



Product Manual

With Sample recognition Without Sample recognition

First time recognize Non-first time recognize

Material number:	60635N00055860W
Material name:	WBOPS_WB55860W_RK3566 EDLA Android box
Version number of recognition:	A
Supplier:	Guangzhou Lango Electronics Technology CoGuangzhou Lango Electronics Technology Co.,Ltd.,Ltd.
Supplier address:	15/f, Building B1, No 11, Guangpu Road, Huangpu district, Guangzhou, Guangdong, P.R. China
Sample series number:	

Supplier	Producer	Auditor	Approve	Sample delivery date
Confirm	Juan.Zhu	Lynn.Chen	Yurong.Chen	

HiteVision	R&D recognize	Quality review	Approve	Recognize date
Recognition				



Sample Change Description

1.Change history

First time change date: _____

second time change date: _____

others:_____ date: _____

Change reason: Client request Internal change Mold damage others_____

Change category:Design change Standard change technology change Packing change
Label change size change others_____

2.Content of change

First time change

Before change: (If necessary, please add the corresponding picture, the change details should be described clearly here)

After change: (If necessary, please add the corresponding picture, the change details should be described clearly here)

Second time change: and so on.....



Catalogue

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1. Product Introduction

XM.R3566.D uses core Rockchip RK3566 chip, it is configured with ARM Cortex-A55 CPU, Mali G52 series GPU, and 1 TOPS NPU, supported Android 12.1L system. Standard 8GB DDR and 64 GB eMMC, Wi-Fi 6+Bluetooth 5.2, high-performance and low power, the function of which can perform fluently and stably.

XM.R3566.D can support interfaces: Micro SD, 1000Mbps RJ45, USB2.0, USB3.0, Analog MIC, Debug, Power In.

Additional instructions are as follows:

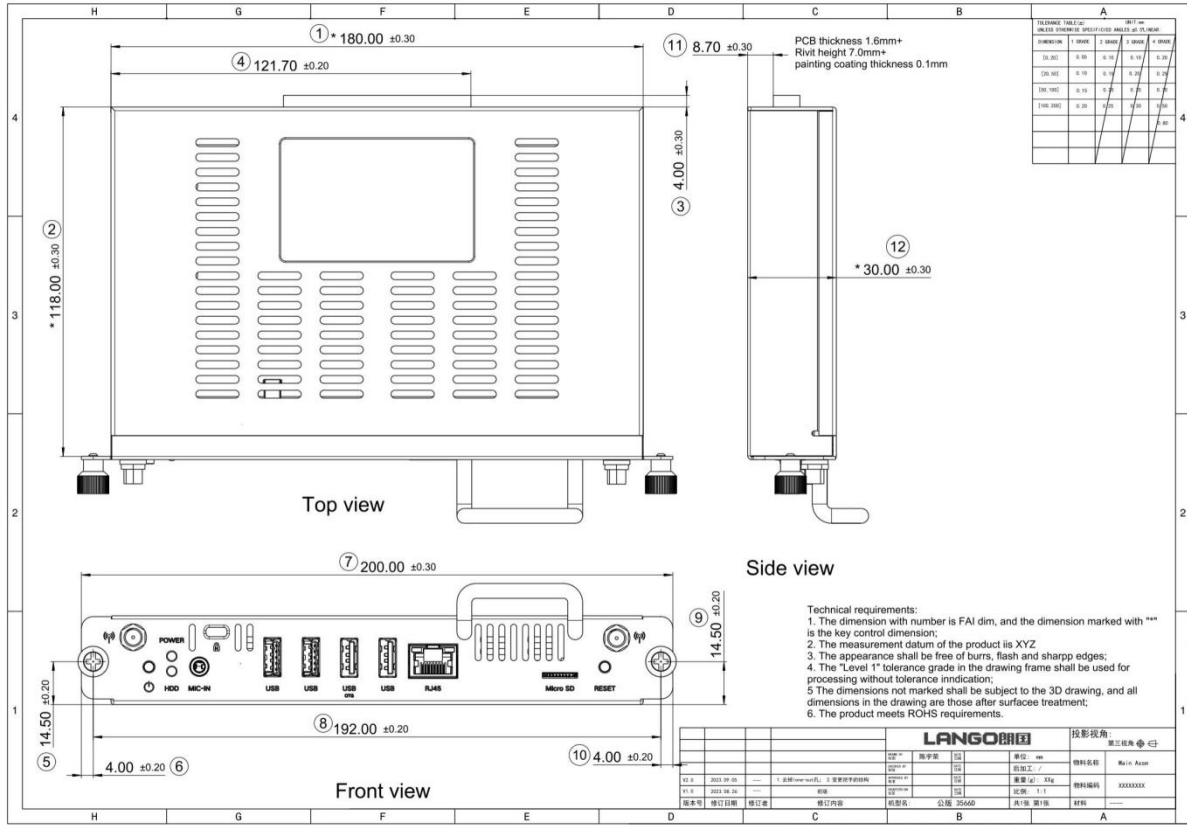
Function	Description
Multitasking window separation operation instructions	Developer Options: 1. Open two apps 2. Open the multi-task view (the small square in the bottom right corner of the screen), swipe left, long press the icon above the second task and select split left/right 3. Tap another app
USB preferences setting	Developer Options: 1. In the User version firmware, go to Settings -> About tablet -> Build number (double click 10 times quickly) -> Click back -> System -> Developer options -> Drop down to find the USB debugging option. This function is disabled by default in the user version firmware. 2. If the debugging function is disabled, the OTG port is in host mode. In host mode, the USB device (equivalent to a normal USB port) can be identified normally. 3. After the debugging function is enabled, the OTG is in Device mode and can be connected to the computer through this port. adb debugging, fastboot debugging, and firmware burning using the RK tool are also

