

Inno&cn 联合创新		量产软件测试报告 Mass Production Software Test Report				Ver.2.7 (20220526)
机台与设备信息(Machine Information)						
机种(项目)名称 Platform (Project)	32A6V	客户名称 Customer	P32A6V	测试人员 Tester	周妍	
软件版本FW Ver	软件名称: (105.001.22421)TAITAN_32A6V_9U4_TK JT_W9EUHD_GV2_2H1DP1TYPEC_AU OM320QAN023_UHD144_LD1152_2022 0917_M001_956C	Checksum	956C	测试日期 Test date	20220920	
软件名称 Software Name	NA	OC型号 OC model	M320QAN02.3	接口信息 Interface information	DP1: UHD 144Hz TYPE-C: UHD 120Hz HDMI1-2: UHD 144Hz	
PD FW Ver	D6-52 (开启HDR,TYPE-C功耗降至65W)	Scalar IC	JRYW9EUHD_GV2/WE/9U14V4			
主机信息 mainboard	JRY-W9EUHD_GV2	显卡信息 Graphics information	N卡GTX3080 A卡6900XT	系统版本 OS Ver	Win 10 /Win 11	
测试结果 Test Result	Pass					
测试时间 Testing Time	12Hr					
一、测试前, 样机核对(Before testing, Check The Prototype)						
1.请软件工程师协助确认测试样机的完整度, 确认与大货量产机台的有无差异, 并将相关信息填写如下 2.重点核对Panel 型号/MB 版本/Scaler 版本/Power Board/USB HUB PCB&FW 版本等信息, 与 大货机台一致的, 打"V", 不一致的打"X",并在差异说明点做简单说明 3.如果以上关键元件与大货机台不匹配, 请提报给主管确认是否进行测试 1.Software engineer should confirm the integrity of the test prototype, confirm whether there is any difference with the mass production machine, and fill in the relevant information as follows 2.Check the Panel model, MB version, Scaler version, Power Board, USB HUB PCB&FW version and other information, mark "V" if the information is consistent with the mass production machine, mark "X" if the information is inconsistent, and briefly explain the difference 3.If the above key components do not matchthe mass production machine, please report to the supervisor to confirm whether to test.						
面板型号 Panel Model	M320QAN02.3	主控芯片 Scaler IC	JRYW9EUHD_GV2/WE/9U14V4	USB主控软件 USB IC FW	NA	
主板型号 MB Model	JRY-L9EUHD-GV2/9U14V4	电源板 Power Board	240w	其他元件 Other components	NA	
差异点说明 Point of Difference						
二、测试项目 Test Item						
项目 Item	细项 Detail		结果Result	描述 Remark		
品牌Logo测试 Logo Test	开机Logo画面是否显示 Whether The Startup Logo Screen Is Displayed		Pass			
	Logo风格是否正确, 完整。 Is the Logo style correct and complete?		Pass			
工厂模式测试 Factory Mode Test	确认机台可以正常进入与退出工厂模式 Verify that the machine can enter and exit factory mode normally		Pass			
	工厂模式中的整机型号/尺寸是否正确 Is the machine model/size in factory mode correct		Pass			
	工厂模式中的软件版本是否正确 Whether the software version in factory mode is correct		Pass			
	工厂模式中的屏型号/芯片方案是否正确 Is the screen model/chip scheme in factory mode correct		Pass			
	工厂模式中的FW checksum是否正确 Check whether the FW checksum in factory mode is correct		Pass			
	工厂模式中调节RGB值后关机再开机, 数值是否保存 Adjust the RGB value in factory mode, power off and then on, whether to save the value		Pass			
	工厂模式的日期是否正确 Is the date of the factory mode correct		Pass			
按键功能测试 Buttons Function Test	按键功能是否有作用 Whether the button works		Pass			
	各按键功能是否一一对应, 有无错乱 Whether each key corresponds one by one, whether there is disorder		Pass			
	按键功能是否与下边条的丝印一一对应 Whether the button corresponds to the silkscreen of the following bar		Pass			
	遥控是否能正常操作? (带有遥控功能机种确认) Does the remote control work properly? (Confirmation of model with remote control function)		Pass			
屏幕菜单功能测试 OSD Function Test	打开OSD菜单, 检验OSD各功能可正常使用。模拟终端用户使用, 随机调节OSD各项功能, 确认显示器显示正常, 功能调节正常作用 Open OSD menu to check whether OSD functions are working properly. Simulate the use of terminal users, and adjust OSD functions randomly to ensure that the monitor displays properly and functions can be adjusted properly		Pass			
