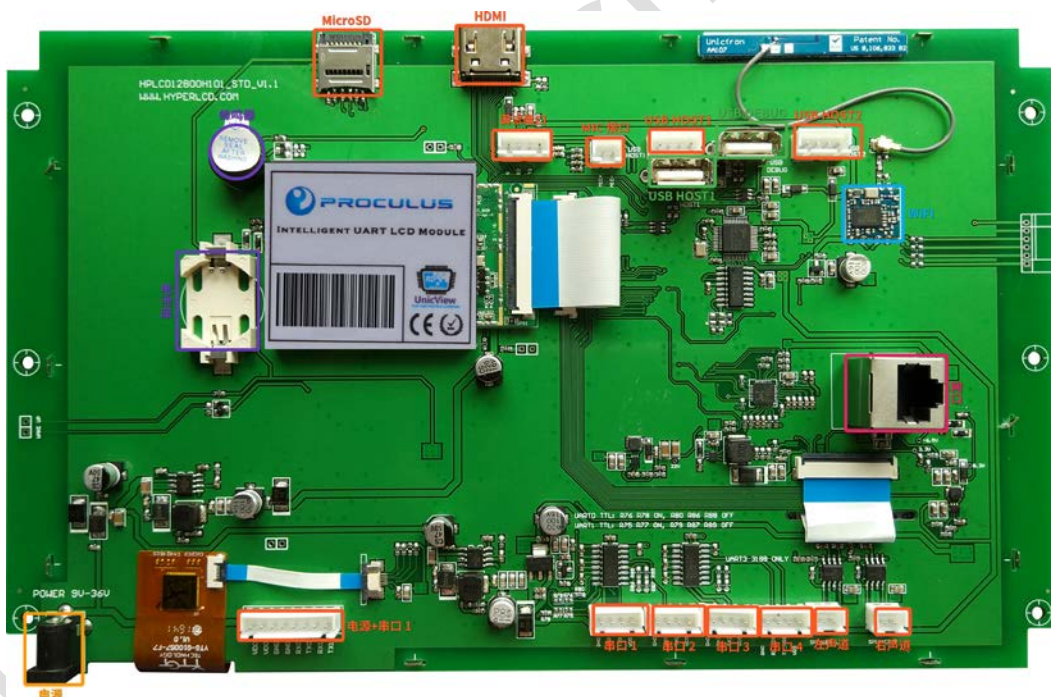


P12800MS101P_T01

10.1 Inches, 1280xRGBx800, 16.7M Colors, Android LCM



P12800MS101P_T01 is an industrial level Android LCM based on Rockchip RK3288 ARM. It is equipped with Quad-core Cortex-A17, supports most decoding solutions under 1080p@60fps, H.265/H.264/MVC/VP8 solutions under 1080p@60fps and many other great features of Rockchip RK3288. Meanwhile, with good jpeg picture processing performance and 3D GPU, it supports OpenGL ES2.0 and 1.1 OpenVG1.1.

RK3288 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

Item	Parameter
CPU	1.8GHz Quad-core A17 ARM
RAM	2GB DDR3
eMMC	8GB eMMC
GPU	Mali-T764 MP4
Power Management	ACT8846 PMU

● 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.)	218.02 mm(W)×136.62 mm(H)	1280×800
View Area (V.A.)	220.52 mm(W)×139.25mm(H)	1280×800
Resolution	1280×800	
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

