# **MB545A User Manual**

### Warnings

#### 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,

(2) this device must accept any interference received, including interference that may cause undesired operation.

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.

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

#### FCC RF Radiation Exposure Statement:

1. This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

2. This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment.

This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

#### Content

Declaration	1
Product Instruction	1
Power on the Product	3
Insert MicroSD Card	3
Home Screen	3
System Bar	7
Applications	10
HDMI Output	11
HDMI IN	12
Language	14
Date & Time	15
Volume	16
Wi-Fi	17
Ethernet	17
Bluetooth	
Virtual Keyboard	
Switch Input Methods	20
Scheduled Power On/Off	21
Surf Online	25
Browse Files	
Play Media	
Install & Uninstall Apps	
Reset to Factory Default	35
Basic Specification	

# Declaration

- Please read the instructions carefully before equipment installation and using the device.
- ✓ Do not put the product in high temperature, humid or dusty environment.
- ✓ Do not drop, crash or break down this product.
- Do not power off the device when it's formatting or upgrading, otherwise it will cause operation system error.
- This product is not waterproof.
- ✓ Use only approved add-on enhancements.



#### **Product Instruction**

- 1. LTE Antenna
- 2.WI-FI Antenna
- 3. Power Slide Switch: Switch On/Off

#### LED Indicator:

Blue Power supply is on.
--------------------------

**Light Off** Power supply is off.

4. USB Type-C: Support OTG, support DisplayPort 1.2 (up to 2K 60Hz)

- 5. USB 3.0
- 6. USB 2.0
- 7. UART: RS232 x 1 (3 pin, GND/TX/RX)



8.Earphone Jack

- 9.HDMI IN
- **10. HDMI Output**
- 11. RJ45 : Support Ethernet 10/100/1000M
- **12. DC in :** AC 100-240Vac, 2A max. 50-60Hz, DC 12V±5%
- **13.GPIO Output**
- 14. PIR (for Motion Detection connected with extension cable)
- 15. IR (for Remote Control connected with extension cable)
- 16. MicroSD Card



#### **Power on the Product**

**Step 1** Connect the HDMI port (#10 in **Product Instruction**) of MB545A to the monitor by a HDMI cable.

**Step 2** Connect the power adapter into the DC In jack (**#12**) of MB545A and power on it, then turn on the power switch (**#3**).

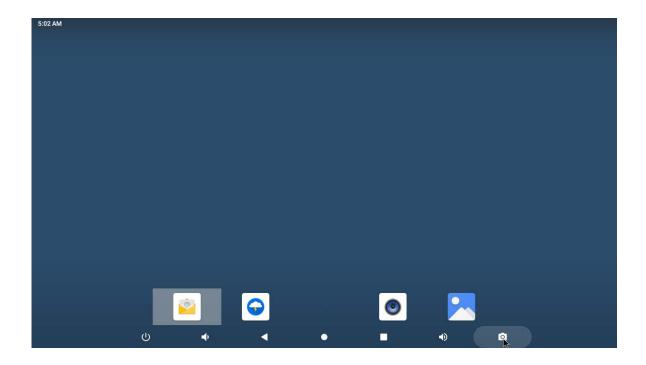
**Step 3** Use a remote control or plug a mouse or keyboard by USB (**#5** or **#6**) to operate. Mouse left button for "Enter", right button for "Back".

### Insert MicroSD Card

This product supports external MicroSD card. Please insert your SD card into the MicroSD Card Slot (**#16** in **Product Instruction**) on the side of this product.

#### **Home Screen**

After boot up completed, you will see the system desktop.

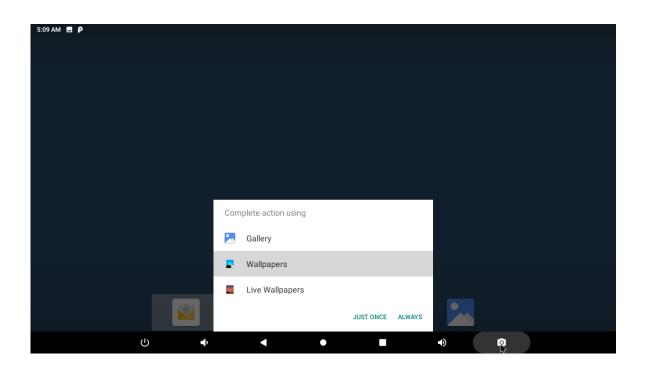


On the home screen, you can press the spacebar to open the wallpaper or widget dialog, then go to options and drag the widget onto the desktop.

5:08 AM 🗳 🖗							
		_					
		\$	Home settings				
		諮	Widgets				
		G	Wallpapers				
	<u></u>			٢			
	and the second s						
ሳ	4 <b>-</b>		•		•	<b>i</b>	

#### Change Wallpaper:

1. Click "WALLPAPER".



2. Select one picture from system presets or your own pictures.



3. Click "Set wallpaper" on the upper-left corner of the screen to apply the wallpaper.

#### Add Widgets:

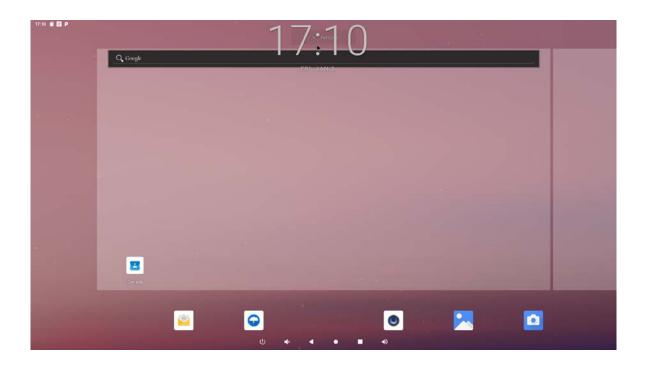
1. Click "WIDGETS".

5:11 AN	υψ <b>ρ</b>	
	alendar	ſ
	elendar 2 x 3	1
	We po 27           Bake to Code to A           Make to Come           Zame - Same           Montau Wav           The machine           Bake Priors Public           Bake Priors Public           Bake Priors Public	
•		
	nalog clock 2 × 2 Digital clock 4 × 2	
Calendar 2×3		
8	ontacts	
	ontact 1 × 1 Direct dial 1 × 1 Direct message 1 × 1	

2. Long-press a widget and drag it to desktop.

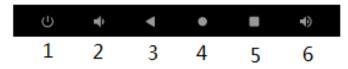
5:13 AM 🖪 🖞 🖗					
		5:1 WED, NOV 1			
ი	<u>©</u>	•	•	•	•

4. If you want to remove an icon, long press the widget and drag it to "xremove" at the top of the screen, then drag it onto the screen.

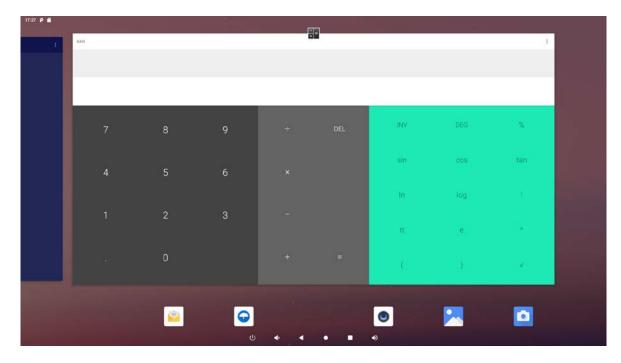


### System Bar

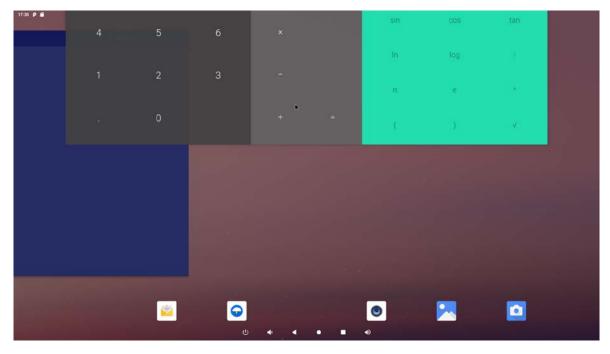
#### **Navigation Buttons**



- 1. Shutdown: Confirm shutdown.
- **2. Volume-:** Decrease the system volume.
- **3. Back:** Return to the previous page.
- 4. Home: Return to the home screen.
- 5. Recents: Switch between recently used apps.



To remove the application from the list, swipe up to remove it from the list.