	OSD中默认语言是否跟订单规格表中的要求一致 Check whether the default language of the OSD is consistent with that specified in the order specification Table		Pass	默认中文		
	调节OSD菜单中各项功能设置, 显示器做DC OFF/ON & AC OFF/ON & 省电/唤醒 & 重启, OSD菜单各项功能可保存, 不会重置。 Adjust the function Settings of the OSD menu. The display can be set to DC OF/ON, AC OFF/ON, power saving, wake up, and restart. The functions of the OSD menu can be saved but not reset.		Pass			
灯效功能测试 Light Effect Test	LED指示灯的灯效是否跟订单规格表中的要求一致 Is the LED indicator light effect consistent with the order specification table		Pass			
	后壳灯效是否跟订单规格表中的要求一致 Is the back lamp effect consistent with the order specification table		Pass			
	投影灯是否跟订单规格表中的要求一致 Is the projection lamp consistent with the order specification table		Pass			
	后盖七彩灯效是否跟订单规格表中的要求一致 Is the effect of the seven color lights on the back cover consistent with the order specification table		Pass			

视频和音频功能测试 Video&Audio Function Test	播放视频，画面正常，无卡顿、抖动等，喇叭工作正常，声音无嗡嗡声、噪音、爆破音等。（若支持HDR，请打开HDR，播放HDR 视频） When Movie is played, the video picture is normal, and there is no stutter or shake. The speaker works normally, and there is no hum, noise or burst sound. (If HDR is supported, open HDR and play HDR video.)	Pass	
	显示器DC off 10s后打开，画面与声音输出同步且无异常。 The display DC is off for 10s and then on, and the picture is synchronized with the sound output without any abnormality.	Pass	
	拔掉显示器电源线5s后插回，画面与声音输出同步且无异常。 Unplug the power cord of the monitor for 5s and then plug it back. The picture is synchronized with the sound output and without any abnormality	Pass	
	电源模式中选择让PC进入睡眠状态，省电5分钟后唤醒，显示器可以唤醒且工作正常，重新播放视频影片无异常。 In the power mode, choose to let the PC enter the sleep state, and wake up after saving power for 5 minutes. The monitor can wake up and work normally, and there is no abnormality when playing the video again.	Pass	
	确认喇叭与耳机左右声道是否存在相反、两边声音大小不一样、 、杂音、破音、调节声音大小时声音是否随调节均匀变化大小。 Confirm whether the left and right channels of the speaker and earphone are opposite and the sound size on both sides is different and noise, broken sound etc#. Whether the size of the uniform change with the adjustment.	Pass	
分辨率&刷新率测试 Timing Test	依照规格表中的Timing Table表，所有Timing都要确认到： 切换Timing时不能有爆音/花屏/蓝屏等异常存在 According to the Timing Table in the specification Table, all Timing Must Confirm: During Timing switchover, exceptions such as sound burst, splintered screen, or blue screen cannot occur	Pass	
信号源切换及侦测功能测试 Signal source change and Detection function Test	信号间相互切换正常(所有信号需测试到)，如 DP<-->HDMI1，HDMI1<-->HDMI2，DP<-->HDMI2，DP<-->Type-C，HDMI<-->Type-C.... Switching between signals is normal (all signals need to be tested), as shown in DP <-> HDMI1, HDMI1 <-> HDMI2, DP <-> HDMI2, DP <-> Type - C, HDMI <-> Type - C... .	Pass	
	确认实际输出信号源+OSD下显示+后壳接口丝印需要三者一一对应 Ensure that the actual output signal source, OSD display, and rear shell interface silk correspond to each other	Pass	
	信号侦测测试，每个信号源要测试到，并显示正常 1. 先开主机，再插信号线； 2. 先插信号线，再开主机； 3. Windows 桌面下，插拔DP/HDMI信号线，再接上； 4. PC先开机1分钟以上，再连接显示器AC电源： Signal detection test, each signal source to be tested and displayed as normal 1. Start the PC first, and then plug in the signal cable. 2. Connect the signal cable first, and then start the PC. 3. On the Windows desktop, unplug DP/HDMI signal cable, and then plug it back. 4. Power on the PC for more than one minute, and then connect the AC power supply of the monitor.	Pass	
