

P10768MS080I_T01

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



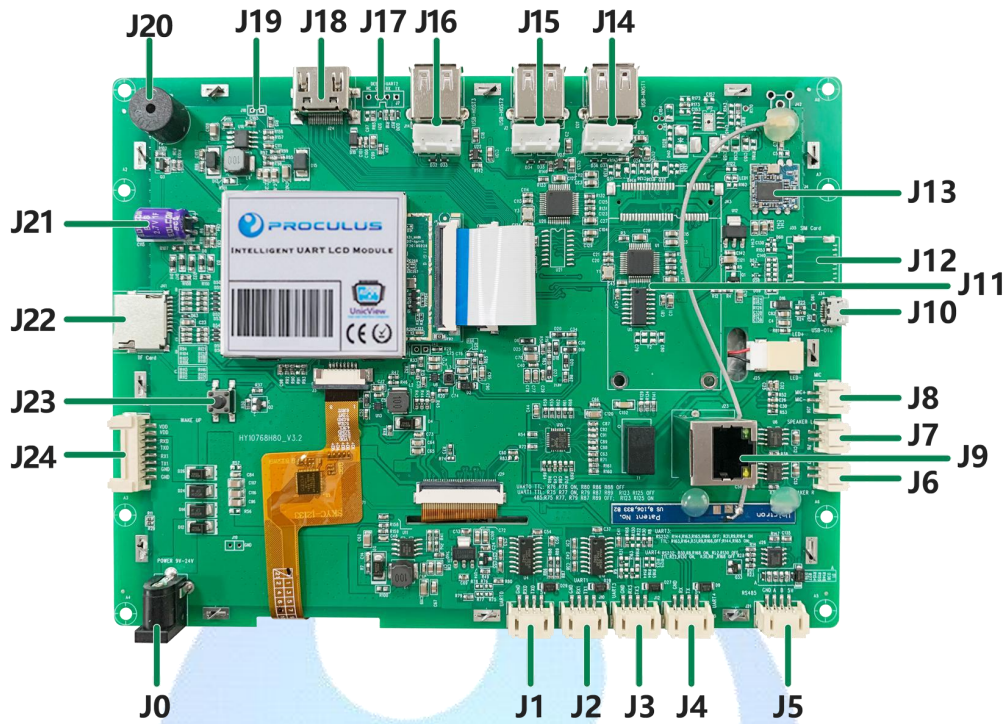
P10768MS080I_T01 is an industrial level Android LCM based on Rockchip RK3188 ARM. It is equipped with Quad-core Cortex-A9, supports most decoding solutions under 1080p@60fps, H.264/MVC/VP8 solutions under 1080p@30fps and many other great features of Rockchip RK3188. Meanwhile, with good jpeg picture 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						
CPU	1.6 GHz Quad-core A9 ARM					
RAM	1GB DDR3					
eMMC	8GB					
GPU	Mali400 MP4					
Power Management	ACT8846 PMU					
System Version						
Android	Android 5.1/7.1					
Ubuntu	Ubuntu 13.09 (Default system is Android. Need to refresh firmware to choose Ubuntu. Apps need to be developed separately.)					
Display						
Color	16.7M (16777216) colors, 24-bit color 8R8G8B.					
Active Area (A.A.)	162.05 mm(W)×121.54 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	Min.	Typ.	Max.	Unit
Viewing Angle (CR≥10)	θL	Φ=180° (9 o' clock)	75	85	—	Degree
	θR	Φ=0° (3 o' clock)	75	85	—	
	θT	Φ=90° (12 o' clock)	75	85	—	
	θB	Φ=270° (6 o' clock)	75	85	—	
Voltage & Current						
Item	Condition		Min.	Typ.	Max.	Unit
Power Voltage			5	12	18	V
Operation Current	—		—	800	—	mA
Power Supply	12V 2A DC (Recommended).					