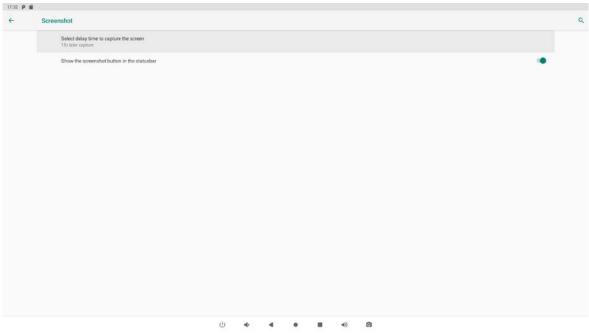
6. Volume+: Increase the system volume.

#### **Optional button: Screenshot**

System also provides a screenshot button that can be added to navigation bar.

To add the screenshot button, click "**Settings**" to open the system

setting app, and select the option "ScreenshotSetting".



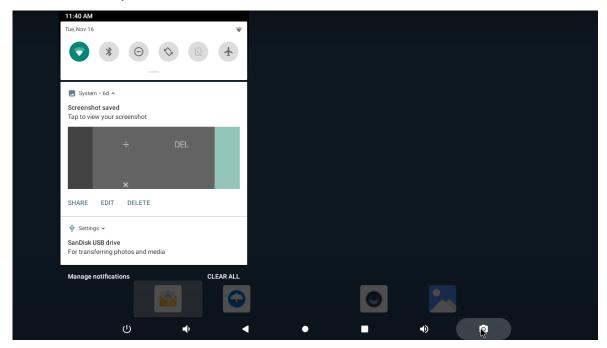
Select show screenshot button in status bar, and the screenshot button will be displayed on the far right of the navigation bar.

#### **Status Notifications**

17:35 🦏 Р 🗂

Status bar at top of the screen displays system status, such as time, Wi-Fi, SD card and USB connection etc.

Pull down to open the status window.



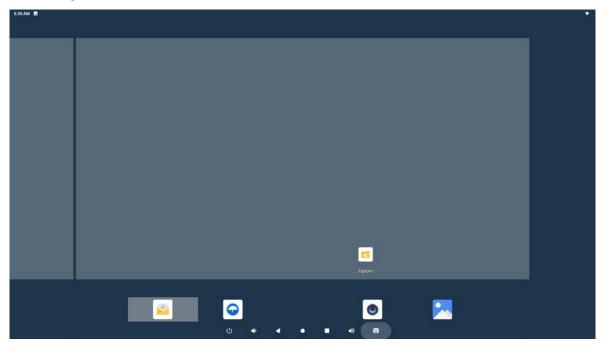
# Applications

Swipe up the bottom of the home screen to enter the application page.

20 AM						
			Q Search apps			
Apkinstaller	- = + Calculator	Calendar	Clock	Contacts	DisplayLink Presenter	Email
Explorer	Files	Gallery	HDMI-In Demo	Lightning	Music	Schedule settings
Search	Settings	Sound Recorder	Video	WebView Browser Tester		
ceator	occurgo.					

The installed applications will be shown here and you can open an app by clicking its icon.

To find an app easily, you can create a shortcut by long-pressing of the icon and drag it to the home screen.



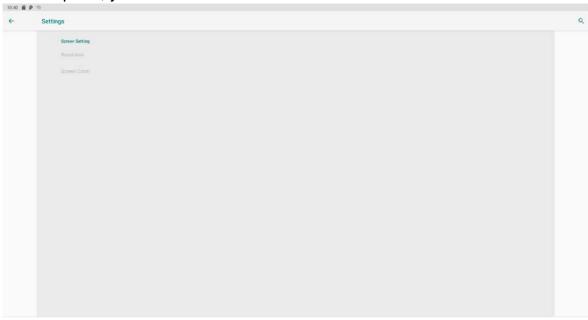
# **HDMI** Output

HDMI output display can be adjusted in system settings.

In the App list, click "**Settings**" to open the system setting app, and select the option "**Display**".

10:40 📾	P %		
+	Display		Q
	Brightness level		
	Adaptive brightness Optimize brightness level for available light		
	Waltpaper		
	Sieep Never		
	Font size Default		
	Display size Default		
	Screen saver		
	Device theme Automatic (based on wallpaper)		
	HDMI		
	Hide Status Bar	9	
	Return To Desktop		
	5 44 - 5 45 - 5 -		

In this option, you can set screen "Resolution and screenzoom".



Ů ♠ ♣ ● ■ ♠

### HDMI IN

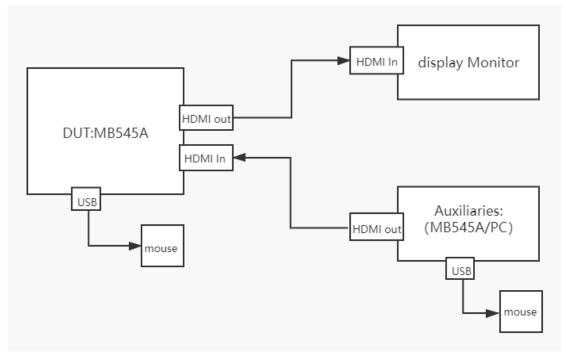
HDMI-IN can project the UI from one device to another and see all the mouse action on the interface. The operation steps as follows:

#### 1. Prepare Resources

DUT: MB545A device \*1 Auxiliaries: MB545A device \*1 / PC \*1 HDMI Cable \*2 HDMI Monitor \*1 Mouse \*2

#### 2. Setup test environment

Setup the device according to the diagram.

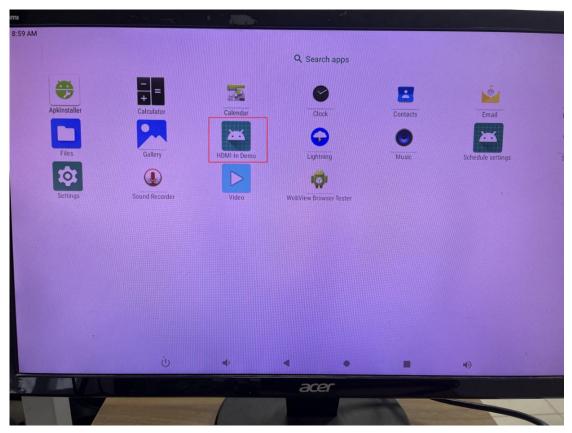


#### 3.Test Steps

3.1. Turn on the power of MB545A, connect the HDMI-In interface of MB545A to the laptop through the HDMI cable, and insert the mouse into the USB interface of MB545A.



3.2 Open the HDMI-IN Demo APK on MB545A with the mouse.



You'll notice that the monitor display switches to the laptop's desktop.



### Language

In the App list, click "Settings" to open the system setting app, and select the option "Language & input".

10:41	P 39								
÷	Lang	uages & input							٩
	Â	Languages English (United States) and Simplified Chinese (China)							
		Keyboard & lepurs Virtual keyboard Android Keyboard (A00°)							
		Physical keyboard Not connected							
	~	Advanced Input assistance, Pointer speed							
			Ċ	4	4		•)		

Click the first option "language" under "language and input" and select "Add a language" to change the system language according to your preference.

€	- Add a language	٩
Español (E	stados Unidos)	
简体中文	(中國)	
All language	н	
Afrikaans		
Aghem		
Akan		
Anaráškiel	å de la d	
Azərbayca	n (latm)	
Bamanaka	n	
Bosanski (	latinica)	
Brezhoneg		
Básáa		
Català		

### Date & Time

In the App list, click "**Settings**" to open the "**System**" setting app, and select the option "**Date & time**".

09:09 P		
÷	Date & time	م
	Automatic date & time Use network-provided time	
	Set. date January 7, 2020	
	Set time 05.29	
	Automatic time zone Use network-provided time zone	•
	Select time zone (SMT+08.00 Taipel Standard Tare	
	Automatic 24-hour format Use locale default	0
	Use 24-hour format	•

If you enabled the option "Automatic date & time" under "Date & time", system date and time will be synchronized automatically with network time when you connected to Internet.

If you want to set the time manually, you need to disable "Automatic date & time".

09:09 P		
+	Date & time	٩
	Automatic date & time Use network-provided time	<u>ب</u>
	Set date January 7, 2020	
	Set time 09.29	
	Automatic time zone Use network-provided time zone	
	Solect time zone GMT+08.00 Tapel Standard Time	
	Automatic 24-hour format Use locale detault	0
	Use 24-hour format 13.00	

In this option, you can also set time zone, time notation and date format.