	A、B两站同时接1台Monitor， A站台Sleep后，Monitor需自动切换B站台显示。 A and B are connected to one Monitor at the same time. After Sleep at platform A, Monitor should automatically switch the display at platform B.	Pass	
	将OSD/设置/自动关机设置为ON，待30S后显示器会自动关机，再按显示器DC开关检查是否可以开机。 Set the OSD/Settings, and Automatic shutdown Settings to ON. After 30 seconds, the monitor automatically shuts down. Then, press the DC switch to check whether the monitor can be started.	Pass	
	分别将USB Type-C&Type-B作为上行线，然后将鼠标和键盘接在显示器接 Type-A Port上，此时进入待机后，确认鼠标键盘是否可以唤醒显示器。 Use USB Type-C&Type-B as the upline respectively, and then connect the mouse and keyboard to the type-A Port of the monitor. After entering standby, confirm whether the mouse and keyboard can wake up the monitor.	Pass	
	省电唤醒功能确认 最佳分辨率&刷新率下HDMI/DP/Type-C都要测试到： 1.桌面右键-个性化-锁屏界面-屏幕超时设置-设置屏幕1分钟自动关闭-屏幕进入省电模式(出现No Single 30s后)-键盘唤醒，确认画面与灯效是否显示正常； 2.桌面右键-个性化-锁屏界面-屏幕保护设置-设置屏幕保护程序为"无"+等待"1分钟"，状态-屏幕进入省电模式(出现No Single 30s后)-鼠标唤醒确认画面与灯效是否显示正常。 Power saving wake up function confirmation Best resolution & refresh rate under HDMI/DP/Type-C should be tested: 1. Right click on the desktop - Personalization - lock screen - Screen timeout setting - Set the screen to automatically close for 1 minute - Enter the power saving mode (No Single 30s) - Wake up from mouse and confirm whether the picture and light effect are displayed normally; 2. Right-click desktop - Personalization - Lock screen - Screen saver Settings - Set screen saver to "None "+ wait for "1 minute", state - Enter power saving mode (No Single 30s)- wake up from mouse to confirm whether the picture and light effect are displayed normally.	Pass	
EDID测试 EDID Test	各通道的EDID信息是否跟订单规格表中的要求一致 各通道的EDID年份、周期、尺寸是否一致 用鲁大师中的显示器信息是否跟订单规格表中的一致 Whether the EDID information of each channel is consistent with the order specification table Whether the EDID information of each channel is consistent in year, period, and size Whether the display information in master Lu is consistent with the order specification table	Pass	注册EDID：_ Register EDID: <u> LHC </u> Monitor Name: <u> P32A6V </u>
	分别打开方格/白画面/黑画面//Window蓝场/50%灰画面、灰阶(34寸以上测64灰阶，32寸以下测32灰阶)进行确认画面是否显示正常(无暗亮点、异物、干扰、偏色、漏光、渗光、暗团、显示不均匀、压边、脏污、饱和)等 Open the grid / white screen / black screen / / window blue field / 50% gray screen and gray scale (64 gray scale is measured above 34 inches and 32 gray scale is measured below 32 inches) to confirm whether the screen displays normally (no dark bright spot, foreign matter, interference, color deviation, light leakage, light penetration, dark mass, uneven display, blank holder, dirt, saturation), etc	Pass	

画面与光学测试 Panel and Optical Test	默认色温是否跟订单规格表中的要求一致 Is the default color temperature consistent with the order specification table	Pass	Default色温为：_ The Default color temperature: _6500K°_
	1.亮度需达到订单规格表的要求：最大亮度不能低于Min值，也不能大于 typ.值 20% 以上，如超标，提报给研发软件确认或实测背光电流是否符合规范？ 2. HDR 亮度确认： a. 在DisplayHDR 1.0冲电流画面下，确认亮度是否符合规格,并确认40Min后亮度是否能降下来 b. 在DisplayHDR非冲电流画面下，不能出现冲电流的现象。 1. The brightness shall meet the requirements of the single specification table: the maximum brightness shall not be lower than min value or greater than typ The value is more than 20%. If it exceeds the	Pass	Default: _387_ Max: _505_ HDR: _1113_