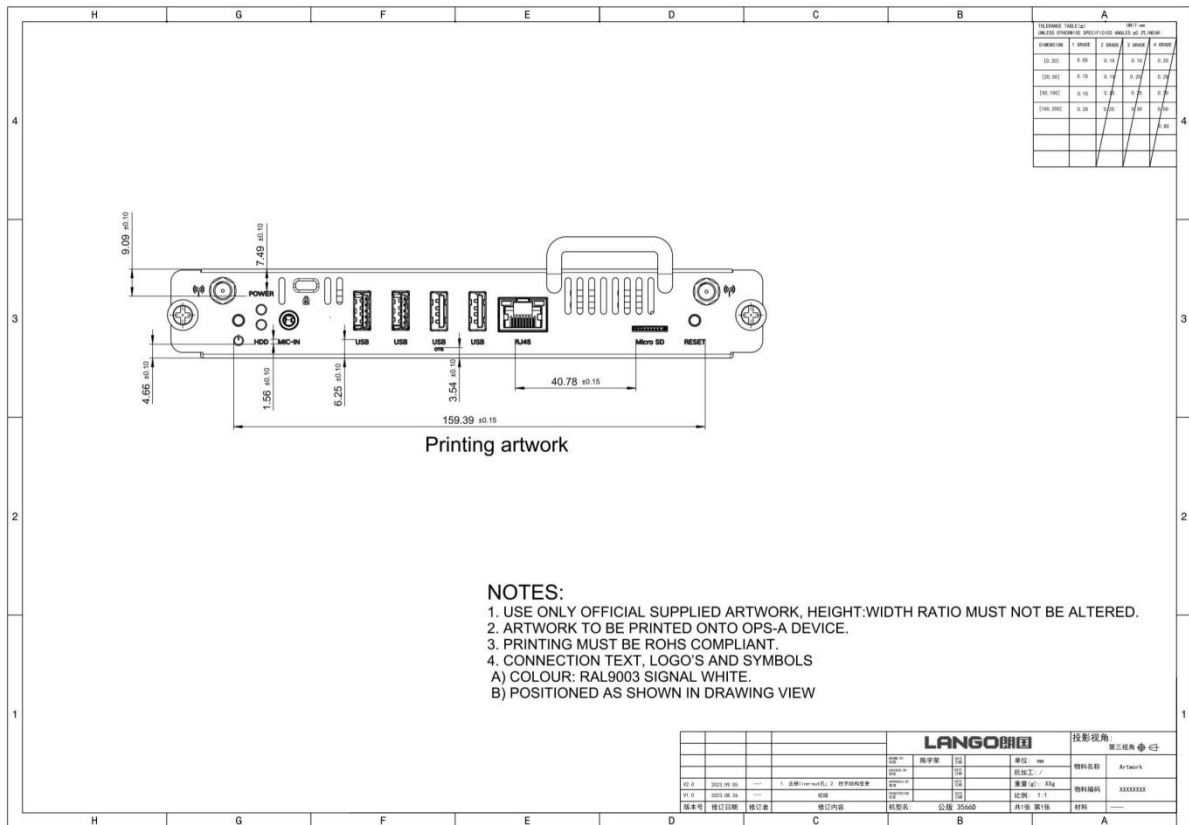


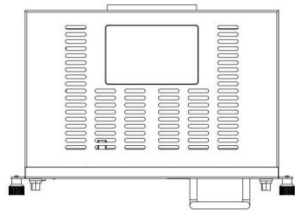
	<p>through this port.</p> <p>4. In this problem list, the OTG port must be in Device mode to enable the file transfer function.</p>
<p>The USBOTG interface connects to wireless mouses and keyboards</p>	<p>Developer Options:</p> <p>1. In the User version firmware, go to Settings -> About tablet -> Build number (double click 10 times quickly) -> Click back -> System -> Developer options -> Drop down to find the USB debugging option. This function is disabled by default in the user version firmware.</p> <p>2. If the debugging function is disabled, the OTG port is in host mode. In host mode, the USB device (equivalent to a normal USB port) can be identified normally.</p> <p>3. After the debugging function is enabled, the OTG is in Device mode and can be connected to the computer through this port. adb debugging, fastboot debugging, and firmware burning using the RK tool are also through this port.</p> <p>4. The functions in this menu require the OTG port to be in Device mode.</p>
<p>Long press/short press the OPS Power Button to power off (the power button does not work when the large screen is on)</p>	<p>Support usual function of power on , power off and screen off following large screen.</p>



2. Product Size/Graphic Description



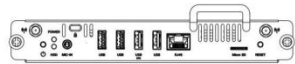




Top view



Side view



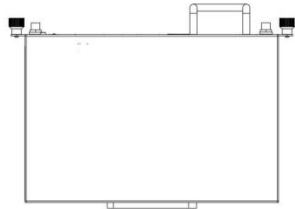
Front view



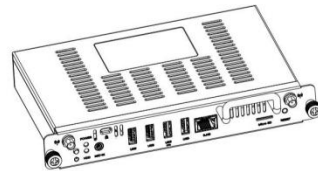
Side view



Rear view



Bottom view



Isometric view



3. Product Specification Parameter Description

Hardware configuration	
Product configuration	CPU: Quad-core Cortex-A55
	GPU: Mail-G52-2EE
	NPU: 1 TOPS
Working voltage	12V ~ 19V, current \geq 3A
RJ45	RJ45 terminal *1
USB	USB2.0 terminal *2, USB3.0 terminal *2
WIFI	WIFI 6 2.4GHz + 5GHz Bluetooth 5.2
