

P80480MS050I_T02

5.0 Inches, 800xRGBx480, 16.7M Colors, Android LCM



P80480MS050I_T02 is an industrial level Android LCM based on Rockchip RK3128 ARM. It is equipped with Quad-core Cortex-A7, supports most decoding solutions under 1080p@60fps, H.264/MVC/VP8 solutions under 1080p@30fps and many other great features of Rockchip RK3128. Meanwhile, with good jpeg picture processing performance and 3D GPU, it supports OpenGL ES2.0 and 1.1 OpenVG1.1.

RK3128 has high-performance external memory interface (DDR3/LPDDR2/LVDDR3) capable of sustaining demanding memory bandwidths, also provides a complete set of peripheral interface to support very flexible applications.

● Core Board

Item	Parameter
CPU	1.2GHz Quad-core A7 ARM
RAM	1GB /2GB DDR3
eMMC	8GB eMMC
GPU	Mali400MP2

● System Version

Item	Parameter
Android	Android 5.1
Ubuntu	Ubuntu 13.09 (Default system is Android. Need to refresh firmware to choose Ubuntu. Apps need to be developed separately.)

● Display

Item	Parameter	Description
Color	16.7M (16777216) colors	24-bit color 8R8G8B
Active Area (A.A.)	108.0 mm(W)X64.8 mm(H)	800×480
View Area (V.A.)	110.4 mm(W)×67.1 mm(H)	800×480
Resolution	800×480	
Backlight	LED	-
Brightness	300nit	-

● Optical Specifications

Item	Symbol	Condition	Values			Unit	Remark
			Min.	Typ.	Max.		
Viewing Angle (CR _{≥10})	θ _L	Φ=180° (9 o'clock)	65	75	-	Degree	
	θ _R	Φ=0° (3 o'clock)	65	75	-		
	θ _T	Φ=90° (12 o'clock)	65	75	-		
	θ _B	Φ=270° (6 o'clock)	65	75	-		

● Voltage & Current

Item	Condition	Min	Typ.	Max	Unit
Power Voltage		5.0	12.0	36.0	V
Operation Current	-	-	400	-	mA
Recommended power supply: 12V 3A DC					