功耗测试 The power consumption Test	1.各模式下功耗是否符合标准 2. 最大功率测试：对比度/亮度调最大，外接口USB-A / Type-C /喇叭等需增加负载：水泥电阻（5V假负载），Type-C诱骗器，喇叭0db 1khz。 1. Whether the power consumption in each mode meets the standard 2. maximum power test: the contrast / brightness is adjusted to the maximum, and the external interface usb-a / type-C / horn needs to increase the load: cement resistance (5V false load), type-C decoy device, speaker 0db 1khz	Pass	Max: _82_ Default: _65_ Sleep: _0.481_ Signal to off: _0.283_ Sleep to off: _0.284_
兼容性测试 Compatibility Test	主机/显卡兼容性： 最佳分辨率下搭配A卡/N卡各一张(涵盖Win 10/Win 11)，以及Apple Mini 主机 1.插拔信号线、电源线、手动开关机后再开显示器画面与声音是否正常 2.睡眠后是否能唤醒 3. 取其中一台主机开机后确认是否可以进 BIOS界面(大部分按“DEL”键)，如不能进，请提报异常。 Graphics card compatibility: Best resolution with A card and N card 1. Plug and unplug signal cable and power cable, and manually power off and then on the machine, next turn on the monitor to check whether it is normal 2. Whether can wake up after sleep	Pass	N卡GTX3080 A卡6900XT
	DVD/机顶盒兼容性： 接入DVD/机顶盒设备后画面是否显示清晰、切换分辨率时画面是否正常显示 DVD/机顶盒测试进行MNT AC/DC测试时画面是否正常显示 备注：小米/创维盒子等都要确认 DVD and SET-top box Compatibility: Whether the screen is displayed clearly after the DVD and SET-top box is connected and whether the screen is displayed normally when the resolution is changed Whether the screen of the DVD and SET-top box is displayed properly during the MNT AC and DC test Note: Mi and Skyworth boxes should be confirmed	Pass	小米4 创维
	NoteBook+扩展坞兼容性： NoteBook直接连接(包括Type-C)+扩展坞转接都要测试到 画面是否显示清晰、切换分辨率时画面是否正常 NoteBook设置睡眠/休眠后能否唤醒Monitor， NoteBook设置重启后是否能正常启动与显示， NoteBook查询EDID信息是否跟订单规格表中的要求一致。 备注：搭配3款以上NoteBook(必须包含Apple 和 华为产品) 和 扩展坞 NoteBook+ Docking compatibility: NoteBook direct connections (including Type-c)+ docking should be tested Whether the screen is displayed clearly and whether the screen is normal when the resolution is switched Whether the monitor can wake up after NoteBook is set to sleep. Whether the monitor can restart and display normally after NoteBook is set to restart. Whether the EDID information queried in Notebook matches the order specification table. Note: With three or more Notebook models(Apple and Huawei products must be included) and docking	Pass	red book pro 15.6 / 小米 BOOK I7
	PS5兼容性测试： 1. 如下支援的所有timing，都需要进行切换，如输出有异常，请提报问题。 720P@60Hz、1080P@60HZ/120Hz、2160P@60HZ/120Hz 2. 如显示器规格支持HDMI 2.1，需支持VRR可变刷新率功能(OSD Free Sync功能要打开)，如不支持请提报异常。 PS5 compatibility test:	Pass	
	XBOX兼容性测试： 1. 如下支援的所有timing，都需要进行切换，如输出有异常，请提报问题。 720P@60Hz、1080P@60HZ/120Hz、1440P@60HZ/120Hz、4K@60HZ(xbox series x可支援120Hz) 2. 如显示器规格支持HDMI 2.0，需支持VRR可变刷新率功能(OSD Free Sync功能要打开)，如不支持请提报异常 Xbox compatibility test:	Pass	
	Switch(任天堂)兼容性测试： 如下支援的所有timing，都需要进行切换，如输出有异常，请提报问题。 480P@60Hz、720P@60Hz、1080P@60HZ 说明： Switch因为版权问题，目前国内项目，有部分开放支援；但是海外项目，基本不同意开放支援。 如果测试发现switch有支援外销机种，请务必提出跟主管或软件确认 Switch compatibility test: All timings supported below need to be switched. If the output is abnormal, please report the problem.	Pass	
