

P80480MS050I_T01

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



P80480MS050I_T01 is an industrial level Android LCM based on Rockchip RK3188 ARM. It is equipped with Quad-core Cortex-A9, supports most decoding solutions under 1080p@60fps, H.264/MVC/VP8 solutions under 1080p@30fps and many other great features of Rockchip RK3188. Meanwhile, with good jpeg picture processing performance and 3D GPU, it supports OpenGL ES2.0 and 1.1 OpenVG1.1.

RK3188 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	1.6GHz Quad-core A9 ARM
RAM	1GB /2GB DDR3
eMMC	8GB eMMC
GPU	Mali400MP4

● System Version

Item	Parameter
Android	Android 4.4
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

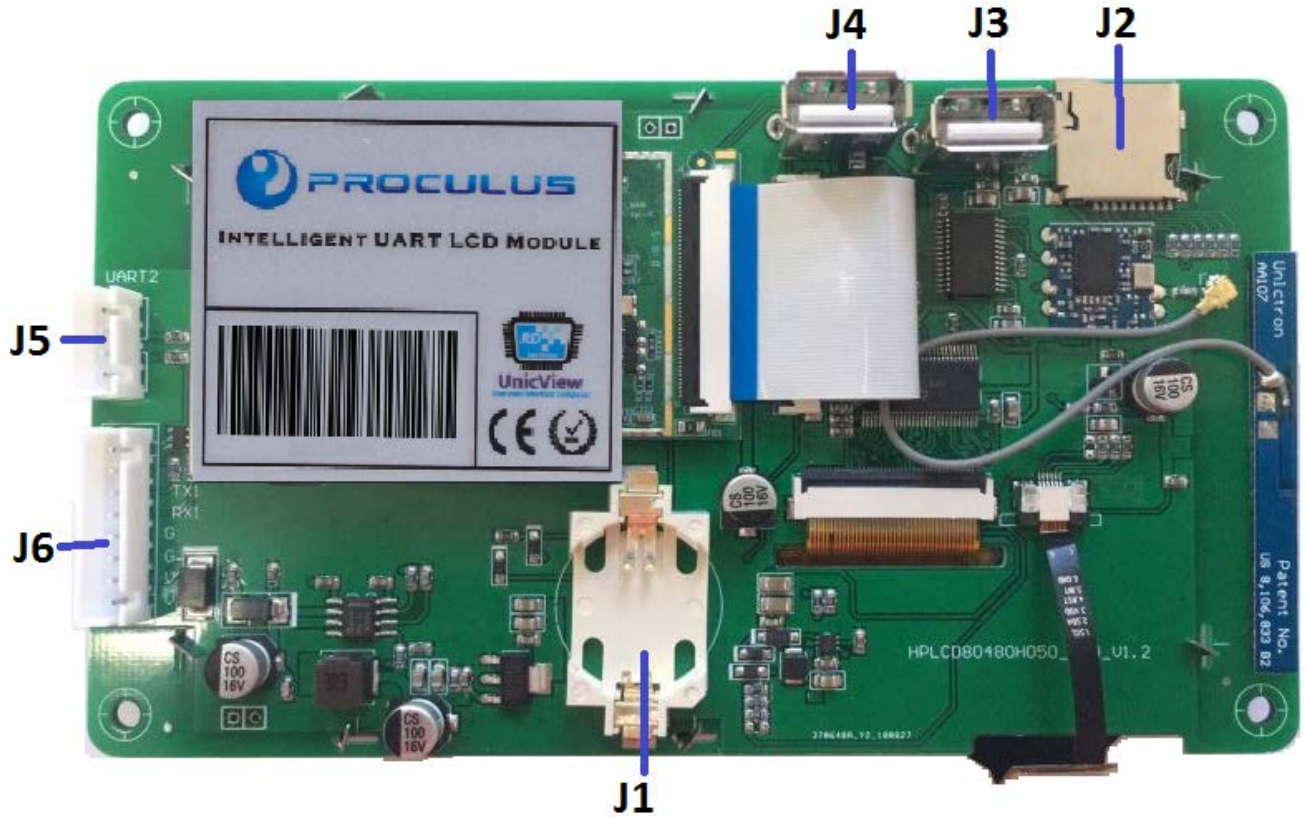
Item	Condition	Min	Typ.	Max	Unit
Working Temperature	60%RH at 12V voltage	-30	25	70	°C
Storage Temperature	-	-30	25	85	°C
Working Humidity	25°C	10%	60%	90%	RH
Protection Paint	-	-	None	-	-