### Volume

On the system bar, click the **Volume-** icon **I** to decrease the system volume, and click the **Volume+** icon **I** to increase the system volume.

#### Wi-Fi

In the App list, click "**Settings**" to open the "**Network&internet**" Settings, and select the option "**Wi-Fi**".

09:10 P	9.6									
4	Netw	rork & internet								۹
		Wi-Fi Not connected								
		Mobile network								
	0	Data usage 0 blused on WHPI								
	0	Hotspot & tethering Off								
		Mobile plan								
	~	Advanced Ethernet, Airplane mode, VPN, Private DNS								
			Ú	-	4		4)			

Turn on the Wi-Fi button and enter. The product will automatically scan the available wireless network. Select the network under the Wi-Fi network and enter a password to connect.

#### Ethernet

In the App list, click "**Settings**" to open the "**Network&internet**" Settings, select "**Ethernet**" to enter the IP that can be viewed automatically.

09:11 P 🖬						6.3
<b>←</b>	Netw	ork & internet				م
		WiFi Not connected				
		Mobile network				
	0	Data usage 0 8 used on Va-P1				
	0	Hotspot & tethering Off				
		Mobile plan				
	$\leftrightarrow$	Ethernet				
	+	Airplane mode				.0
	ŝ	VPN None				
		Private DNS Automotic				
			- 26	 	-	

Plug the Internet cable into the Ethernet port (**#11**in **Product Instruction**), and the Ethernet will connect automatically.

If you are Static IP user, please set the configurations manually.

### Bluetooth

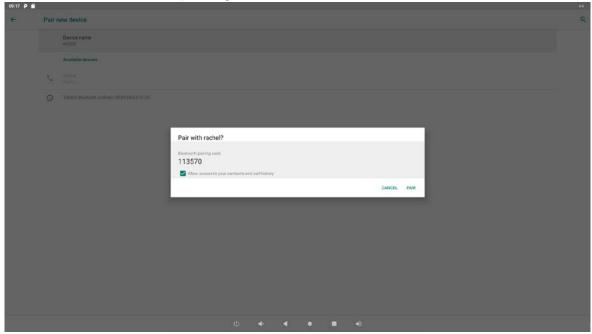
In the App list, click "Settings" to open the "Connect device" option,

select "Connect preferences", and select the option "Bluetooth".

14 P I											1
	Bluet	cooth									
	On									0	
		Device name rk3399									
	+	Pair new device						*			
	0	When Bluetooth is turned on, your device can communicate with other nearby Blue	nooth devices.								
			U	who is		1.00	db.				

Switch the Bluetooth button to **ON**, and go to the "Pair new device" option to view the available bluetooth devices around you.

Select the bluetooth device to be paired from the available devices list, send a matching request, and then click "match" in the pop-up window. In the meantime, confirm the pairing on another bluetooth device.



After pairing, the paired device will be moved to the "Currently connected" list.



# **Virtual Keyboard**

The device provides a virtual keyboard for typing.

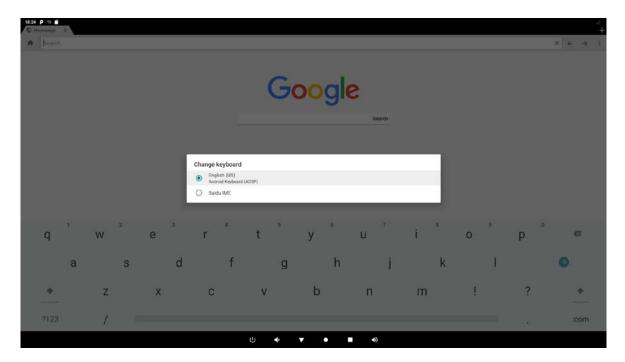
When you click in a text input box, the virtual keyboard will appear at the bottom of the screen.



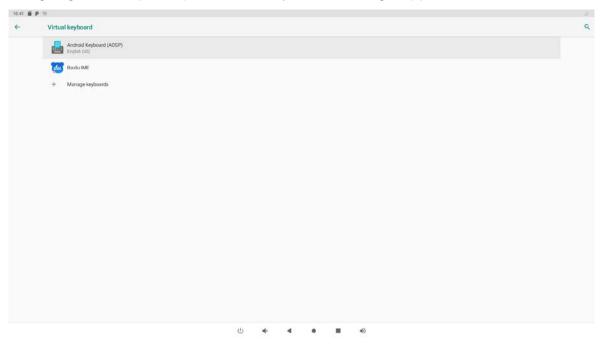
When you don't need the soft keyboard, you can click the icon on the navigation bar to collapse it.

# **Switch Input Methods**

Long press the space bar to bring up "Change keyboard".



If the long press of the space bar "Change keyboard" is not visible, please check whether the installed input method is in the "Vitual keyboard" in the "language and input" option of the system Settings app.



### **Scheduled Power On/Off**

This function is used to power the device on and off automatically at the set time.

In the App list, click "Settings" 🔯 to open the system setting app, open the

"Digital signage options "under" Advanced ", and select the "Scheduled" option.

6:24 AM 🖪	li -
Schedu	le settings
Shut Down	00:00
Re	00:00
LCD OFF	00:00
LCD ON	00:00

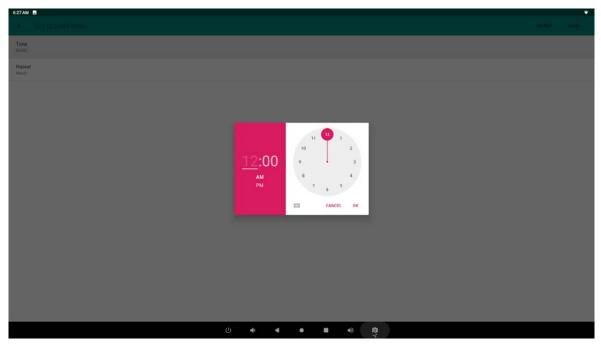
Click the single option "Set Scheduled Sleep On/Off Clocks".

6:24 AM		٠
Schedu	ettings	
Shut Down	0:00	
Re	0:00	
LCD OFF	0:00	
LCD	0:00	
	U 4• € ■ 40 130	

"Sleep ON" is when the device starts to fall asleep, and "Sleep OFF" is when the device wakes up from sleep.

6:24 AM	-									8
Schedu	ule settings									
Shut Down	00:00									C
Re	00:00									
LCD OFF	00:00									
LCD ON	00:00									
			Ċ	-	4	•	 ) Da			

Click the option "Time" to set the sleep on time of this device.



Click the option "**Repeat**" to select the days which will power on this device at the set time.

6:28 AM		÷.
<li>SHI LCO OFFI GROM</li>		
Time 10.45		
Repeat : Nover		
Rej	peat	
	Monday	
	Tuesday	
S	Wednesday	
	Thursday	
	Friday	
	Saturday	
	Sunday	
	CANCEL OK	
	U 40 4 ● ■ 40 (Q)	

After setting, click "**Done**" at the upper-right corner of the screen to save them.

09:13 P										
€ Set LCD ON Clock									REVERT	DONE
Time 1800										
Repeat Men, Tur, Wed, Thu, Fri										
	Ċ	4	۹	٠	-	•				

You will see the sleep on option checked after saving the settings.

6:28 AM								•
Schedu	le settings							
Shut	00:00							0
Re	00:00							
LCD OFF	10:45 Mor, Tim, Wed, Thu							
LCD	00:00							
		U <b>4</b> 0			~	~		
		() ♦	4	• =	•0			

For Sleep OFF, Reboot, Shut Down, you can set them as same as sleep on clocks. Note that the restart and shutdown times are performed outside of sleep hours.

6:28 AM	-								
Schedu	ule settings								
Shut Down	08:00								
Re	10:00								
LCD OFF	10:45 Mori, Tale, Wed, Thu								
LCD ON	01:00								•
			U.	(· 4	•	•			
							e A		

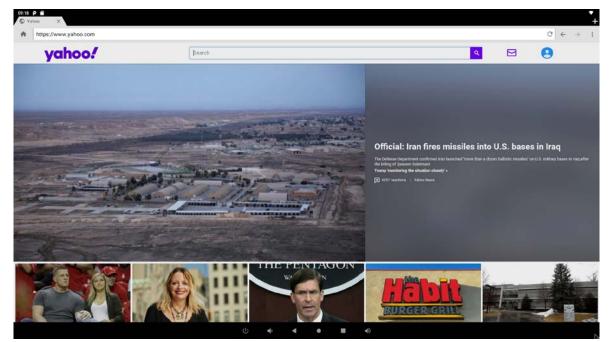
After the settings, the device will be powered off at set time, and powered on again when achieves the appointed time.