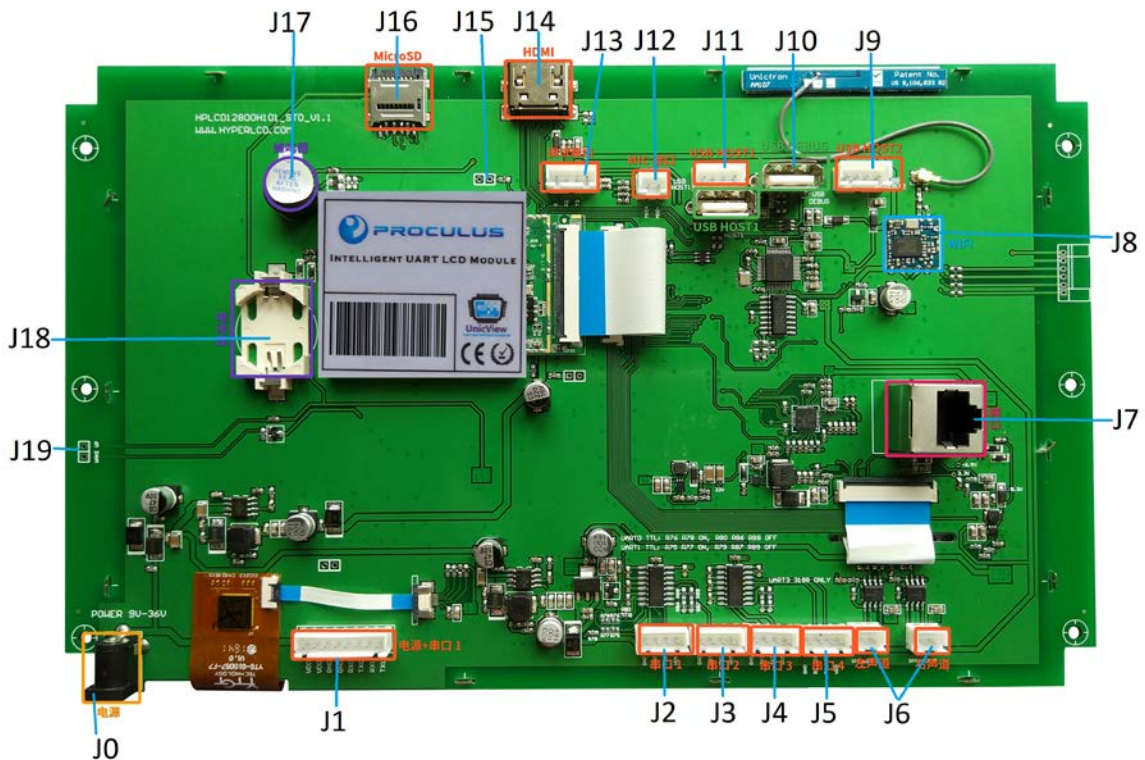
Item	Condition	Min	Typ.	Max	Unit
Baudrate	Standard	1200	115200	115200	bps
	User Defin	1200	-	115200	bps
Serial Mode	Serial Port*4 (defaulted interface RS232). 2 of them support TTL.				
User Interface	Standard serial communication protocol. 4Pin_2.54mm socket.				
USB	USB DEBUG*1. USB HOST*2				

