

P10600MS070I_T01

7.0 Inches, 1024xRGBx600, 16.7M Colors, Android LCM



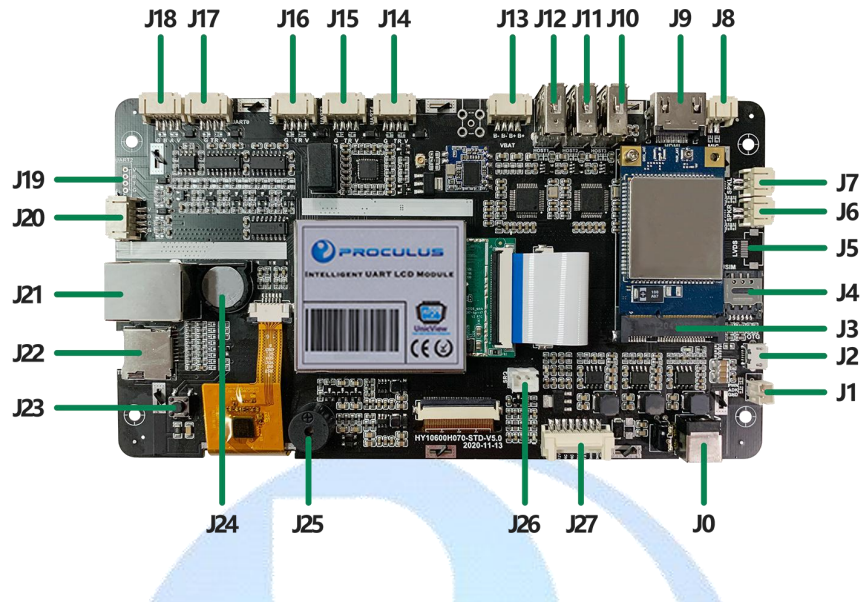
P10600MS070I_T01 is an industrial level Android LCM based on Rockchip RK3188 ARM. It is equipped with Quad-core Cortex-A9, supports most decoding solutions under 1080p@60fps, H.264/MVC/VP8 solutions under 1080p@30fps and many other great features of Rockchip RK3188. Meanwhile, with good jpeg picture 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	Mali400MP4					
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.)	154.08 mm(W)×85.92 mm(H), 1024×600.					
View Area (V.A.)	155.96 mm(W)×88.87mm(H), 1024×600.					
Resolution	1024×600					
Backlight	LED					
Brightness	350nit					
Optical Specifications						
Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Viewing Angle (CR≥10)	θL	Φ=180° (9 o' clock)	70	80	—	Degree
	θR	Φ=0° (3 o' clock)	70	80	—	
	θT	Φ=90° (12 o' clock)	50	60	—	
	θB	Φ=270° (6 o' clock)	60	70	—	
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*3 (2*RS232/TTL, 1*RS232/TTL/RS485); 1*RS232/TTL is optional.				
User Interface	Standard serial communication protocol. 8Pin_2.0mm socket.				
USB	USB DEBUG*1. USB HOST*2. (1*USB HOST is optional)				
Ethernet	Support 10m/100m Ethernet.				
Wi-Fi	Support 802.11b/g/n Wi-Fi wireless network.				
4G LTE Module	4G LTE Module/GPS. (Optional)				
Peripherals					
Microphone	Audio input interface.				
Loudspeaker	2-channel, 4Ω/3W loudspeaker.				
HDMI	HDMI output interface. (Optional)				
IIC	Optional				
TF card	Yes				
GPIO	Reserved				