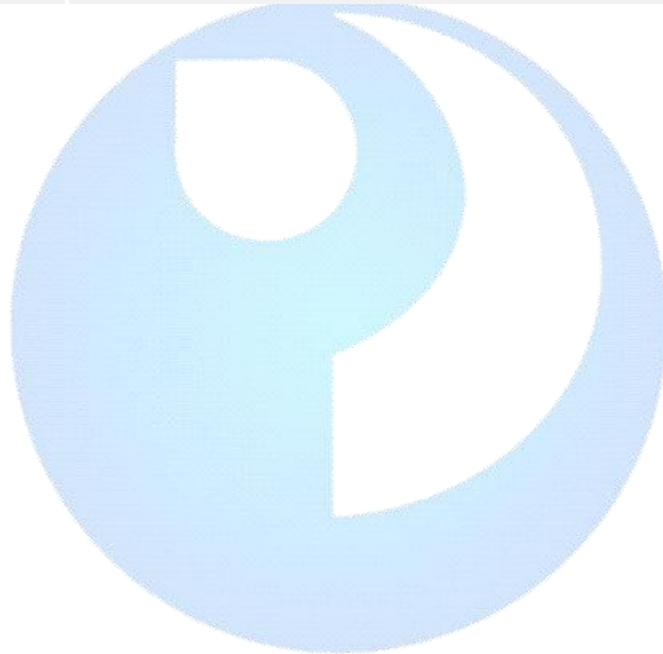
Reliability Test					
Item	Condition	Min.	Typ.	Max.	Unit
Working Temperature	60%RH at 12V voltage	-30	25	70	°C
Storage Temperature	—	-30	25	85	°C
Working Humidity	25°C	10%	60%	90%	RH
Protection Paint	—	—	None	—	—
Interface					
Item	Condition	Min.	Typ.	Max.	Unit
Baud Rate	Standard	1200	9600	115200	bps
	User Defin	1200	—	115200	bps
Serial Mode	Serial Port*4 (3*RS232/TTL, 1*RS485).				
User Interface	Standard serial communication protocol. 8Pin_2.00mm socket.				
USB	USB DEBUG*1. USB HOST*3.				
Ethernet	Support 10m/100m Ethernet.				
Wi-Fi/Bluetooth	Support 802.11b/g/n Wi-Fi wireless network; Bluetooth is optional.				
4G LTE Module	4G LTE Module/GPS. (Optional)				
Peripherals					
Microphone	Audio input interface.				
Loudspeaker	2-channel, 4Ω/3W loudspeaker.				
HDMI	HDMI output interface.				
TF card	Yes				

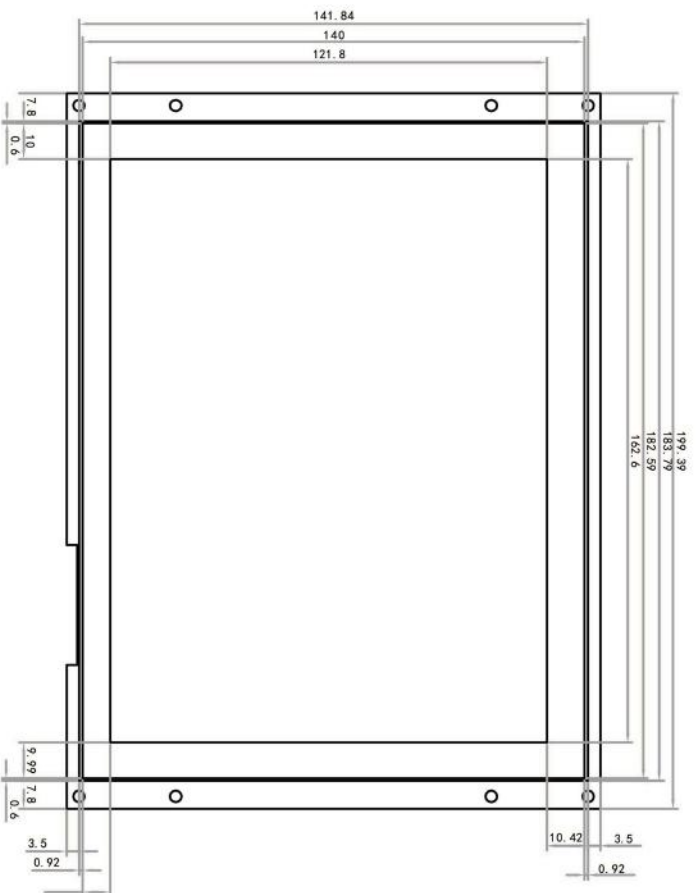
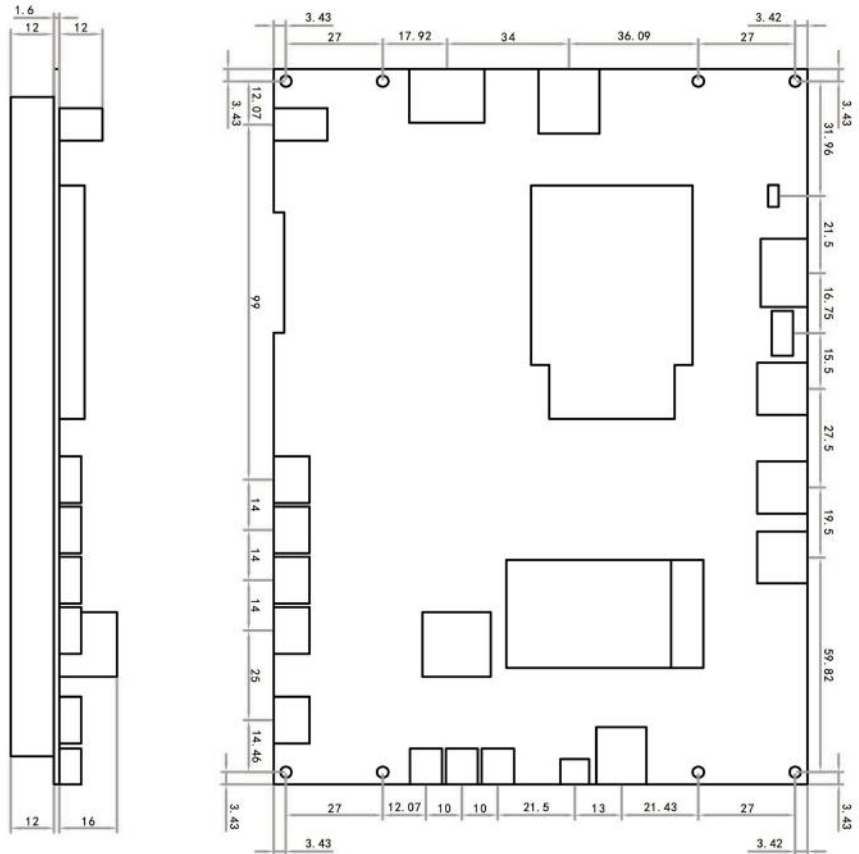
Interface Description



