

# P10768MS080I\_T01

8.0 Inches, 1024xRGBx768, 16.7M Colors, Android LCM



P10768MS080I\_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.)	162.00 mm(W)×121.5 mm(H)	1024×768
View Area (V.A.)	164.5 mm(W)×124.12mm(H)	1024×768
Resolution	1024×768	
Backlight	LED	-
Brightness	300nit	-

### ● Optical Specifications

Item	Symbol	Condition	Values			Unit	Remark
			Min.	Typ.	Max.		
Viewing Angle (CR <sub>≥10</sub> )	θ <sub>L</sub>	Φ=180° (9 o'clock)	65	75	-	Degree	
	θ <sub>R</sub>	Φ=0° (3 o'clock)	65	75	-		
	θ <sub>T</sub>	Φ=90° (12 o'clock)	65	75	-		
	θ <sub>B</sub>	Φ=270° (6 o'clock)	65	75	-		

### ● Voltage & Current

Item	Condition	Min	Typ.	Max	Unit
Power Voltage		10.0	12.0	18.0	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

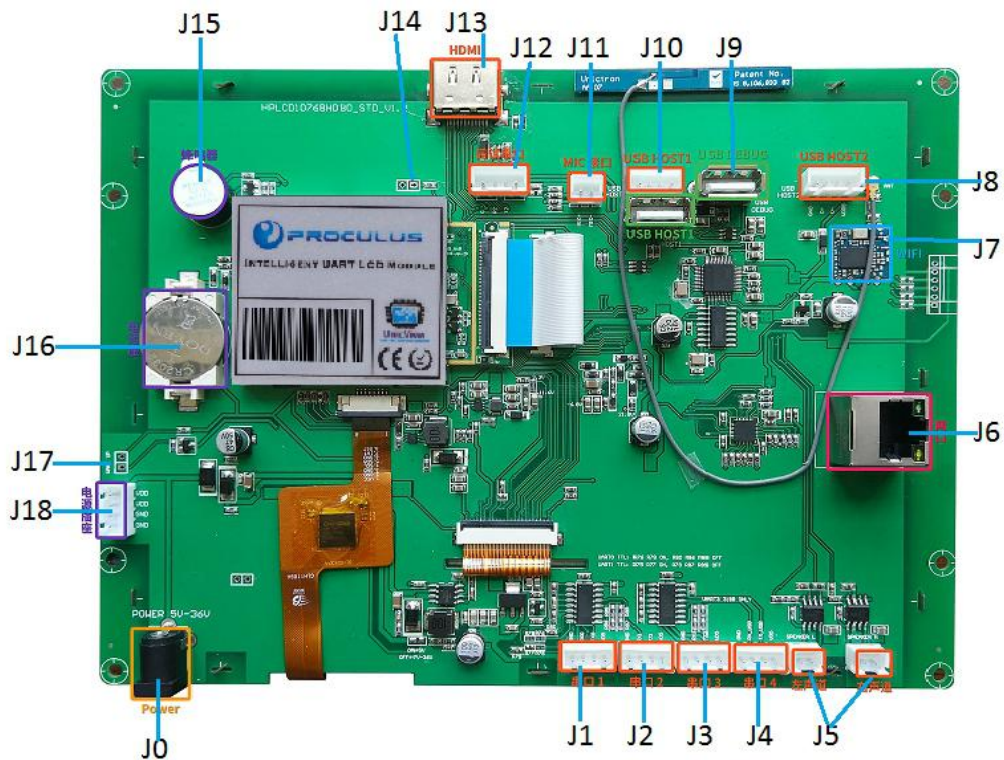
Item	Condition	Min	Typ.	Max	Unit
Baudrate	Standard	1200	115200	115200	bps
	User Defin	1200	-	115200	bps
Serial Mode	Serial Port*4 (defaulted interface RS232). 2 of them support TTL.				
User Interface	Standard serial communication protocol. 4Pin_2.54mm socket.				
USB	USB DEBUG*1. USB HOST*2				