### **Surf Online**

In the App list, open "Browser" S.

When connecting the device to a network, you can visit websites, play online media or download files via the browser.

In a browser window, enter in a URL in the address bar and click "->" in the virtual keyboard to go. You can also click **I** to add new tabs to make multiple tabs opened simultaneously.



### **Browse Files**

In the App list, open "Explorer" 5.

You'll find the menu at the top, which includes: Home, LeveIUP, Multi, Editor, NewFolder, Back, Next.

09:47 Ý	e p						•
Explo	orer						
1	🖨 Home	LevelUp	🖻 Multi	C Editor	RewFolder	Back	next
۲	Internal Memor	ry					
	SD Card						
۲	USB						
					4		

We can view local files through explorer.

A Home	LevelUp	Es Multi	Editor	R NewFolder	Back	R: Next	
	Le ceverop		Landitor	Es NewFolder	BE DOCK	IL INEXT	
Android							[2019-12-25.14:32:14] dry
CARMERA							2019-12-25 10:44:07   drv
LOST.DIR							[ 2019-12-25 10:57:48   drv
picture							2019-12-25 10:44:12   drv
🚀 1.jpg							105.02 K   2002-08-07 08:08:32  -N
🚀 21.jpg							627.33 K   2018-07-13 16:17:09   -rv
🔿 btmac.nand	1						17 8   2019-08-20 15:02:34   -n
👼 BurnTest-V(	0.1-20160126.apk						503.56 K   2017-02-15 18:58:25  -h
🗃 coastal_hig	hway.mp4						16.94 M   2013-01-25 10:38:56   -N
cpufrequen	cy.apk						295.63 K   2017-05-11 12:11:44   -n
👼 EnableFulls	creen_v0.2.apk						41.45 K   2016-03-10 14:22:48   -fV
🕥 ethmac.nan	d						
ethmac.nan	d						21 8   2019-08-20 15:02:23   -

Long-press a file or folder to do file operations, such as copy, delete, move (cut), paste, rename, send (share) and create shortcut.

69:50 🕆 🗃 P						÷
/storage/4402BF2						
A Home	83 LevelUp		NewFolder	BB Back	E Next	
Android						12010/12/25 14:32:14 i drw
CARMERA						12019-12-25 10.4407 Lidne
						12019-12-25 10:57,48   dov
picture			Copy			(2019-12:25:10:44:12.) dow
🐝 1.jpg			Move			105.02 K   2002-06 07 08 08.32   -nv
🐋 21.jpg			Paste Rename			627.13 K (2016-07-13 16-17-09) -rv
S btmac.nand			Send			17 8   2019 08 20 18 02 34   rw
🗿 BurnTest-V	1.1-20160125.apk		Create shotcut			503.56 K   2017/02/15 18:58:26 J rw
coastal_hig	hway.mp4					16.94 M (2012-01-2510-38.56) -w
G cpufrequen	:y.apk					296.43 K (2017/05/11 12:11:44) rw
EnableFulls	creen_v0.2.apk					A1.45 K ( 2016-03:10 14:22:48 ) rw
ethmac.nar	d					218(2019-0820 15-02-23) rw
		ى	* * *	•		

If you want to select several files/folders at once, click "Multi" in the menu, and then select files/folders. The selected files/folders will be highlighted in orange.

A Home	LevelUp	En Multi	Editor	RewFolder	RE Back	Next Next	
Android							[2019-12-25.14:32:14] dn
CARMERA							2019-12-25 10:44:07   dn
LOST.DIR							2019-12-25 10:57:48   dr
picture							2019-12-25 10:44:12   dn
🗴 1.jpg							105.02 K   2002-08-07 08:08:32  -n
¥ 21.jpg							627.33 K   2018-07-13 16:17:09   -n
btmac.nand							17 B   2019-08-20 15:02:34   -n
	.1-20160125.apk						503.56 K   2017-02-15 18:58:25   -h
coastal_hig	1way.mp4						16.94 M   2013-01-25 10:38:56   -n
cpufrequent	cy.apk						295.63 K   2017-05-11 12:11:44   -n
EnableFulls	creen_v0.2.apk						41.45.K   2016-03-10.14:22:48  -n
ethmac.nan	d						21 8   2019-08-20 15:02:23   -n

Click "Editor" in the menu to operate the selected files/folders.

# Play Media

With the provided apps, you can play your media files on your storage, such as pictures, music and videos.



#### Gallery

This app can be used to play pictures and videos.



#### **Music Player**

This app can be used to play music.



#### Video Player

This app can be used to play videos.

Supported media format:

Picture: HD JPEG, BMP, GIF, PNG, WEBP.
Music: MP3, WMA, AAC, WAV, OGG, FLAC.
Video: Avi, Ts, Vob, Mkv, Mov, ISO, wmv, asf, flv, dat, mpg, mpeg, mp4.

### Install & Uninstall Apps

#### **Install Apps**

Before installing an app, please download the app (.apk) to via the browser, or copy a downloaded app to the device from your computer.

Then you can open "ApkInstaller"

downloaded app.

First installation prompt "you need grant access READ\_EXTERNAL\_STORAGE" select ok.

osas 🔶 📫 P Apkinstaller	
	Install
	Manage
	Exit You need to grant access to READ_EXTERNAL_STORAGE, WRITE_EXTERNAL_STORAGE
	OK Cancel
	(j w a a a

Choose "Allow".

09.54 🕈 💼 P Apkinstaller	
	Install
	Manage
	Exit Allow ApkInstaller to access photos, media, and files on your device?  EXXY ALLOW
	(j) •(•) • ■ •(>)

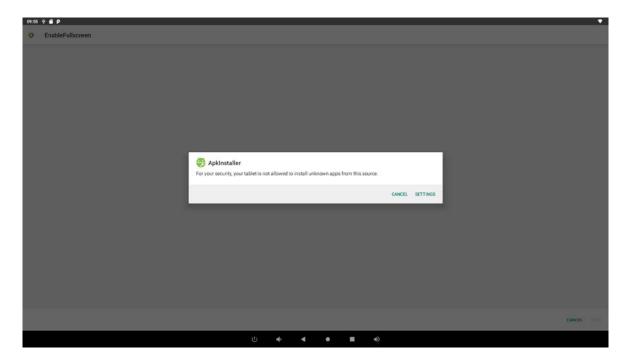
Enter the installation interface and click Install.

ce:su 🛊 🖻 👂 Apkinstaller	
	Install
	Manage
	Exit

The apk files will be automatically scanned in the right side list.

cesta 🕸 🗃 P Install	
Path: USB Memory/storage/44C2BF2CC2BF20DA	
	Directory: US8 Memory/storage/44C28F2CC28F2CDA
🖀	FactoryTest_RK10P_8.1_v1.1.0.apk
picture	MagneSafeHID_20141008.apk
LOST.DIR	BurnTest-V0.1-20160126.apk
CARMERA	FactoryTest_RK10P_9.0_v1.0.2.apk
Android	FactoryTest_RK15N_6.0_v2.2.1.apk
	FactoryTest_RK15N_v2.2_20190614_for8.1.apk
	FactoryTest_RK7N.apk
	FactoryTest_RK7NC_9.0_v1.0.1.apk
	FactoryTest_RK7N_5.1_3188.apk
	😽 Geekbench.apk
	😁 cpufrequency.apk
	EnableFullscreen_v0.2.apk
	FactoryTest_MB543_3288.apk
	FactoryTest_MB543_5.1_v2.4.apk
	FactoryTest_RK10N.apk
	FactoryTest_RK10N_5.1.apk
ى مە مە ھ	4)

Click the apk you want to install.



If "Install blocked" is prompted when installing an app, please open "Settings" and select the option "Allow from this sources" and then back to reinstall the app.

09:55 🔶 1	ii P	
4	Install unknown apps	Q
	Zekkretaller 20140810.0.0	
	Allow from this source	
	Your tablet and personal data are more vulnorable to attack by unknown apps. By installing apps from this source you agree that you are responsible for any damage to your tablet or loss of data that may result from their use.	
	ال ا	

Click "Install" or "Next" until it turns to "Install", and then waiting for installation finished.

09:55	Ý 🖞 P		•
•	EnableFullscreen		
	App installed.		
	· · · · · · · · · · · · · · · · · · ·		
		DONE	
		DONE	OPEN
	(l) <b>d b b</b> (l)		

You can also download an android app market, and install the apps via the market.