LPDDR4	Optional 8GB
eMMC	Optional 64GB
Light	State indicator light Power indicator light
Button	Power button Reset button
Analog mic	Connects to a microphone
Temperature	Operating: 0°C to 40°C Store: -20°C to 60°C
Humidity	Operating: 10% to 85% (non-condensing) Store: 10% to 90% (non-condensing)
Altitude	Operating: 5,000 m.(max)



4. Power Supply Parameter Description

Power	Requirement	12V ~ 19V
	Max Output Power	36W



5. List of Key Components

Num.	Substitut ematerial or not	Submember name	Submember	Unit dosage	Bit number
1	Main material	SD Card holder	SOCKET,MICRO SD card holder,SMD,9PIN,14.5*16.1*0.98MM,ST EEL,90°,摩凯	1	CONU3
	Substitute material	SD Card holder	SOCKET,MICRO SD card holder,SMD,13PIN,14.5*16.1*0.98MM,S TEEL,90°,WLSD-004A (改模后),WLCO (TY)	1	CONU3
	Substitute material	SD Card holder	SOCKET,MICRO SD card holder,SMD,13PIN,14.5*16.1*0.98MM,S TEEL,90°,130010722,SUOEN	1	CONU3
2	Main material	USB3.0 Hub	IC,USB3.0 Hub,SMD,QFN-76,VL817-Q7,C0 version, VLI	1	UU7
3	Main material	DC-DC	IC,DC-DC,SMD,SOT23-6,2A,4.2V~18V, SM8102ABC,SILERGY (Shipped with high temperature test and SS TIME test report)	1	UY4
	Substitute material	DC-DC	IC,DC-DC,SMD,SOT23-6,2A,4.5V~18V, SY8120B1ABC,SILERGY	1	UY4
	Substitute material	DC-DC	IC,DC-DC,SMD,SOT23-6,2A,4.2V~18V, SY8120IABC,SILERGY	1	UY4
4	Main material	Clock chip	IC,CLOCK,SMD,8-pin SOIC,PT7C4337WEX,PERICOM	1	UL12
5	Main material	FLASH	IC,FLASH,SMD,8-SOP,4Mb,KH25V4006 6M1I02,MXIC	1	UU8(need burned)
6	Main material	DC-DC	IC,DC-DC,SMD,QFN2.5*2.5-16,6A,4V~2 4V,SY8386ARHC,SILERGY	1	UW4
7	Main material	DC-DC	IC,DC-DC,SMD,SOIC8E,3A,4.5V~28V,M P1584EN,MPS	1	UW5
8	Main material	DC-DC	IC,DC-DC,SMD,QFN68-7X7,2.7V~5.5V, RK809-5,Rockchip	1	UW1
9	Main material	DC-DC	IC,DC-DC,SMD,WLCSP20,2.7V~5.5V,R K860-0,Rockchip	1	UW2
10	Main material	PHY chip	IC,PHY,SMD,QFN-40,10/100/1000M,YT 8531C,Motorcomm	1	UN1

