

# P48480HY040X\_B01

**4.0 Inches, 480xRGBx480, 16.7M Colors, Android LCM**



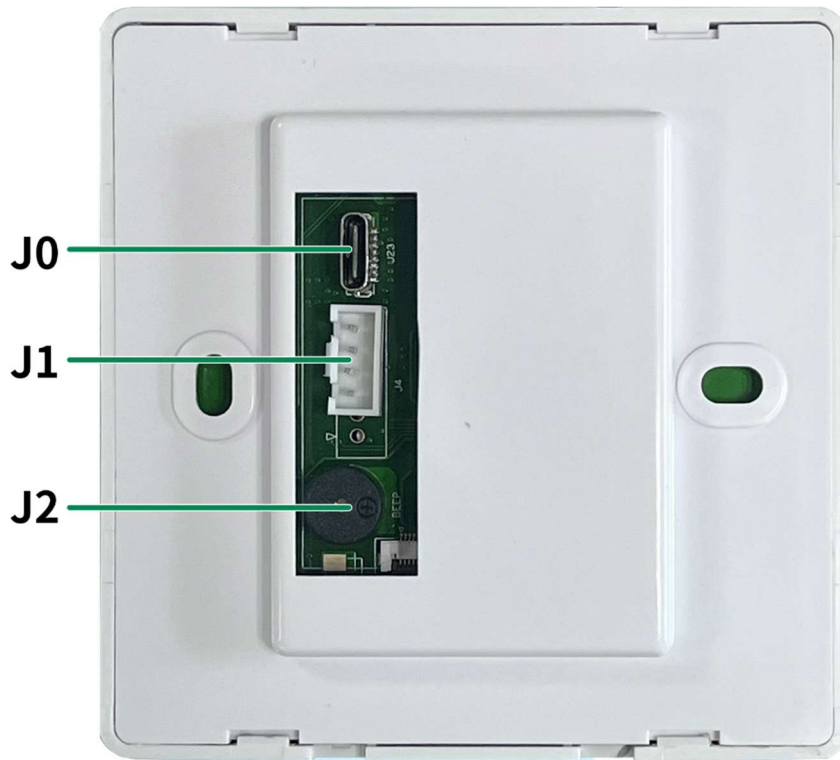
P48480HY040X\_B01 is an industrial level Android LCM based on Rockchip RK PX30 ARM. It is equipped with Quad-core Coretex-A35, supporting most decoding solutions under 1080p@60fps, H.265/H.264/MVC/VP8 solutions and many other great features of Rockchip RK PX30. Meanwhile, with good jpeg picture processing performance and 3D GPU, it supports OpenGL ES2.0 and OpenVG1.1.

Rockchip RK PX30 has high-performance external memory interface (DDR3/DDR3L/LPDDR2) capable of sustaining demanding memory bandwidths, also provides a complete set of peripheral interface to support very flexible applications.

Core Board						
<b>CPU</b>	1.5 GHz Quad-core A35 ARM					
<b>RAM</b>	1GB DDR3					
<b>eMMC</b>	8GB					
<b>GPU</b>	Mali-G31					
<b>Power Management</b>	RK809					
System Version						
<b>Android</b>	Android 8.1					
<b>Ubuntu</b>	Ubuntu16.04 or linux+QT5.12 (Default system is Android. Need to refresh firmware to choose Ubuntu. Apps need to be developed separately.)					
Display						
<b>Color</b>	16.7M (16777216) colors, 24-bit color 8R8G8B.					
<b>Active Area (A.A.)</b>	70.18 mm(W)×71.86 mm(H), 480×480.					
<b>View Area (V.A.)</b>	70.78 mm(W)×72.46mm(H), 480×480.					
<b>Resolution</b>	480×480					
<b>Backlight</b>	LED					
<b>Brightness</b>	350					
Optical Specifications						
Item	Symbol	Condition	Min.	Typ.	Max.	Unit
<b>Viewing Angle (CR≥10)</b>	θL	Φ=180° (9 o' clock)	70	80	—	Degree
	θR	Φ=0° (3 o' clock)	70	80	—	
	θT	Φ=90° (12 o' clock)	50	60	—	
	θB	Φ=270° (6 o' clock)	60	70	—	
Voltage & Current						
Item	Condition		Min.	Typ.	Max.	Unit
<b>Power Voltage</b>			6.5	12	18	V
<b>Operation Current</b>	—		—	400	—	mA

<b>Power Supply</b>	12V 2A DC (Recommended).				
<b>Reliability Test</b>					
Item	Condition	Min.	Typ.	Max.	Unit
<b>Working Temperature</b>	60%RH at 12V voltage	-20	25	70	°C
<b>Storage Temperature</b>	—	-30	25	85	°C
<b>Working Humidity</b>	25°C	10%	60%	90%	RH
<b>Protection Paint</b>	—	—	None	—	—
<b>Interface</b>					
Item	Condition	Min.	Typ.	Max.	Unit
<b>Baud Rate</b>	Standard	1200	9600	115200	bps
	User Defined	1200	—	115200	bps
<b>Serial Mode</b>	RS485*1				
<b>USB</b>	USB Debug*1				
<b>Ethernet</b>	Optional				
<b>Wi-Fi/Bluetooth</b>	Support 802.11b/g/n Wi-Fi wireless network; Bluetooth 4.0				
<b>4G LTE Module</b>	Optional				
<b>Peripherals</b>					
<b>Microphone</b>	Optional				
<b>Loudspeaker</b>	Optional				
<b>TF card</b>	—				
<b>IIC</b>	1				
<b>IO interface</b>	—				
<b>Output Power</b>	Three connectors output 3.3V /5V /12V, one of three				

### Interface Description



Num.	Interface Name	Description
J0	USB_DEBUG	OTG /App debugging/ Firmware upgrade interface
J1	User interface	Pin definition: DEBUG_RX,DEBUG_TX,GND,RS485B,RS485A,DC12V_IN
J2	Buzzer	Buzzer