#### **Uninstall Apps**

**Method 1**: Use the app "**ApkInstaller**" to uninstall Double click to enter "**Manage**".

1128 🖬 P 🕈 Apkinstaller	
	instali
	Manage O
	Exit

Find the app you want to uninstall and select it.

	£ P Ý
	age
20160830_6.	Apkinstaller
	Calculator
	Calendar
rk_camera2_v1.0.1	Camera
2	Clock
1.7.3	Contacts
	Email
0.	EnableFullscreen
2019011	Explorer
	Files
1.1.5-2018092	Gallery
4.4.	Lightning
	Music
	Search

Select "**Uninstall**" in the pop-up window and confirm "OK" to uninstall the app.

11:29 @ P + Manage		
Apkinstaller		20160830_6.0
Calculator		9
Calendar		9
Camera		rk_camera2_v1.0.15
Clock	Action	9
Contacts	Launch	1.7.31
Email	Export	9
C EnableFullscreen	Uninstall	0.2
Explorer -	Cancel	20190114
Files		9
Gallery		1.1.5-20180920
G Lightning		4.4.2
O Music		9
Q Search		3
	() ★	

Method 2: Use Settings' App Management to uninstall

Open "**Settings**" in the App list and select the option "**Apps & notifications**". In this option; Open "See all apps" in this option and you will see a list of installed applications.

11:37	E P								
4	App info								
4	Android Keyboard (AOSP) 246 kB								
۲	Apkinstaller 119kB								
	Calculator 0.0								
	Calendar 0.8								
٥	Camera 0 B								
0	Clock 73,73 KB								
8	Contacts 0B								
2	Email 213k0								
•	EnableFullscreen 104k8								
6	Explorer 34.47 MB								
	Files 0 B								
	Gallery 0 B								
•	Lightning 5.21540								
		U	-		1	4)		•	

Click the app you want to remove to enter the detail page.

09:57 🔶 📾	ρ								
4	App in	nfo							٩
		EnableFullscreen Installed							
			UNINSTALL					FORCE STOP	
		Notifications On							
		Permissions No parmations requested							
		Storage 104 kB used is internal storage							
		Data usage No data used							
	~	Advanced Open by default, Store							
				Ċ	4		4)		

Click the "**Uninstall**" button and select "OK", and then waiting for uninstallation finished.

### **Reset to Factory Default**

Please make sure to back up the important data before resetting the device. In the App list, click "**Settings**" is to open the system setting app, enter "system" and select "Reset options".



Click "Erase all data (factory reset)" option.

10:01 P	P #							*
←	Reset options							Q
	Reset Wi-Fi, mobile & Bluetooth							
	Reset app preferences							
	Erase all data (factory reset)	*						
			0	6 4		4)		

Click "RESET TABLET" button.

10:02	P Ý #
4	Erase all data (factory reset)
	This will erase all data from your tablet's Internal atorage, including.  • Your Google account • Devenloaded appa • Ausc • Photos • Dhe user data • The tablet's Internal atorage including. • Devenloaded appa • Devenloaded
	DESET TARLET
	U #

Click "Erase everything" button, and then waiting system reboots and resets to factory default.

11:47 🖬 P									
÷	Reset?								
	our personal information and downloaded apps? You can't undo this a	ction!	1	DASE PVD	IVTHING				
		Ċ	-	4		40	•		