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11	Main material	CODEC chip	IC,AUDIO CODEC,SMD,QFN28,ES8388, Everest	1	UA3
12	Main material	e-MMC chip	IC,e-MMC,SMD,64GB,FBGA153,BWCT ARV11X64G,BIWIN	1	UL11 (need burned)
13	Main material	Main chip	IC,MAIN CHIP,SMD,FCCSP565L,RK3566,B version,Rockchip	1	UL1
14	Main material	LPDDR4X	IC,LPDDR4X,SMD, TFBGA-200,64Gb,RS2G32LV4D4BDT-5 3BT,Rayson	1	UD2
15	Main material	USB2.0 Hub	IC,USB 2.0 4-PORT Hub,SMD,SSOP28,FE1.1s (L),REACH,TERMINUS	1	UU5
16	Main material	Power distribution Switch	IC,DISTRIBUTION SWITCH,SMD,5.5V,2A,SOT23-5pin,SY6 280AAC,SILERGY	4	UU3,UU1,UU1 1,UU12
	Substitute material	Power distribution Switch	IC,DISTRIBUTION SWITCH,SMD,5.5V,2A,SOT23-5pin,SY6 280AAC,SILERGY	4	UU3,UU1,UU1 1,UU12
	Substitute material	Power distribution Switch	IC,DISTRIBUTION SWITCH,SMD,6V,2.2A,SOT23-5pin,ET A6280S2F,ETA	4	UU3,UU1,UU1 1,UU12



6. WiFi Throughput Test Report

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WiFi吞吐量测试 WiFi Throughput								
测试结论 Result		Pass			测试 Tester		安守强	
测试日期 Date		3月16日			审批 Checked		魏晓忠	
测试环境 Test environment		温度: 26.4°C 湿度: 45%						
基本信息 Basic information		阶段: RD 数量: 1		产品型号: WB55860W wifi模块: RTL8852BU		wifi驱动: [REDACTED]		主板软件版本: 20230227202543
测试设备 Test equipment		Bluetooth Speaker, PC, 华硕RT-AX86U, ZAPO-Z-2600, 华为AX3pro						
测试标准 Spec.		各模式结果符合规格要求						
测试规格 & 数据: Test data:								
模式 Mode	信道 Channel	测试值 Value		结果 Result	规格 Spec.	备注 note		
		上行 up	下行 down					
802.11g	CH1	26.4	23.3	Pass	>20Mbit/s	华硕RT-AX86U		
	CH6	27	24.4	Pass		华硕RT-AX86U		
	CH11	26	25	Pass		华硕RT-AX86U		
BT OFF	802.11n (20MHz) 2.4G	CH1	109	134	Pass	>90Mbit/s	ZAPO-Z-2600	
		CH6	107	134	Pass		ZAPO-Z-2600	
		CH11	110	134	Pass		ZAPO-Z-2600	
	802.11n (40MHz) 2.4G	CH1	214	285	Pass	>140Mbit/s	ZAPO-Z-2600	
		CH6	210	283	Pass		ZAPO-Z-2600	
		CH11	212	285	Pass		ZAPO-Z-2600	
BT ON	802.11n (20MHz) 2.4G	CH1	110	137	Pass	>45Mbit/s	ZAPO-Z-2600	
		CH6	110	129	Pass		ZAPO-Z-2600	
		CH11	105	129	Pass		ZAPO-Z-2600	
	802.11n (40MHz) 2.4G	CH1	206	265	Pass	>70Mbit/s	ZAPO-Z-2600	
		CH6	209	263	Pass		ZAPO-Z-2600	
		CH11	208	264	Pass		ZAPO-Z-2600	
802.11ac (40M)	CH149	266	293	Pass	>240Mbit/s	华为AX3pro		
	CH153	270	294	Pass		华为AX3pro		
	CH157	271	300	Pass		华为AX3pro		



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模式 Mode	信道 Channel	测试值 Value		结果 Result	规格 Spec.	备注 note
		上行 up	下行 down			
802.11ac (80M)	CH149	266	302	Pass	>240Mbit/s	华为AX3pro
	CH153	270	301	Pass		华为AX3pro
	CH157	268	303	Pass		华为AX3pro
802.11aX (40M)	CH149	263	304	Pass	>240Mbit/s	华为AX3pro
	CH153	265	303	Pass		华为AX3pro
	CH157	264	299	Pass		华为AX3pro
802.11aX (80M)	CH149	265	304	Pass	>240Mbit/s	华为AX3pro
	CH153	264	301	Pass		华为AX3pro
	CH157	270	300	Pass		华为AX3pro
802.11aX (160/80/40/20)	CH36	266	305	Pass	>240Mbit/s	华为AX3pro
	CH48	264	303	Pass		华为AX3pro
	CH64	262	306	Pass		华为AX3pro