Interface Description

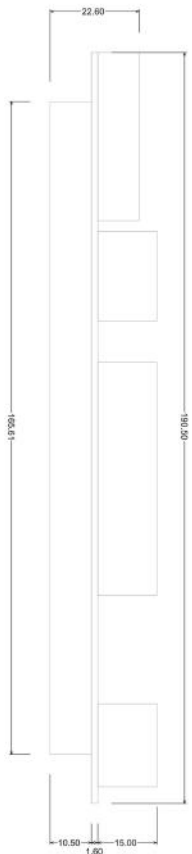
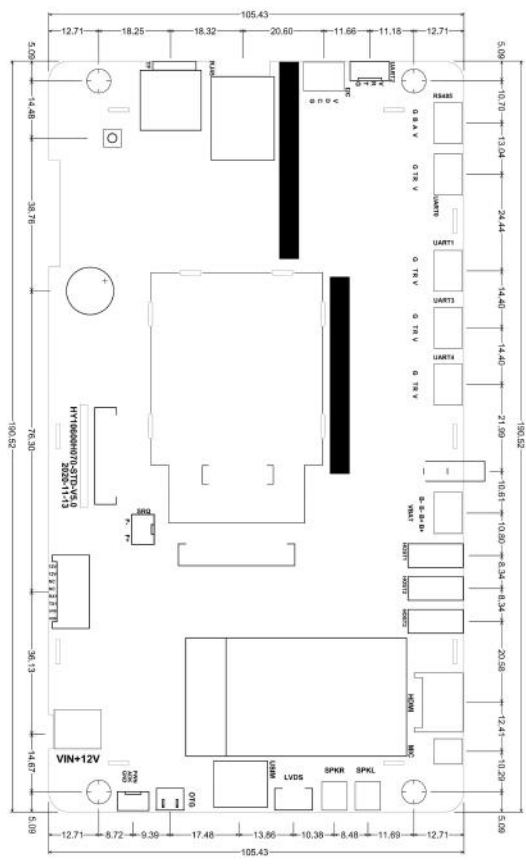
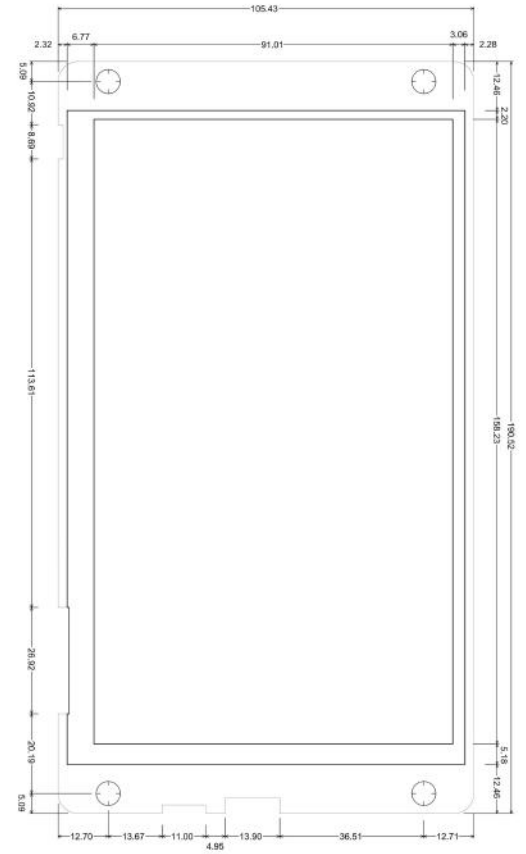


Num.	Interface Name	Description
J0	Power	12V2A power supply
J1	Wake-up	
J2	USB_Micro	OTG /App debugging/ Firmware upgrade interface
J3	MINI PCIE 4G	4G LTE Module/GPS (Optional)
J4	SIM card	Nano-SIM supported (Optional)
J5	GPIO interface	Reserved
J6	SPK_R	Right channel audio output interface
J7	SPK_L	Left channel audio output interface
J8	MIC	Audio input interface
J9	HDMI	HDMI output interface (Optional)
J10	USB_HOST3	Support USB Peripherals (Optional)
J11	USB_HOST2	Support USB Peripherals
J12	USB_HOST1	Support USB Peripherals/Support dual USB parallel use
J13	Power	External lithium-ion battery (Only available for RK3128)
J14	UART4	Device name: COM0. Pin definition: 5V, RXD, TXD, GND (Optional)
J15	UART3	Device name: ttyS3. Pin definition: 5V, RXD, TXD, GND
J16	UART1	Device name: ttyS1. Pin definition: 5V, RXD, TXD, GND
J17	UART0	Device name: ttyS0. Pin definition: 5V, RXD, TXD, GND/Same as J18
J18	RS485	Device name: ttyS0. Pin definition: 5V, A, B, GND/Same as J17
J19	Debug interface	not open temporarily
J20	IIC communication	Pin definition: 5V, SDA, SCL, GND (Reserved)
J21	RJ45 interface	Support 10M/100M network
J22	TF card	

J23	Wake-up	
J24	RTC	Supply system RTC
J25	Buzzer	
J26	Radiator interface	Reserved
J27	User interface	Pin Definition: 12V, 12V, NC, NC, RXD, TXD, GND, GND

Note: J13 is only available for RK3128, and J15 is only available for RK3188.






1. Location hole is used as position reference

2. Unmarked Tolerance is +/-0.3mm

Active area is marked in Dash lines

Part No.	P10600MS070I_T01				 PROCLUS TECHNOLOGIES INS.	
Datasheet	A4	Drawn by	Proculus	Date		
Proportion	1:1	Verified by		Date		
Unit	mm	Confirmed by		Date		