**Ethernet** Support 802.11b/g/n/WIFI wireless network. Support 10m/100m Ethernet

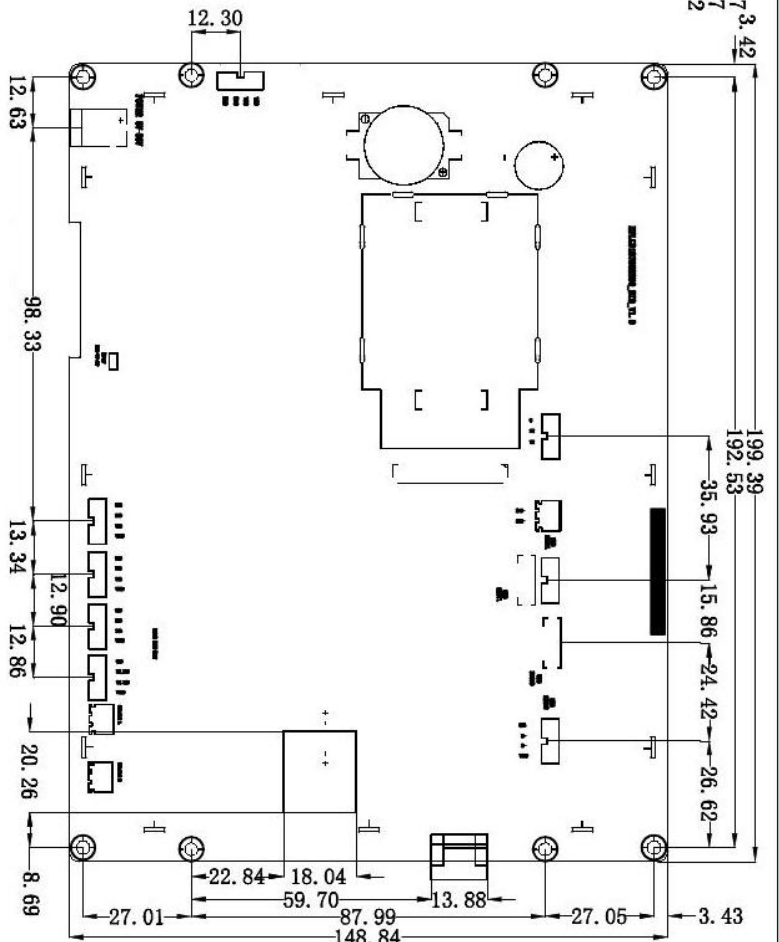
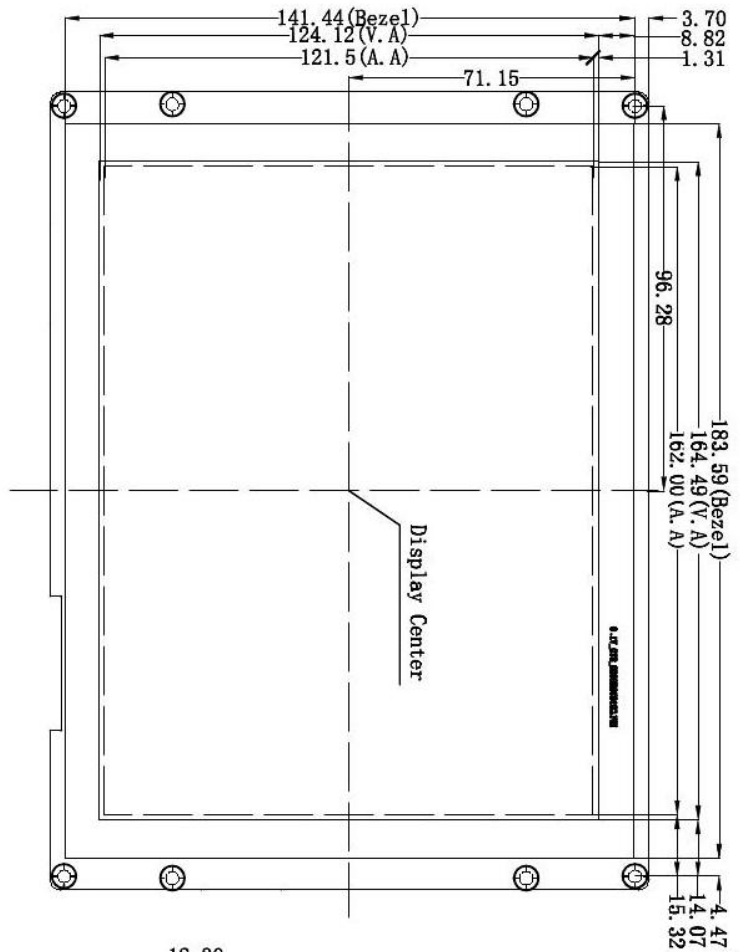
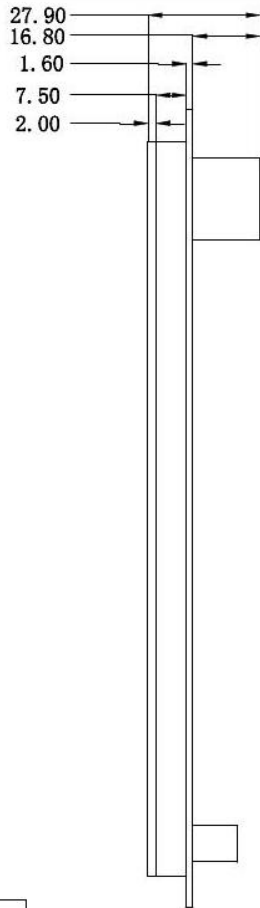
● **Peripherals**

**Peripherals** Microphone interface. 2-channel 4 Ω/3W loudspeaker.

● **Interface Description**



Num.	Interface Name	Description
J0	Power	12V3A power supply
J1	Serial port 0	Device name: ttyS0. Support RS232/TTL. Pin definition: GND, RX, TX, VCC
J2	Serial port 1	Device name: ttyS1. Support RS232/TTL. Pin definition: GND, RX, TX, VCC
J3	Serial port 3	Device name: ttyS3. Pin definition: GND, RX, TX, VCC (Not Available in RK3188)
J4	USB-serial interface	Device name: ttyCOM0. Pin definition: GND, RX, TX, VCC
J5	Loudspeaker	Support 4W output
J6	RJ45 interface	Support 10M/100M network
J7	Wireless network	Support IEEE802.11b/g/n network. Support wireless & Bluetooth 2-in-1.
J8	USB2	Support USB Peripherals
J9	USB DEBUG	App debugging interface. Firmware upgrade interface
J10	Mic	Audio input port
J11	USB1	Support USB Peripherals
J12	Serial debugging	Reserved
J13	HDMI	
J14	RECOVERY	Short-circuit to enter firmware burning mode
J15	Buzzer	
J16	RTC	Supply system RTC
J17	Wake-up	
J18	Power	Same as J0



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.	P10768MS080I_T01			 PROCLUS TECHNOLOGIES ZINC.
Datasheet	A4	Drawn by	Proclus	
Proportion	1:1	Verified by		Date
Unit	mm	Confirmed by		Date