Please refer to the attachment for details:



WB55860W WiFi
Throughput.pdf

7. Reliability Test Standards

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环境适应性测试报告

一 基本信息	产品型号	WE55860W	规格	OPS整机
	软件版本	20230904165204	测试数量	4
	测试用屏	OPS_J转HDMI_OUT		
二 测试设备	高低温交变湿热试验箱、电源、OPS_J辅板、老化监控系统、HDMI分离器、显示器。			
三 测试项目	1 恒定湿热试验			
	2 低温负荷试验			
	3 高低温循环试验			
	4 高温启动试验			
	5 低温启动试验			
四 测试方法与标准	1. 输入电压:12V DC; 2. OPS整机通过OPS_J辅板将输出信号转换成HDMI_OUT,接到HDMI分离器,HDMI分离器输出HDMI信号至显示器,观察显示器的画面输出情况。 3. 本地播放4K60Hz视频。 4. 测试时间与结果判定:详见各个试验项目			
五 试验前检查				
检查项目	判断标准	合格判定	备注	
元器件检查	无严重变形、裂纹、破损等不良,则判断合格	Pass		
外观检查	样品外表无腐蚀、霉斑、镀层/涂层剥落、划痕、开裂、变形、液体或者灌注物渗漏以及溢出等现象,文字符号标志清晰;结构件、主要元器件与控制件应完整、无机械损伤	Pass		
功能检查	测试整机功能是否正常	Pass		
六 测试现场图片				
				
七 试验中检查				
1、恒定湿热试验				
试验条件: (1). 温度: 60℃ (2). 湿度: 85% (3). 时间: 24H 判定标准: 正常工作,画面无干扰、无噪点、无死机、重启等不良现象				
编号	老化起止时间	老化结果	备注	
1号	10月12日10:00-10月13日10:00	Pass		
2号		Pass		
3号		Pass		
4号		Pass		



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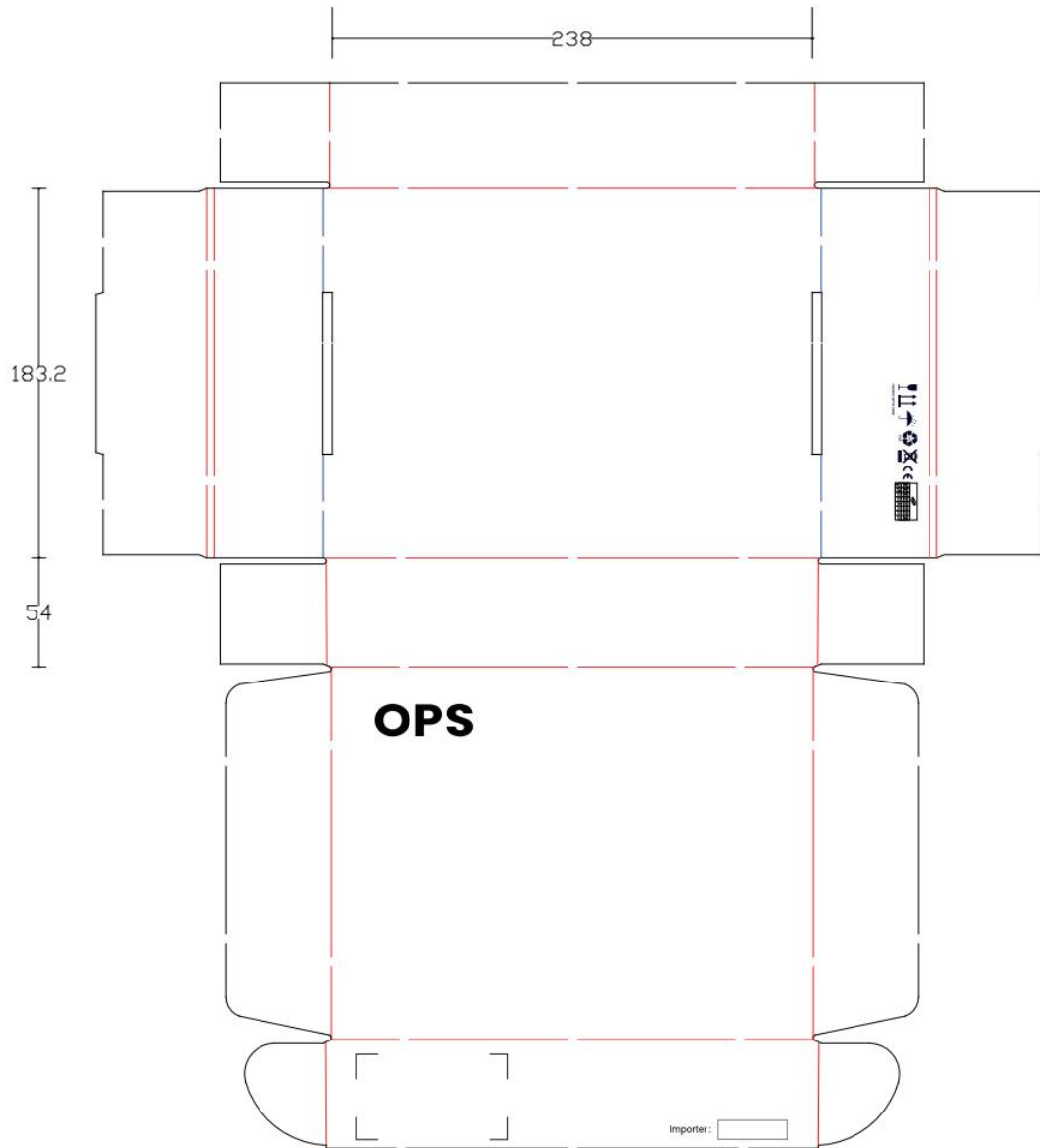
八 试验后检查			
检查项目	判断标准	合格判定	备注
元器件检查	无严重变形、裂纹、破损等不良，则判断合格	Pass	
外观检查	样品外表无腐蚀、霉斑、镀层/漆层剥落、划痕、开裂、变形、液体或者灌注物渗漏以及漏出等现象，文字符号标志清晰；结构件、主要元器件与控制件应完整、无机械损伤	Pass	
功能检查	测试整机功能是否正常	Pass	
九 测试现场图片			
			