● Reliability Test

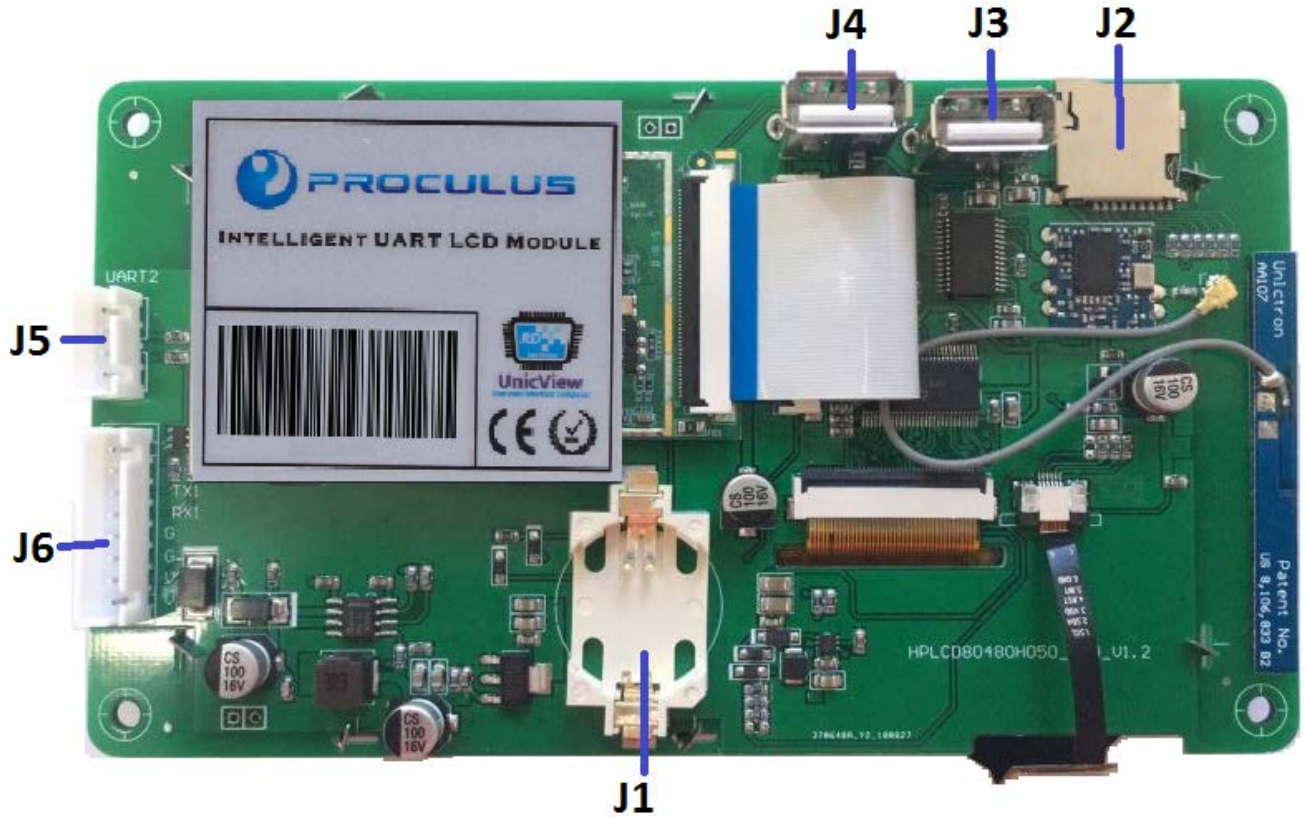
Item	Condition	Min	Typ.	Max	Unit
Working Temperature	60%RH at 12V voltage	-30	25	70	°C
Storage Temperature	-	-30	25	85	°C
Working Humidity	25°C	10%	60%	90%	RH
Protection Paint	-	-	None	-	-