● Interface

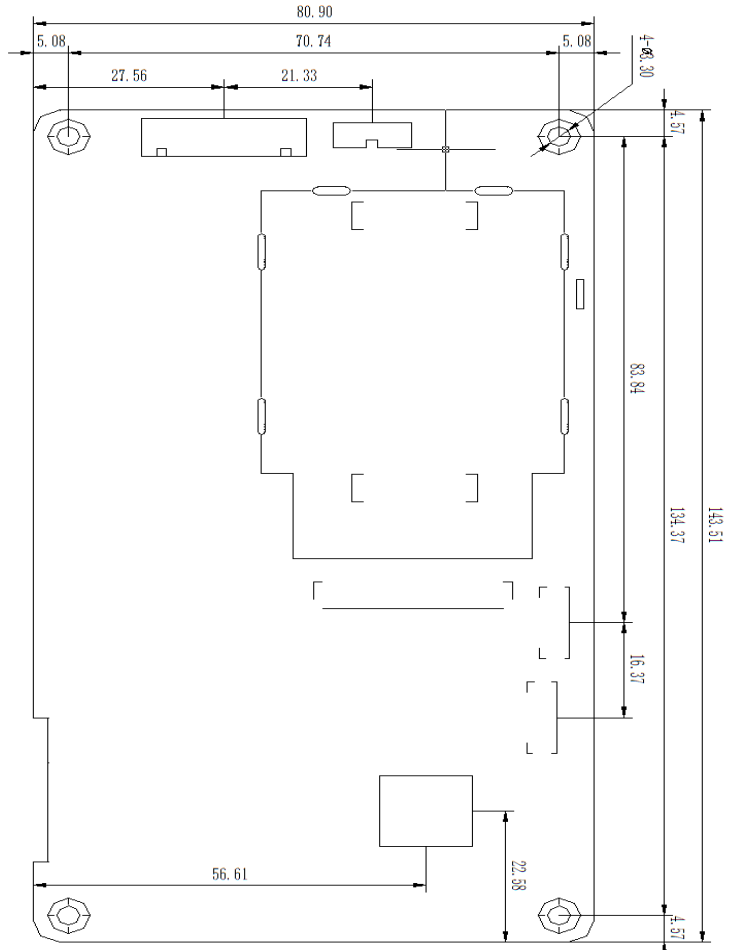
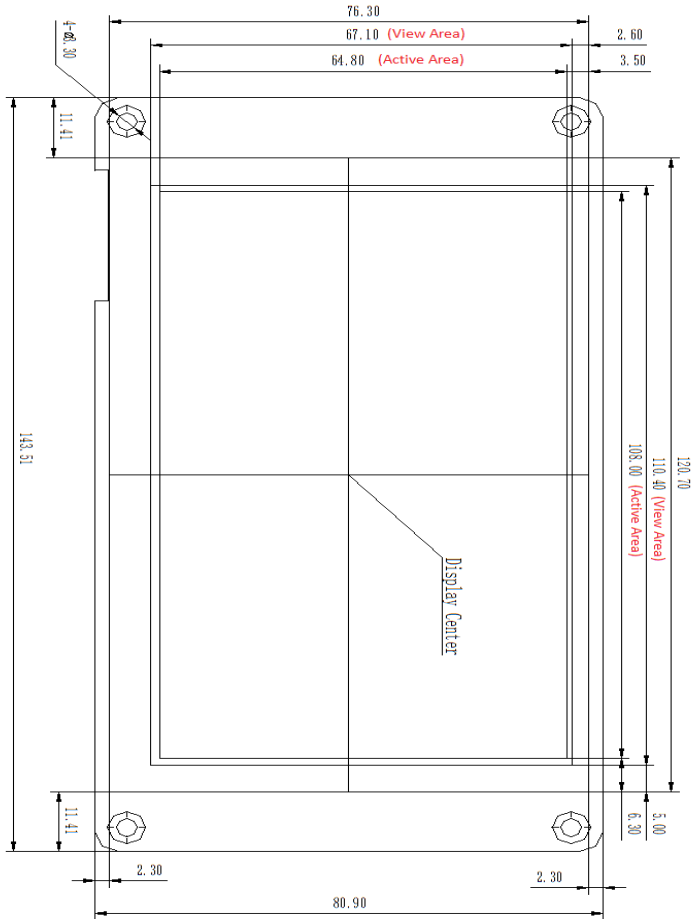
Item	Condition	Min	Typ.	Max	Unit
Baudrate	Standard	1200	115200	115200	bps
	User Defin	1200	-	115200	bps
Serial Mode	Serial Port*4 (defaulted interface RS232). 2 of them support TTL.				
User Interface	Standard serial communication protocol. 4Pin_2.54mm socket.				

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_T01			 PROCLUS TECHNOLOGIES INC.
Datasheet	A4	Drawn by	Proculus	
Proportion	1:1	Verified by		Date
Unit	mm	Confirmed by		Date