测试备注:			
测试结果	PASS	日期	测试
		23/10/20	罗武
		审批	核准
		过其松	过其松

Please refer to the attachment for details:



WB55860W
环境适应性试验测

8. Packing and Transportation Instructions

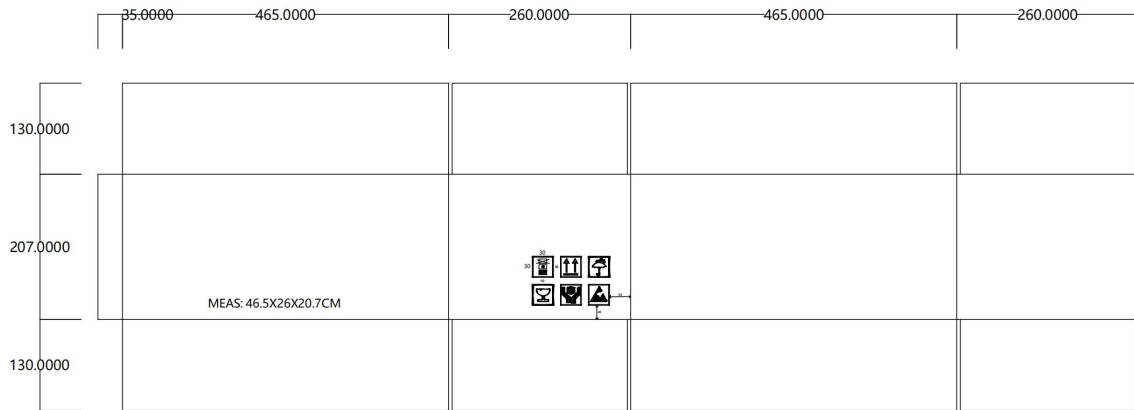


EDLA Android OPS Computer_WB55860W Aircraft box specification:

- 1) External size 247*185*55, unit: mm
- 2) Print black logo, comply with regulations MOSH-MOAH ink
- 3) The material conforms to ROHS
- 4) 250g Kraft paper +A9120, T=2mm , external size 247*185*55mm