Ethernet	Support 802.11b/g/n/WiFi wireless network. Support 10m/100m Ethernet
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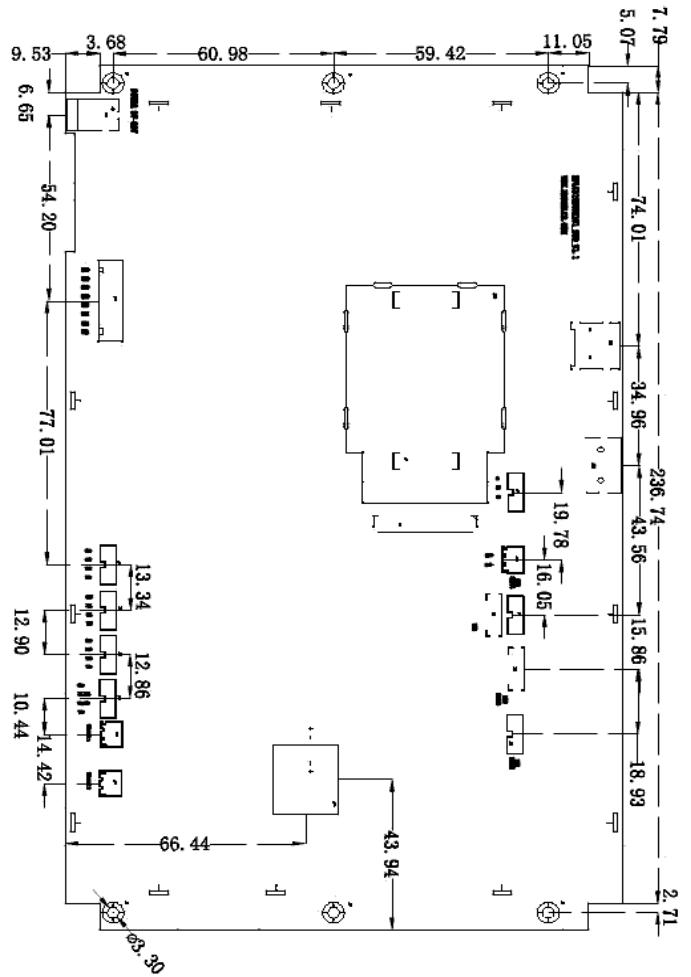
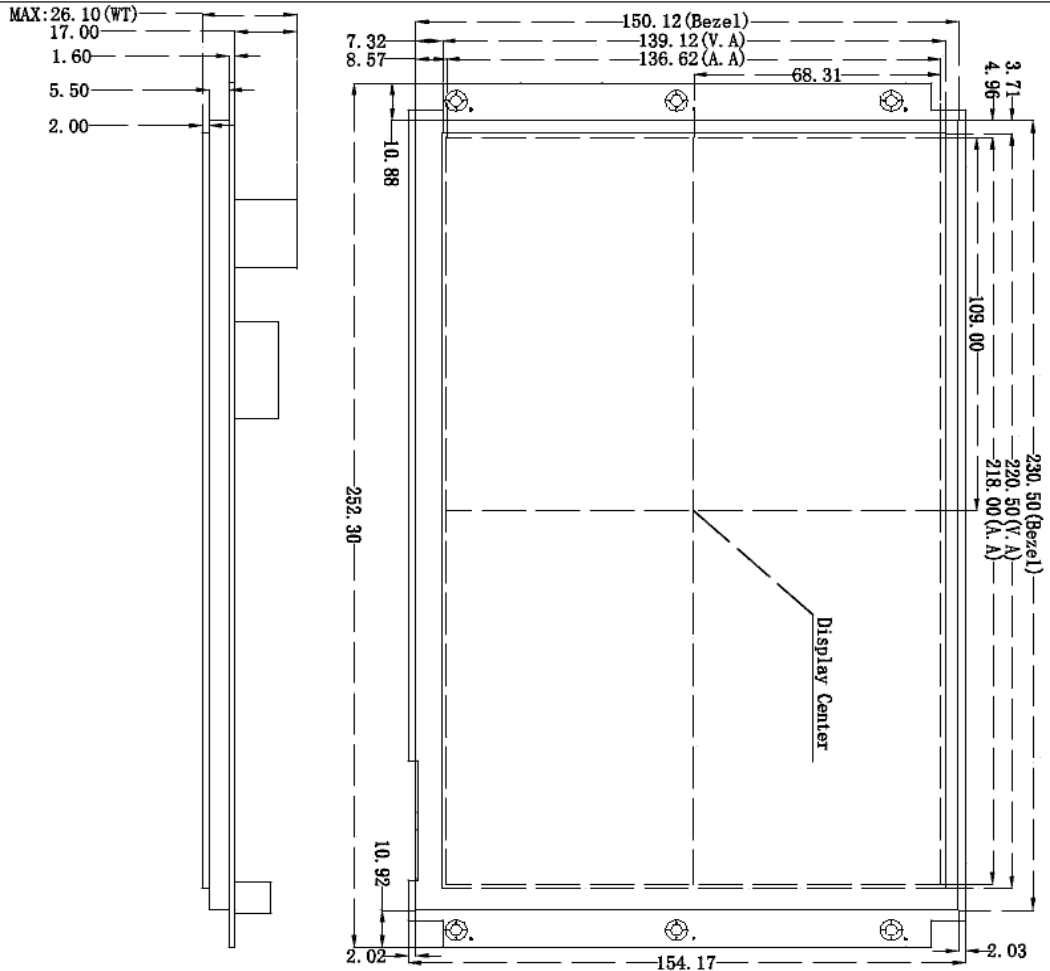
- Peripherals

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



Num.	Interface Name	Description
J0	Power	12V3A power supply
J1	Power	Same as J0
J2	Serial port 0	Device name: ttyS0. Support RS232/TTL. Pin definition: GND, RX, TX, VCC
J3	Serial port 1	Device name: ttyS1. Support RS232/TTL. Pin definition: GND, RX, TX, VCC
J4	Serial port 3	Device name: ttyS3. Pin definition: GND, RX, TX, VCC (Not Available in RK3188)
J5	USB-serial interface	Device name: ttyCOM0. Pin definition: GND, RX, TX, VCC
J6	Loudspeaker	Support 4W output
J7	RJ45 interface	Support 10M/100M network
J8	Wireless network	Support IEEE802.11b/g/n network. Support wireless & Bluetooth 2-in-1.
J9	USB2	Support USB Peripherals
J10	USB DEBUG	App debugging interface. Firmware upgrade interface
J11	USB1	Support USB Peripherals
J12	Mic	Audio input port
J13	Serial debugging	Reserved
J14	HDMI	
J15	RECOVERY	Short-circuit to enter firmware burning mode
J16	TF card	
J17	Buzzer	
J18	RTC	
J19	Wake-up	



- 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.	P12800MS101P_T01			 PROCLUS TECHNOLOGIES INC.	
Datasheet	A4	Drawn by	Proclus	Date	
Proportion	1:1	Verified by		Date	
Unit	mm	Confirmed by		Date	