● Interface

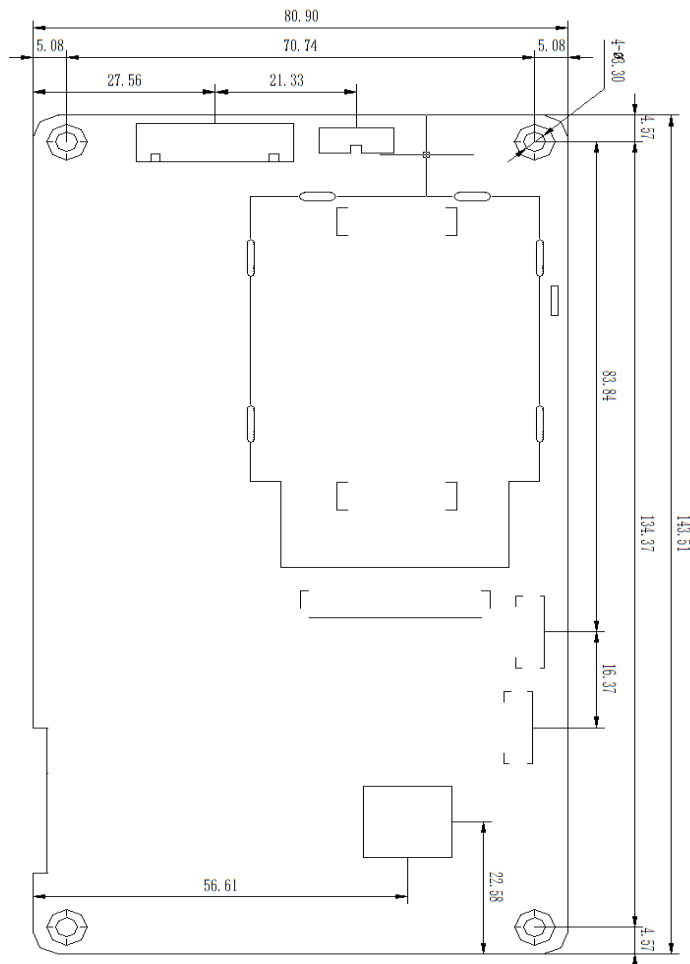
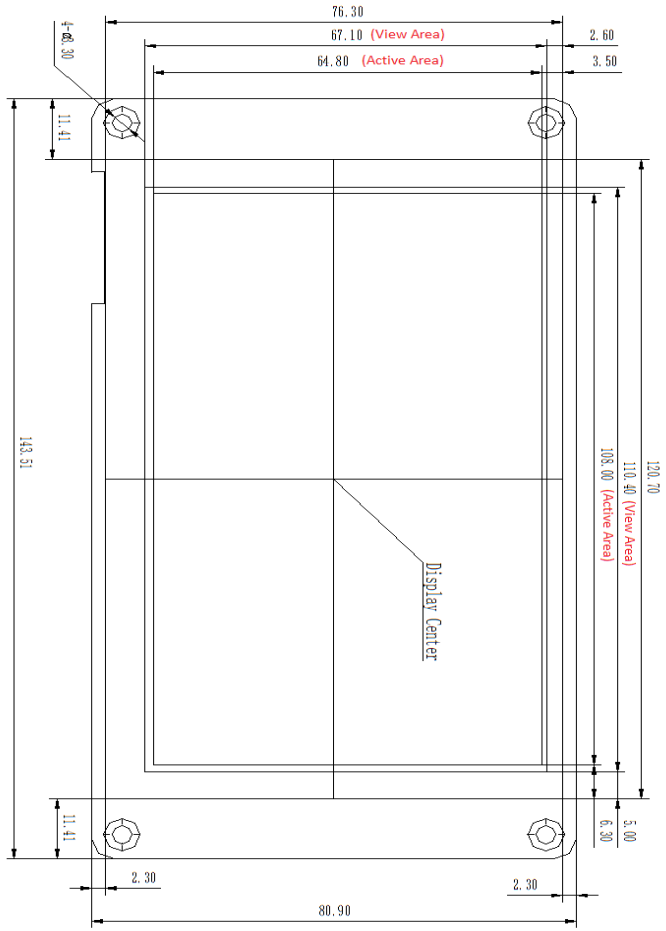
Item	Condition	Min	Typ.	Max	Unit
Baudrate	Standard	1200	115200	115200	bps
	User Defin	1200	-	115200	bps
Serial Mode	Serial Port*4 (defaulted interface RS232). 2 of them support TTL.				
User Interface	Standard serial communication protocol. 4Pin_2.54mm socket.				

USB	USB DEBUG*1. USB HOST*2
Ethernet	Support 802.11b/g/nWIFI wireless network. Support 10m/100m Ethernet


● Interface Description



Pin Num.	Name	Description
J1	Battery Socket	CR2032 Battery Socket
J2	TF Card Slot	
J3	USB DEBUG	Interface for App debugging and firmware upgrading
J4	USB HOST	Support USB connecting I/O Devices
J5	Serial Debugging Port	Name: ttyS0. Pin Definition: GND、RX、TX、VCC
J6	VCC + Serial Port	Name: ttyS1. This port can be used to supply power



- 1. Location hole is used as position reference.
 - 2. Unmarked Tolerance is $\pm 0.3\text{mm}$.
- Active area is marked in Dash Lines.

Part No.	P80480MS050I_T02			 PROCLUS TECHNOLOGIES INC.
Datasheet	A4	Drawn by	Proculus	
Proportion	1:1	Verified by		Date
Unit	mm	Confirmed by		Date