# **Basic Specification**

GPU       Mali-T860MP4         SDRAM       2GB/4GB(Optional)         FLASH       eMMC 16GB/32GB(Optional)         Power Supply       DC 12V/2.0A adapter (CE, FCC, PSE certified)         Power Supply       DC 12V/2.0A adapter (CE, FCC, PSE certified)         Power Indicator       Power supply ON: Green; Power supply OFF: LED light off         (LED)       Main Features         OS       Android9         Support       Decoder         4K VP9 Video decoder, H.265/H.264 video decoder         Format       1080P other video decoders (VC-1, MPEG-1/2/4, VP8)         Support       Media         Avi/Ts/Vob/Mkv/Mov/ISO/wmv/asf/flv/dat/mpg/mpeg/mp4         Format       NP3/WMA/AAC/WAV/OGG/FLAC         Format       HD JPEG/BMP/GIF/PNG/WEBP         Format       HD JPEG/BMP/GIF/PNG/WEBP         Format       HDR HDR10 and HLG modes         Type-C x 1 – support OTG       Type-A USB 2.0 x 1         Type-A USB 3.0 x 1       Type-A USB 3.0 x 1         Card Reader       Micro SD card, Maximum support 128GB         HDMI Output       HDMI 2.0, support 1080P         LAN       Ethernet 10/100/1000M standard RJ45         Wireless       Wireless 2.4G/5G dual-band Wi-Fi, IEEE802.11 a/b/g/n/ac         Bluetooth       V4.2								
GPU       Mali-T860MP4         SDRAM       2GB/4GB(Optional)         FLASH       eMMC 16GB/32GB(Optional)         Power Supply       DC 12V/2.0A adapter (CE, FCC, PSE certified)         Power Supply       DC 12V/2.0A adapter (CE, FCC, PSE certified)         Power Indicator       Power supply ON: Green; Power supply OFF: LED light off         (LED)       Main Features         OS       Android9         Support       Decoder         4K VP9 Video decoder, H.265/H.264 video decoder         Format       1080P other video decoders (VC-1, MPEG-1/2/4, VP8)         Support       Media         Avi/Ts/Vob/Mkv/Mov/ISO/wmv/asf/flv/dat/mpg/mpeg/mp4         Format       NP3/WMA/AAC/WAV/OGG/FLAC         Format       MP3/WMA/AAC/WAV/OGG/FLAC         Format       HD JPEG/BMP/GIF/PNG/WEBP         Format       HD JPEG/BMP/GIF/PNG/WEBP         Format       HDR HDR10 and HLG modes         Type-A USB 2.0 x 1       Type-A USB 3.0 x 1         Card Reader       Micro SD card, Maximum support 128GB         HDMI Output       HDMI 2.0, support 1080P         LAN       Ethernet 10/100/1000M standard RJ45         Wireless       Wireless 2.4G/5G dual-band Wi-Fi, IEEE802.11 a/b/g/n/ac         Bluetooth       V4.2 <t< td=""><td>Hardware Specification</td><td>าร</td></t<>	Hardware Specification	าร						
SDRAM       2GB/4GB(Optional)         FLASH       eMMC 16GB/32GB(Optional)         Power Supply       DC 12V/2.0A adapter (CE, FCC, PSE certified)         Power Supply       DC 12V/2.0A adapter (CE, FCC, PSE certified)         Power Indicator       Power supply ON: Green; Power supply OFF: LED light off         (LED)       Main Features         OS       Android9         Support       Decoder         Format       4K VP9 Video decoder, IV.265/H.264 video decoder         Format       1080P other video decoders (VC-1, MPEG-1/2/4, VP8)         Support       Media         Avi/Ts/Vob/Mkv/Mov/ISO/wmv/ast/flv/dat/mpg/mpeg/mp4         Format       MP3/WMA/AAC/WAV/OGG/FLAC         Format       MP3/WMA/AAC/WAV/OGG/FLAC         Format       HDR10 and HLG modes         Support       Photo         FOR       HDR10 and HLG modes         Type-C x 1 – support OTG       Type-A USB 3.0 x 1         Card Reader       Micro SD card, Maximum support 128GB         HDMI Output       HDM1.4, Support 1080P         LAN       Ethernet 10/100/1000M standard RJ45         Wireless       Wireless 2.4G/5G dual-band Wi-Fi, IEEE802.11 a/b/g/n/ac         Bluetooth       V4.2         4G module (optional)       EC25-E-MINIPCIE / Mi	Chipset	Rockchip RK3399 Hexa-core 2x Cortex-A72 + 4x Cortex-A53						
FLASH       eMMC 16GB/32GB(Optional)         Power Supply       DC 12V/2.0A adapter (CE, FCC, PSE certified)         Power Supply       DC 12V/2.0A adapter (CE, FCC, PSE certified)         Power Indicator       Power supply ON: Green; Power supply OFF: LED light off         (LED)       Main Features         OS       Android9         Support       Decoder         Format       1080P other video decoders (VC-1, MPEG-1/2/4, VP8)         Support       Media         Avi/Ts/Vob/Mkv/Mov/ISO/wmv/ast/flv/dat/mpg/mpeg/mp4         Format       Main Features         Support       Music         Format       MP3/WMA/AAC/WAV/OGG/FLAC         Format       MDI DPEG/BMP/GIF/PNG/WEBP         Format       HD JPEG/BMP/GIF/PNG/WEBP         Format       Type-C x 1 – support OTG         USB       Type-A USB 2.0 x 1         Type-A USB 3.0 x 1       TageB         Card Reader       Micro SD card, Maximum support 128GB         HDMI Output       HDMI 2.0, support 4K 60Hz display         HDMI In       HDMI 2.0, support 4K 60Hz display         HDMI In       HDMI 2.0, support 1080P         LAN       Ethernet 10/100/1000M standard RJ45         Wireless       Wireless 2.4G/5G dual-band Wi-Fi, IEEE802.11 a/b/g/n/ac </td <td>GPU</td> <td>Mali-T860MP4</td>	GPU	Mali-T860MP4						
Power Supply Specifications           Power Supply         DC 12V/2.0A adapter (CE, FCC, PSE certified)           Power Indicator         Power supply ON: Green; Power supply OFF: LED light off           Main Features         OS           OS         Android9           Support         Decoder           Format         1080P other video decoders (VC-1, MPEG-1/2/4, VP8)           Support         Media           Avi/Ts/Vob/Mkv/Mov/ISO/wmv/ast/flw/dat/mpg/mpeg/mp4           Format         MP3/WMA/AAC/WAV/OGG/FLAC           Format         MP3/WMA/AAC/WAV/OGG/FLAC           Support         Music           Format         HD JPEG/BMP/GIF/PNG/WEBP           Format         Type-C x 1 – support OTG           Support         Photo           HDR         HDR10 and HLG modes           Type-A USB 2.0 x 1         Type-A USB 3.0 x 1           Card Reader         Micro SD card, Maximum support 128GB           HDMI Output         HDMI 2.0, support 4K 60Hz display           HDMI In         HDMI 2.0, support 1080P           LAN         Ethernet 10/100/1000M standard RJ45           Wireless         Wireless 2.4G/5G dual-band Wi-Fi, IEEE802.11 a/b/g/n/ac           Bluetooth         V4.2           4G module (optional)         EC25-E-M	SDRAM	2GB/4GB(Optional)						
Power Supply       DC 12V/2.0A adapter (CE, FCC, PSE certified)         Power       Indicator       Power supply ON: Green; Power supply OFF: LED light off         Main Features       OS       Android9         Support       Decoder       4K VP9 Video decoder, H.265/H.264 video decoder         Format       1080P other video decoders (VC-1, MPEG-1/2/4, VP8)         Support       Media       Avi/Ts/Vob/Mkv/Mov/ISO/wmv/asf/flv/dat/mpg/mpeg/mp4         Format       MP3/WMA/AAC/WAV/OGG/FLAC         Format       MP3/WMA/AAC/WAV/OGG/FLAC         Support       Photo       HD JPEG/BMP/GIF/PNG/WEBP         Format       HDR10 and HLG modes         Type-C x 1 – support OTG       Type-A USB 2.0 x 1         Type-A USB 3.0 x 1       Type-A USB 3.0 x 1         Card Reader       Micro SD card, Maximum support 128GB         HDMI 0utput       HDMI 2.0, support 1080P         LAN       Ethernet 10/100/1000M standard RJ45         Wireless       Wireless 2.4G/5G dual-band Wi-Fi, IEEE802.11 a/b/g/n/ac         Bluetooth       V4.2         4G module (optional)       EC25-E-MINIPCIE / Mini-PCIE         UART       RS232 x 1 (3 pin, GND/TX/RX) - settings: baud rate: 115,200bps, stop bit: 8, parity: N.         Audio       Earphone + MIC(Headset)         Comm.       Remote	FLASH	eMMC 16GB/32GB(Optional)						
Power (LED)Indicator Power supply ON: Green; Power supply OFF: LED light offMain FeaturesOSAndroid9SupportDecoder4K VP9 Video decoder, H.265/H.264 video decoder 1080P other video decoders (VC-1, MPEG-1/2/4, VP8)SupportMediaAvi/Ts/Vob/Mkv/Mov/ISO/wmv/asf/flv/dat/mpg/mpeg/mp4FormatMaineMP3/WMA/AAC/WAV/OGG/FLACSupportMusicMP3/WMA/AAC/WAV/OGG/FLACFormatMP3/WMA/AAC/WAV/OGG/FLACFormatHD JPEG/BMP/GIF/PNG/WEBPFormatHDR10 and HLG modesType-C x 1 – support OTGType-A USB 2.0 x 1 	Power Supply Specific	ations						