Num.	Interface Name	Description
J0	Power	12V2A power supply
J1	UART0	Device name: ttyS0. Support RS232/TTL. Pin definition: GND, RX, TX, 5V
J2	UART1	Device name: ttyS1. Support RS232/TTL/485. Pin definition: GND, RX, TX, 5V (choose one from J2 and J5)
J3	UART3	Device name: ttyS3. Support RS232/TTL/485. Pin definition: GND, RX, TX, 5V (choose one from J3 and J5)
J4	UART4	Device name: COM0. Support RS232/TTL. Pin definition: GND, RX, TX, 5V
J5	RS485	Pin definition: GND, A, B, 5V
J6	SPK_L	Left channel audio output interface
J7	SPK_R	Right channel audio output interface
J8	MIC	Audio input interface
J9	RJ45 interface	Support 10M/100M network
J10	USB_Micro	OTG /App debugging/ Firmware upgrade interface
J11	MINI PCIE 4G	4G LTE Module/GPS (Optional)
J12	SIM card	Nano-SIM supported (Optional)
J13	Wireless Network	Support IEEE802.11b/g/n network. Support Wireless & Bluetooth 2-in-1
J14	USB_HOST1	Vertical 4P2.54mm. Support USB Peripherals

J15	USB_HOST2	Vertical 4P2.54mm. Support USB Peripherals
J16	USB_HOST3	Vertical 4P2.54mm. Support USB Peripherals
J17	USB_HOST1	Horizontal USB2.0. Support USB Peripherals
J18	USB_HOST2	Horizontal USB2.0. Support USB Peripherals
J19	USB_HOST3	Horizontal USB2.0. Support USB Peripherals
J20	Debug Interface	not open temporarily
J21	HDMI	HDMI output interface
J22	Recovery	Short-circuit to enter firmware burning mode
J23	Buzzer	
J24	RTC	Supply system RTC
J25	TF Card	
J26	Wake Up	
J27	User Interface	Pin Definition: 12V、12V、ttyS0-RX、ttyS0-TX、ttyS1-RX、ttyS1-TX、GND、 GND





1. Location hole is used as position reference

2. Unmarked Tolerance is +/-0.3mm

Active area is marked in Dash lines

Part No.	P10768MS080I_T01				 PROCLUS TECHNOLOGIES INS.
Datasheet	A4	Drawn by	Proclus	Date	
Proportion	1:1	Verified by		Date	
Unit	mm	Confirmed by		Date	