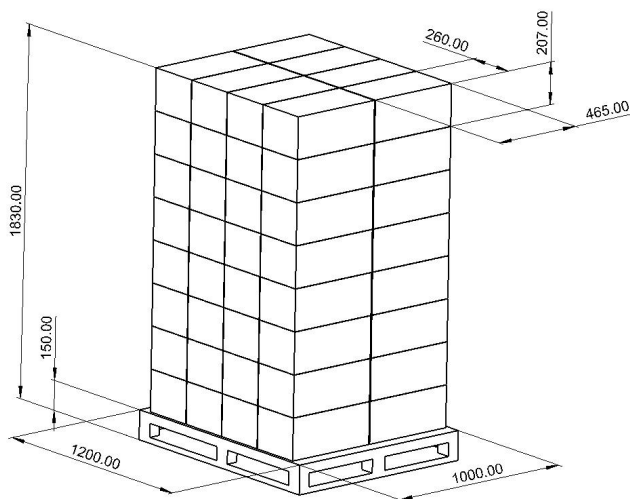
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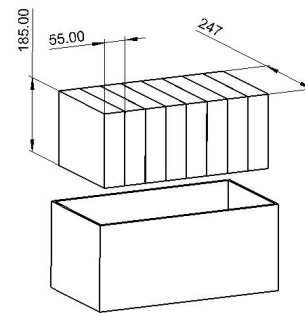


EDLA Android OPS Computer_WB55860W shipping box specifications:

- 1) Unit: External size 465*260*207, mm
- 2) Print black logo, comply with regulations MOSH-MOAH ink
- 3) The material conforms to ROHS
- 4) Material K=K, five layers of grams (160/90/70/90/126) T=6mm
- 5) Tolerance +5mm



Isometric view
Pallet package(1:20)



Isometric view
Gife box (1:10)

US 1000x1200 Pallet
Single Retail box size: 247x185x55mm;
Single 8-in-1 transportation carton size: 465X260X207mm;
Max. g'ty per layer: 8Max;
layer loading: 8Total Q'ty per US pallet: 512 pcs (64 cartons).



9. Safety and Certification Requirements

LANGO is not responsible for arranging this test.



10. Annex List

Project	Quantity
desiccant	1

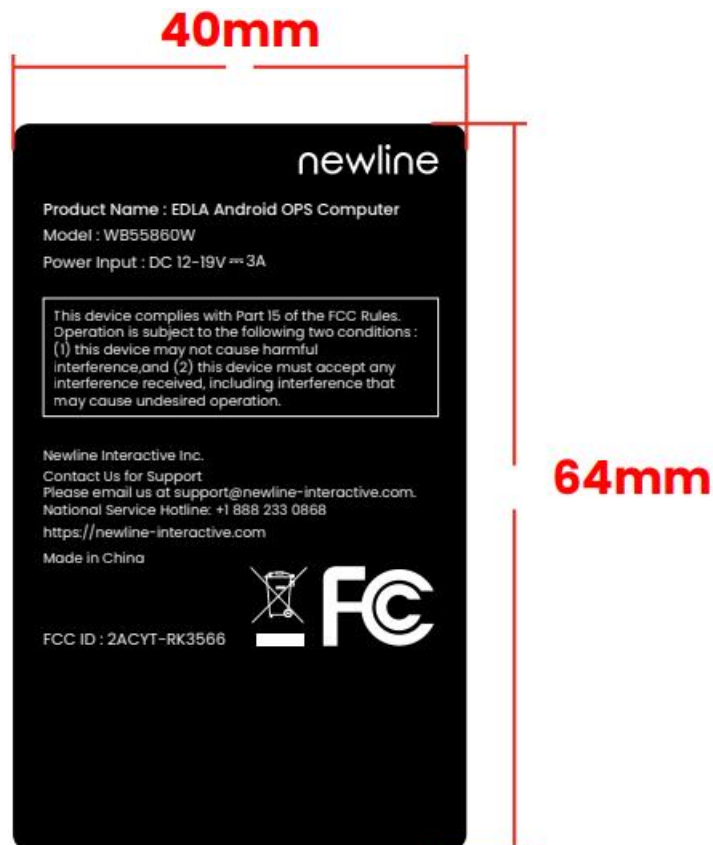


11. Commercialized Information



newline 3566
OPS盒子铭牌-202

Nameplate:



newline 3566
OPS盒子标签-202

Label description summary:



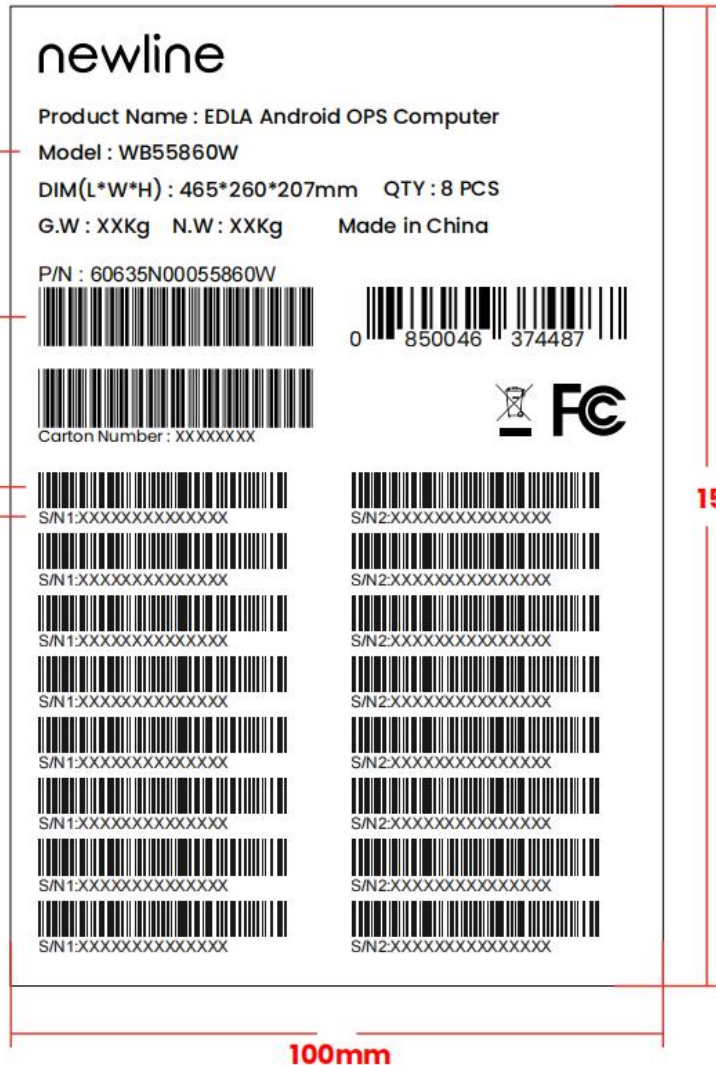
Large box label:

N.W: 依实际净重填写 (产品的重量·不包含附件·)
 G.W: 依实际毛重填写 (包装后整体的重量·)
 QTY: 每箱实际装的产品数量
 DIM: 打包装箱的外尺寸

根據FTI料號編碼原則
 P / N : 98100C570Z0000

根據FTI Serial number編碼原則
 序列號順序排法

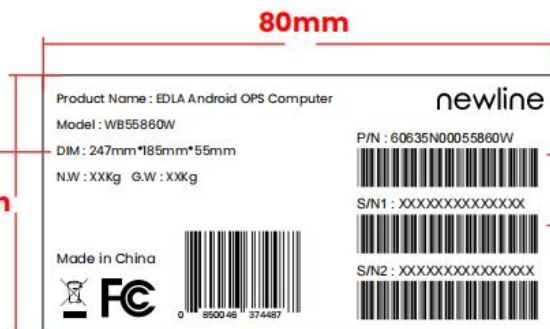
note:
 1.材质: 空白銅板紙
 2.尺寸: 100mm*150mm
 3.印刷黑色標志·符合法規MOSH-MOAH油墨
 4.材质材质符合ROHS



Single EDLA Android OPS Computer box label:

N.W: 依实际净重填写 (产品的重量·不包含附件·)
 G.W: 依实际毛重填写 (包装后整体的重量·)
 QTY: 每箱实际装的产品数量
 DIM: 打包装箱的外尺寸

40mm



根據FTI料號編碼原則
 P / N : 98100C570Z0000

根據FTI Serial number編碼原則

LANGO S/N2:

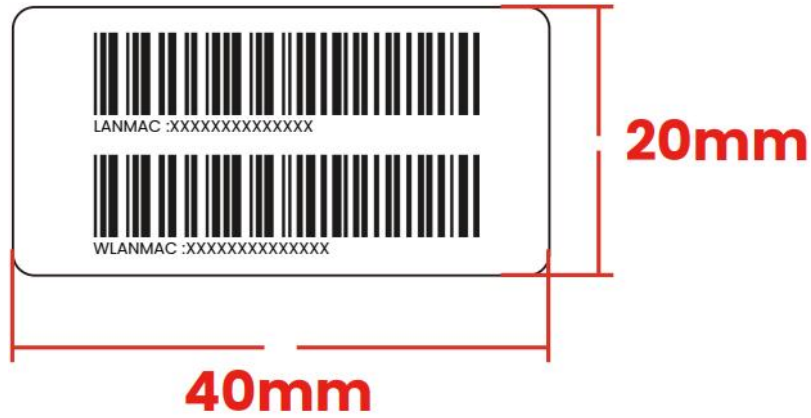


HiteVision S/N1:

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MAC:





12. Warning

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution:

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Non-modification Statement

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

Antenna	BT/BLE: 4.19dbi WiFi 2.4GHz: Antenna A:4.19dbi; Antenna B:4.19dbi WiFi 5GHz BAND1: Antenna A: 4.26dbi; Antenna B:4.26dbi BAND4: Antenna A:4.46dbi; Antenna B:4.46dbi
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