订单规格表确认	Type-C机种手机/平板电脑兼容性： 分别搭配2款以上支持type-C视频输出的手机/平板(必须包含Apple 和 华为产品) 1.连接显示正常且可正常播放视频和声音 (测试全程需播放视频测试) 2.拔插信号线，等显示器进入省电模式后 30S，再接上信号线，显示器可正常显示，且视频与声音应能同步输出。 3.拔插端信号线，再接上信号线后，显示器可正常显示,且视频与声音应能同步输出。 4. DC on/off或AC on/off后可正常显示,且视频与声音应能同步输出。 5.手机和平板连接好，关机或锁屏可正常充电 6. 手机投屏时手机模式和电脑模式都需要确认到。 Type-c Phone/tablet compatibility: At least 2 types of mobile phones/tablets supporting Type-C video output 1. The display is normally displayed and video and sound can be played normally (video test is required throughout the test) 2. Unplug signal cable, and wait for 30 seconds after the display enters power-saving mode, then connect the signal cable. The display can display normally, and video and sound can be output synchronously. 3. Unplug and plug signal cable, the display can be displayed normally, and the video and sound can be output synchronously.	Pass	红魔/华为mate40Pro /三星s21/s9/note10
	1. 软件最后一轮测试，按照订单规格表在默认语言下——核对相关功能，并记录软件版本与 checksum 2. 订单规格表如有额外功能，请实测相关功能并记录测试结果，如光感、重力感应、Local Dimming，NFC投屏、Switch等； 1. For the last round of software test, check the relevant functions one by one in the default language according to the order specification table, and record the software version and	Pass	
欧洲能效测试 European Energy Efficiency Certification Test	EU Energy Efficiency'!A1	Pass	备注： 若导欧洲能效，则在第二表中填写相关项目 Remark: For European Energy Efficiency, fill in the relevant items in the second form
三、考古题确认 Past abnormal cases			

1	把亮度调到最低， 确认屏幕能否看清 Set the brightness as low as possible to check if can see the screen	Pass	
2	苹果/戴尔/HP 2060等（重点测试Tpye-c转接口是否有异常） Apple/Dell /HP 2060, etc. (focus on the TPYE-C transfer interface is abnormal or not)	Pass	
3	DP验证是否会跳帧（https://www.testufo.com/frameskipping） Whether DP will jump frame (https://www.testufo.com/frameskipping)	Pass	
4	在小苹果Adjust White界面调到25， 查看屏幕四周是否泛白漏光 Adjust white to 25 in Apple App interface and see whether light leaks around the screen	Pass	
5	调节静音功能时， 画面不会自动变亮 When adjusting the mute function, the screen will not automatically brighten	Pass	
6	确认 OSD饱和度设置后无法保存（比如：饱和度默认值50， 设置为70后， 再打开还是50） Confirm the OSD saturation cannot be saved. (For example, if the saturation is set to 70 and the default value is 50, the value will remain 50 again.	Pass	
7	使用 G Sync_Compatible / Free_Sync时， 刷新率最大 画面最下面是否有一条闪频的问题 When using G Sync_Compatible/Free_Sync, whether there is flash at the bottom of screen under the maximum refresh	Pass	
8	32灰阶下切换gamma 2.2 到2.6 再进行关机gamma 2.6 颜色不饱和 switch gamma 2.2 to 2.6 under 32 grey scale and then power off ,gamma 2.6 color is unsaturated	Pass	
9	打开aimpoint 按下Navi key 出现会自动关机异常现象 Open aimpoint, then press the Navi key, automatically shuts down will occur	Pass	
10	异常模拟： OSD菜单下调节亮度值20次(从0->100->0算一次)， 确认是否出现卡机/重启/开机当logo/画异等异常 Abnormal simulation: Under the OSD menu, adjust the brightness value 20 times (once from 0 - > 100 - > 0), and confirm whether there are abnormal conditions such as jamming / restart / startup, logo / painting	Pass	
11	异常模拟： 显示器按Power键关机->拔掉显示器端Power Cable->静置30S后一直按Power键20S(余电彻底放掉)->接上Power Cable上电->， 按Power键确认是否显示正常(不可出现Power led 亮但是无画面等情况) Abnormal simulation:	Pass	
12	客诉问题模拟： 不按任何线材情况下， 电量高于20%情况下， 开机不可出现低电压图标 Customer complaint problem simulation: when the power is higher than 20% without any wire, the low voltage icon cannot appear when starting up	Pass	

说明：
Notes:
1. 测试 Issue list， 请参考Buglist shell汇总
1. Refer to the summary of the buglist shell
2. 报表命名规则： 机种名+客户别+软件版本+量产软件Test Report. ex:32G6G Husky M001量产软件测试报告
2.Report naming rules: Model name + Customer + Software version + Mass production software Test Report. Ex :32G6G Husky M001 mass production software test report