX1	UPTECH	SR300
PCIEX8	ADAPTEC	ASR-8805
	Areca	ARC-1882I
	ATTO	ExpressSAS H1208-SAS
	LSI	MegaRAID SAS 9271-8i

3.4. Ethernet

3.4.1. 100 BaseTx Networking Cards

Type	Model	
USB 2.0	Xiaomi	USB2.0 to RJ-45 LAN Card(小米)

3.4.2. 1000 BaseTx Networking Cards

Type	Model	
PCIEX1	ASUS	PEB-G21 Rev 1.00
	DigiFusion	PETL01B
	Intel	9400PT
	LB-Link	BL-P8168(Supper Win10 S5)
PCIEX4	Intel	E1G42ETBLK
USB 3.0 Type C	AIBO	CB-USBC-RJ45

3.4.3. 10G Ethernet Adapters

Type	Model	
PCIEX4	ASUS	ROG 10G Express
PCIEX8	Intel	X540-T2 (10G)

3.4.4. Networking Hubs/Switches/Routers

Type	Model	
Home Plug	ZyXEL	PLA-4211
Switch	Abocom	GS05
	Buffalo	LSW4-GT-8EP/WH
	D-Link	DGS-1008A
	TP-Link	SG1005D
	ZyXEL	GS-1100-24

3.4.5. Wireless Ethernet Adapters

Type	Model	
PCIEX1	ASUS	PCE-AC88
		PCE-N10
		PCE-N15 B1
	TP-Link	TL-WDN4800
USB3.0	ASUS	USB-AC68 (AC1900)
	D-Link	DWA-182 ver:C1
	TP-Link	Archer T4UH
	NETGEAR	A6210
M.2 (Key E)	Intel	7260NGW

3.5. Fans and Heatsinks

Type	Model	
AMD	COOLERMMASTER	NEPTON 280L
	Intel	TS13X
		TS15A (0.60A)
	NOCTUA	NH-U9S
		NH-U12S
		NH-D15
	SILVERSTONE	TD02
	Thermalright	MACHO 90
	Thermaltake	NIC C5
	XIGMATEK	ORTHRUS

3.6. Keyboard and Mouse

3.6.1. Keyboards

Type	Model	
USB 1.1 / USB 2.0	AJAZZ	AK10
	ASUS	GK1050 RGB KEYBOARD
		STRIX TACTIC PRO
CHERRY	G80-3000LPCEU-2	
USB 1.1 / USB 2.0	CM STORM	QUICK FIRE RAPID-I
	Corsair	VENGEANCE K70
	DARE-U	ZHONG ZHUANG JIA BING
	DASKEYBOARD	DAS KEYBOARD 4
	Ducky	Shine4
	FILCO	NINJA
	FUHLEN	SC950 OMG
	G.SKILL	KM780
	i-rocks	KR-6523
	KEYCOOL	HERP-87
	LBOTS	DK130500041
	LISHENG	KB-118
	MAX	BLACKBIRD
	NEWMEN	GM100
	RealForce	108UBK
	ROYAL KLUDGE	RG-928
	SADES	CAI JUE
	SANGEE	XT2-PRO
	SHARKOON	TACTIX
	STEELSERIES	APEX
TESORO	DURANDAL	

3.6.2. Keyboard + Mice Combos

Type	Model	
USB 1.1 / USB 2.0	ALUA	SHARK DRAGON BEHEAD
	IOGEAR	GKM552R
	Kinyo	KBM-991
	Logitech	G100S
		K400R
	MICROSOFT	COMFORT 5000
RAZER	ABYSSUS ESSENTIAL GAMING BUNDLE	

3.6.3. Mice

Type	Model	
USB 1.1/ USB 2.0	AORUS	Thunder M7
	ASUS	GT200
		SICA
		SPATHA
	CM STORM	REAPER

Type	Model	
USB 1.1/ USB 2.0	CORSAIR	VENGEANCE M95
	LEETGION	HELLION
	LISHENG	LX-305
	Logitech	G602
		WIRELESS M560
	QPAD	OM5K
	RAZER	DEATHADDER 1800DPI
	ROCCAT	LUA
	STEELSERIES	RIVAL
XINMENG	XM-M398	

3.7. Optical Drives

Type	Model	
USB 2.0	ASUS	SBW-06D2X-U
		SBW-S1 PRO
		SDRW-08D3S-U
		SDRW-08U5S-U
	Lite-On	eBAU108
USB 3.0	archgon	MD-3107G-U3
	Pioneer	BDR-XS06T
	Plextor	PX-B950UE
SATA	ASUS	BC-12B1ST
		BW-12B1ST
		BW-16D1HT
		DRW-24D3ST
		DVD-E818A9T
		DRW-24D5MT
	LG	GH24NSB0
	Lite-On	IHAS124
		IHAS524
	Pioneer	BDR-S07XLB
		BDR-207EBK
		BDR-208EBK
		BDR-S08XLT
		BDR-209DBK
		DVR-S20L
		DVR-S21LBK
		DVR-220CHV
	Plextor	PX-B950SA
		PX-891SAW
	Samsung	SH-224DB
SH-222AB		

3.8. Multi-function Printers

Type	Model	
USB 2.0	Brother	DCP-L2540DW
	Canon	PIXMA MX377
	EPSON	XP-422
	HP	OFFICE JET4630
	Samsung	M2020W

3.9. TV Tuner & Video Capture Cards

Type	Model	
PCIEX1	AverMedia	RECENTRAL
USB 2.0	Uptech	Hybrid TV HD 3

3.10. Others Input Device

3.10.1. Apple Devices

Type	Model	
USB 2.0	Apple	iPad Air Wi-Fi 16GB
		iPad2 Wi-Fi 16GB
		iPhone 6 Plus 16GB
		iPhone 6S 16GB
		iPhone 7 32GB

3.10.2. Android Series Device

Type	Model	
USB 2.0	ASUS	ASUS ZenPad S 8.0 64GB (Z580CA)
	Amazon	Fire HD7 (4th Generation)
	MI	PAD 16GB
	Nokia	N1 32GB

3.10.3. Bluetooth Adapter

Type	Model	
USB 2.0	AZIO	BTD-V201
	IRXON	BT560i

3.10.4. Tablets

Type	Model	
USB 2.0	Wacom	Bamboo PAD

3.10.5. Joystick

Type	Model	
USB 2.0	BETOP	BTP-2175
	Logitech	F710
		G27 RACING WHEEL
	MADCATZ	FLY5

3.10.6. Web Cams

Type	Model	
USB 2.0	Logitech	C920
	Microsoft	LifeCam HD-3000
	Rosewill	RCM-8163 True 1.3 M Effective Pixels USB WebCam

3.11. VR Device

Type	Model	
USB 3.0	hTC	Vive

PART D. BUGS & LIMITATIONS

1. Bugs:

8, 28, 34, 36, 45, 66, 71, 72, 75, 76, 78, 81, 84, 85, 87, 108, 111, 112, 113, 114, 115, 117, 118, 121, 127, 140, 141, 144, 145, 147, 149, 150, 151, 156, 162, 164, 169, 171, 174, 178, 179, 180, 185, 187, 188, 189, 190, 191, 195, 200, 206, 207, 208, 209, 210, 213, 214, 218, 223, 224, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244

2. Limitations:

17, 30, 65, 86, 96, 122, 137, 199, 203, 212