(LED)       Android9         Support       Decoder         4K VP9 Video decoder, H.265/H.264 video decoder         Format       1080P other video decoders (VC-1, MPEG-1/2/4, VP8)         Support       Media         Avi/Ts/Vob/Mkv/Mov/ISO/wmv/asf/flv/dat/mpg/mpeg/mp4         Format       Avi/Ts/Vob/Mkv/Mov/ISO/wmv/asf/flv/dat/mpg/mpeg/mp4         Format       MP3/WMA/AAC/WAV/OGG/FLAC         Format       MP3/WMA/AAC/WAV/OGG/FLAC         Format       HD JPEG/BMP/GIF/PNG/WEBP         Format       Type-C x 1 – support OTG         Type-C x 1 – support OTG       Type-A USB 2.0 x 1         Type-A USB 2.0 x 1       Type-A USB 3.0 x 1         Card Reader       Micro SD card, Maximum support 128GB         HDMI 10       HDMI 2.0, support 4K 60Hz display         HDMI 11       HDMI 2.0, support 1080P         LAN       Ethernet 10/100/1000M standard RJ45         Wireless       Wireless 2.4G/5G dual-band Wi-Fi, IEEE802.11 a/b/g/n/ac         Bluetooth       V4.2         4G module (optional)       EC25-E-MINIPCIE / Mini-PCIE         UART       RS232 x 1 (3 pin, GND/TX/RX) - settings: baud rate:         115,200bps, stop bit: 8, parity: N.       Audio         Earphone + MIC(Headset)       Comm.	Power Supply	DC 12V/2.0A adapter (CE, FCC, PSE certified)						
Main Features         OS       Android9         Support       Decoder         K VP9 Video decoder, H.265/H.264 video decoder         Format       1080P other video decoders (VC-1, MPEG-1/2/4, VP8)         Support       Media         Avi/Ts/Vob/Mkv/Mov/ISO/wmv/ast/flv/dat/mpg/mpeg/mp4         Format       Music         Support       Music         Format       MP3/WMA/AAC/WAV/OGG/FLAC         Format       MD         Support       Photo         HD JPEG/BMP/GIF/PNG/WEBP       Format         Format       HDR10 and HLG modes         Type-C x 1 – support OTG       Type-A USB 2.0 x 1         Type-A USB 2.0 x 1       Type-A USB 3.0 x 1         Card Reader       Micro SD card, Maximum support 128GB         HDMI Output       HDMI 2.0, support 4K 60Hz display         HDMI In       HDMI 1.4, Support 1080P         LAN       Ethernet 10/100/1000M standard RJ45         Wireless       Wireless 2.4G/5G dual-band Wi-Fi, IEEE802.11 a/b/g/n/ac         Bluetooth       V4.2         4G module (optional)       EC25-E-MINIPCIE / Mini-PCIE         UART       RS232 x 1 (3 pin, GND/TX/RX) - settings: baud rate:         115,200bps, stop bit: 8, parity: N.         Audio       Ear	Power Indicator	Power supply ON: Green; Power supply OFF: LED light off						
OSAndroid9SupportDecoder4K VP9 Video decoder, H.265/H.264 video decoderFormat1080P other video decoders (VC-1, MPEG-1/2/4, VP8)SupportMediaAvi/Ts/Vob/Mkv/Mov/ISO/wmv/ast/flv/dat/mpg/mpeg/mp4FormatAvi/Ts/Vob/Mkv/Mov/ISO/wmv/ast/flv/dat/mpg/mpeg/mp4SupportMusicMP3/WMA/AAC/WAV/OGG/FLACFormatMD3/WMA/AAC/WAV/OGG/FLACFormatHD JPEG/BMP/GIF/PNG/WEBPFormatHDR 10 and HLG modesType-C x 1 – support OTGType-A USB 2.0 x 1Type-A USB 3.0 x 1Type-A USB 3.0 x 1Card ReaderMicro SD card, Maximum support 128GBHDMI OutputHDMI 2.0, support 1080PLANEthernet 10/100/1000M standard RJ45WirelessWireless 2.4G/5G dual-band Wi-Fi, IEEE802.11 a/b/g/n/acBluetoothV4.24G module (optional)EC25-E-MINIPCIE / Mini-PCIEUARTRS232 x 1 (3 pin, GND/TX/RX) - settings: baud rate: 115,200bps, stop bit: 8, parity: N.AudioEarphone + MIC(Headset)Comm.Remote Control – connected with extension cable (optional)	(LED)							
SupportDecoder4K VP9 Video decoder, H.265/H.264 video decoderFormat1080P other video decoders (VC-1, MPEG-1/2/4, VP8)SupportMediaAvi/Ts/Vob/Mkv/Mov/ISO/wmv/asf/flv/dat/mpg/mpeg/mp4FormatAvi/Ts/Vob/Mkv/Mov/ISO/wmv/asf/flv/dat/mpg/mpeg/mp4SupportMusicMP3/WMA/AAC/WAV/OGG/FLACFormatImage: State S	Main Features							
Format1080P other video decoders (VC-1, MPEG-1/2/4, VP8)SupportMediaAvi/Ts/Vob/Mkv/Mov/ISO/wmv/asf/fiv/dat/mpg/mpeg/mp4FormatMusicMP3/WMA/AAC/WAV/OGG/FLACFormatMDHD JPEG/BMP/GIF/PNG/WEBPSupportPhotoHD JPEG/BMP/GIF/PNG/WEBPFormatHDR10 and HLG modesHDRHDR10 and HLG modesType-C x 1 – support OTGUSBType-A USB 2.0 x 1Type-A USB 3.0 x 1Card ReaderMicro SD card, Maximum support 128GBHDMI OutputHDMI 2.0, support 4K 60Hz displayHDMI InHDMI 1.4, Support 1080PLANEthernet 10/100/1000M standard RJ45WirelessWireless 2.4G/5G dual-band Wi-Fi, IEEE802.11 a/b/g/n/acBluetoothV4.24G module (optional)EC25-E-MINIPCIE / Mini-PCIEUARTRS232 x 1 (3 pin, GND/TX/RX) - settings: baud rate: 115,200bps, stop bit: 8, parity: N.AudioEarphone + MIC(Headset)Comm.Remote Control – connected with extension cable (optional)	OS	Android9						
Support       Media       Avi/Ts/Vob/Mkv/Mov/ISO/wmv/asf/flv/dat/mpg/mpeg/mp4         Format       Avi/Ts/Vob/Mkv/Mov/ISO/wmv/asf/flv/dat/mpg/mpeg/mp4         Support       Music       MP3/WMA/AAC/WAV/OGG/FLAC         Format       HD       HD JPEG/BMP/GIF/PNG/WEBP         Format       HDR       HDR10 and HLG modes         Type-C x 1 – support OTG       Type-A USB 2.0 x 1         Type-A USB 3.0 x 1       Type-A USB 3.0 x 1         Card Reader       Micro SD card, Maximum support 128GB         HDMI Output       HDMI 2.0, support 1080P         LAN       Ethernet 10/100/1000M standard RJ45         Wireless       Wireless 2.4G/5G dual-band Wi-Fi, IEEE802.11 a/b/g/n/ac         Bluetooth       V4.2         4G module (optional)       EC25-E-MINIPCIE / Mini-PCIE         UART       RS232 x 1 (3 pin, GND/TX/RX) - settings: baud rate: 115,200bps, stop bit: 8, parity: N.         Audio       Earphone + MIC(Headset)         Comm.       Remote Control – connected with extension cable (optional)	Support Decoder	4K VP9 Video decoder, H.265/H.264 video decoder						
Format       MP3/WMA/AAC/WAV/OGG/FLAC         Support       Music         Format       HD JPEG/BMP/GIF/PNG/WEBP         Support       Photo         HDR       HDR10 and HLG modes         Type-C x 1 – support OTG         USB       Type-A USB 2.0 x 1         Type-A USB 3.0 x 1         Card Reader       Micro SD card, Maximum support 128GB         HDMI Output       HDMI 2.0, support 4K 60Hz display         HDMI In       HDMI 1.4, Support 1080P         LAN       Ethernet 10/100/1000M standard RJ45         Wireless       Wireless 2.4G/5G dual-band Wi-Fi, IEEE802.11 a/b/g/n/ac         Bluetooth       V4.2         4G module (optional)       EC25-E-MINIPCIE / Mini-PCIE         UART       RS232 x 1 (3 pin, GND/TX/RX) - settings: baud rate: 115,200bps, stop bit: 8, parity: N.         Audio       Earphone + MIC(Headset)         Comm.       Remote Control – connected with extension cable (optional)	Format	1080P other video decoders (VC-1, MPEG-1/2/4, VP8)						
SupportMusicMP3/WMA/AAC/WAV/OGG/FLACFormatHD JPEG/BMP/GIF/PNG/WEBPSupportPhotoHD JPEG/BMP/GIF/PNG/WEBPFormatHDR10 and HLG modesHDRHDR10 and HLG modesUSBType-C x 1 – support OTGUSBType-A USB 2.0 x 1Type-A USB 3.0 x 1Card ReaderMicro SD card, Maximum support 128GBHDMI OutputHDMI 2.0, support 4K 60Hz displayHDMI InHDMI 1.4, Support 1080PLANEthernet 10/100/1000M standard RJ45WirelessWireless 2.4G/5G dual-band Wi-Fi, IEEE802.11 a/b/g/n/acBluetoothV4.24G module (optional)EC25-E-MINIPCIE / Mini-PCIEUARTRS232 x 1 (3 pin, GND/TX/RX) - settings: baud rate: 115,200bps, stop bit: 8, parity: N.AudioEarphone + MIC(Headset)Comm.Remote Control – connected with extension cable (optional)	Support Media	Avi/Ts/Vob/Mkv/Mov/ISO/wmv/asf/flv/dat/mpg/mpeg/mp4						
Format       HD JPEG/BMP/GIF/PNG/WEBP         Support       Photo         Format       HDR10 and HLG modes         HDR       HDR10 and HLG modes         Type-C x 1 – support OTG         USB       Type-A USB 2.0 x 1         Type-A USB 3.0 x 1         Card Reader       Micro SD card, Maximum support 128GB         HDMI Output       HDMI 2.0, support 4K 60Hz display         HDMI In       HDMI 1.4, Support 1080P         LAN       Ethernet 10/100/1000M standard RJ45         Wireless       Wireless 2.4G/5G dual-band Wi-Fi, IEEE802.11 a/b/g/n/ac         Bluetooth       V4.2         4G module (optional)       EC25-E-MINIPCIE / Mini-PCIE         UART       RS232 x 1 (3 pin, GND/TX/RX) - settings: baud rate: 115,200bps, stop bit: 8, parity: N.         Audio       Earphone + MIC(Headset)         Comm.       Remote Control – connected with extension cable (optional)	Format							
SupportPhotoHD JPEG/BMP/GIF/PNG/WEBPFormatHDRHDR10 and HLG modesHDRHDR10 and HLG modesUSBType-C x 1 – support OTGUSBType-A USB 2.0 x 1Type-A USB 3.0 x 1Card ReaderMicro SD card, Maximum support 128GBHDMI OutputHDMI 2.0, support 4K 60Hz displayHDMI InHDMI 1.4, Support 1080PLANEthernet 10/100/1000M standard RJ45WirelessWireless 2.4G/5G dual-band Wi-Fi, IEEE802.11 a/b/g/n/acBluetoothV4.24G module (optional)EC25-E-MINIPCIE / Mini-PCIEUARTRS232 x 1 (3 pin, GND/TX/RX) - settings: baud rate: 115,200bps, stop bit: 8, parity: N.AudioEarphone + MIC(Headset)Comm.Remote Control – connected with extension cable (optional)	Support Music	MP3/WMA/AAC/WAV/OGG/FLAC						
FormatHDRHDR10 and HLG modesHDRType-C x 1 – support OTGUSBType-A USB 2.0 x 1Type-A USB 3.0 x 1Card ReaderMicro SD card, Maximum support 128GBHDMI OutputHDMI 2.0, support 4K 60Hz displayHDMI InHDMI 1.4, Support 1080PLANEthernet 10/100/1000M standard RJ45WirelessWireless 2.4G/5G dual-band Wi-Fi, IEEE802.11 a/b/g/n/acBluetoothV4.24G module (optional)EC25-E-MINIPCIE / Mini-PCIEUARTRS232 x 1 (3 pin, GND/TX/RX) - settings: baud rate: 115,200bps, stop bit: 8, parity: N.AudioEarphone + MIC(Headset)Comm.Remote Control – connected with extension cable (optional)	Format							
HDRHDR10 and HLG modesType-C x 1 – support OTGUSBType-A USB 2.0 x 1Type-A USB 3.0 x 1Card ReaderMicro SD card, Maximum support 128GBHDMI OutputHDMI 2.0, support 4K 60Hz displayHDMI InHDMI 1.4, Support 1080PLANEthernet 10/100/1000M standard RJ45WirelessWireless 2.4G/5G dual-band Wi-Fi, IEEE802.11 a/b/g/n/acBluetoothV4.24G module (optional)EC25-E-MINIPCIE / Mini-PCIEUARTRS232 x 1 (3 pin, GND/TX/RX) - settings: baud rate: 115,200bps, stop bit: 8, parity: N.AudioEarphone + MIC(Headset)Comm.Remote Control – connected with extension cable (optional)	Support Photo	HD JPEG/BMP/GIF/PNG/WEBP						
USBType-C x 1 – support OTGUSBType-A USB 2.0 x 1Type-A USB 3.0 x 1Card ReaderMicro SD card, Maximum support 128GBHDMI OutputHDMI 2.0, support 4K 60Hz displayHDMI InHDMI 1.4, Support 1080PLANEthernet 10/100/1000M standard RJ45WirelessWireless 2.4G/5G dual-band Wi-Fi, IEEE802.11 a/b/g/n/acBluetoothV4.24G module (optional)EC25-E-MINIPCIE / Mini-PCIEUARTRS232 x 1 (3 pin, GND/TX/RX) - settings: baud rate: 115,200bps, stop bit: 8, parity: N.AudioEarphone + MIC(Headset)Comm.Remote Control – connected with extension cable (optional)	Format							
USBType-A USB 2.0 x 1 Type-A USB 3.0 x 1Card ReaderMicro SD card, Maximum support 128GBHDMI OutputHDMI 2.0, support 4K 60Hz displayHDMI InHDMI 1.4, Support 1080PLANEthernet 10/100/1000M standard RJ45WirelessWireless 2.4G/5G dual-band Wi-Fi, IEEE802.11 a/b/g/n/acBluetoothV4.24G module (optional)EC25-E-MINIPCIE / Mini-PCIEUARTRS232 x 1 (3 pin, GND/TX/RX) - settings: baud rate: 115,200bps, stop bit: 8, parity: N.AudioEarphone + MIC(Headset)Comm.Remote Control – connected with extension cable (optional)	HDR	HDR10 and HLG modes						
Type-A USB 3.0 x 1Card ReaderMicro SD card, Maximum support 128GBHDMI OutputHDMI 2.0, support 4K 60Hz displayHDMI InHDMI 1.4, Support 1080PLANEthernet 10/100/1000M standard RJ45WirelessWireless 2.4G/5G dual-band Wi-Fi, IEEE802.11 a/b/g/n/acBluetoothV4.24G module (optional)EC25-E-MINIPCIE / Mini-PCIEUARTRS232 x 1 (3 pin, GND/TX/RX) - settings: baud rate: 115,200bps, stop bit: 8, parity: N.AudioEarphone + MIC(Headset)Comm.Remote Control – connected with extension cable (optional)		Type-C x 1 – support OTG						
Card ReaderMicro SD card, Maximum support 128GBHDMI OutputHDMI 2.0, support 4K 60Hz displayHDMI InHDMI 1.4, Support 1080PLANEthernet 10/100/1000M standard RJ45WirelessWireless 2.4G/5G dual-band Wi-Fi, IEEE802.11 a/b/g/n/acBluetoothV4.24G module (optional)EC25-E-MINIPCIE / Mini-PCIEUARTRS232 x 1 (3 pin, GND/TX/RX) - settings: baud rate: 115,200bps, stop bit: 8, parity: N.AudioEarphone + MIC(Headset)Comm.Remote Control – connected with extension cable (optional)	USB	Type-A USB 2.0 x 1						
HDMI OutputHDMI 2.0, support 4K 60Hz displayHDMI InHDMI 1.4, Support 1080PLANEthernet 10/100/1000M standard RJ45WirelessWireless 2.4G/5G dual-band Wi-Fi, IEEE802.11 a/b/g/n/acBluetoothV4.24G module (optional)EC25-E-MINIPCIE / Mini-PCIEUARTRS232 x 1 (3 pin, GND/TX/RX) - settings: baud rate: 115,200bps, stop bit: 8, parity: N.AudioEarphone + MIC(Headset)Comm.Remote Control – connected with extension cable (optional)		Type-A USB 3.0 x 1						
HDMI InHDMI 1.4, Support 1080PLANEthernet 10/100/1000M standard RJ45WirelessWireless 2.4G/5G dual-band Wi-Fi, IEEE802.11 a/b/g/n/acBluetoothV4.24G module (optional)EC25-E-MINIPCIE / Mini-PCIEUARTRS232 x 1 (3 pin, GND/TX/RX) - settings: baud rate: 115,200bps, stop bit: 8, parity: N.AudioEarphone + MIC(Headset)Comm.Remote Control – connected with extension cable (optional)	Card Reader	Micro SD card, Maximum support 128GB						
LANEthernet 10/100/1000M standard RJ45WirelessWireless 2.4G/5G dual-band Wi-Fi, IEEE802.11 a/b/g/n/acBluetoothV4.24G module (optional)EC25-E-MINIPCIE / Mini-PCIEUARTRS232 x 1 (3 pin, GND/TX/RX) - settings: baud rate: 115,200bps, stop bit: 8, parity: N.AudioEarphone + MIC(Headset)Comm.Remote Control – connected with extension cable (optional)	HDMI Output	HDMI 2.0, support 4K 60Hz display						
WirelessWireless 2.4G/5G dual-band Wi-Fi, IEEE802.11 a/b/g/n/acBluetoothV4.24G module (optional)EC25-E-MINIPCIE / Mini-PCIEUARTRS232 x 1 (3 pin, GND/TX/RX) - settings: baud rate: 115,200bps, stop bit: 8, parity: N.AudioEarphone + MIC(Headset)Comm.Remote Control – connected with extension cable (optional)	HDMI In	HDMI 1.4, Support 1080P						
Bluetooth       V4.2         4G module (optional)       EC25-E-MINIPCIE / Mini-PCIE         UART       RS232 x 1 (3 pin, GND/TX/RX) - settings: baud rate: 115,200bps, stop bit: 8, parity: N.         Audio       Earphone + MIC(Headset)         Comm.       Remote Control – connected with extension cable (optional)	LAN	Ethernet 10/100/1000M standard RJ45						
4G module (optional)EC25-E-MINIPCIE / Mini-PCIEUARTRS232 x 1 (3 pin, GND/TX/RX) - settings: baud rate: 115,200bps, stop bit: 8, parity: N.AudioEarphone + MIC(Headset)Comm.Remote Control – connected with extension cable (optional)	Wireless	Wireless 2.4G/5G dual-band Wi-Fi, IEEE802.11 a/b/g/n/ac						
UARTRS232 x 1 (3 pin, GND/TX/RX) - settings: baud rate: 115,200bps, stop bit: 8, parity: N.AudioEarphone + MIC(Headset)Comm.Remote Control – connected with extension cable (optional)	Bluetooth	V4.2						
UART115,200bps, stop bit: 8, parity: N.AudioEarphone + MIC(Headset)Comm.Remote Control – connected with extension cable (optional)	4G module (optional)	EC25-E-MINIPCIE / Mini-PCIE						
115,200bps, stop bit: 8, parity: N.AudioEarphone + MIC(Headset)Comm.Remote Control – connected with extension cable (optional)		RS232 x 1 (3 pin, GND/TX/RX) - settings: baud rate:						
Comm. Remote Control – connected with extension cable (optional)		115,200bps, stop bit: 8, parity: N.						
	Audio	Earphone + MIC(Headset)						
Human Detection Motion Detection - connected with extension cable (optional)	Comm.	Remote Control – connected with extension cable (optional)						
	Human Detection	Motion Detection - connected with extension cable (optional)						

Sensor	
GPIO	1* Output/Input pin connector
Antenna	Wi-Fi & Bluetooth x 1, LTE(optional) x 1
Mauga / Kaybaard	Support mouse and keyboard via USB; Support 2.4GHz
Mouse / Keyboard	wireless mouse and keyboard via 2.4GHz dongle
Tomporatura	Operation: -10°C ~ 60°C
Temperature	Storage: -20°C ~ 65°C
Accessories	Power adapter x 1