

# P10600HY070X\_T01

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



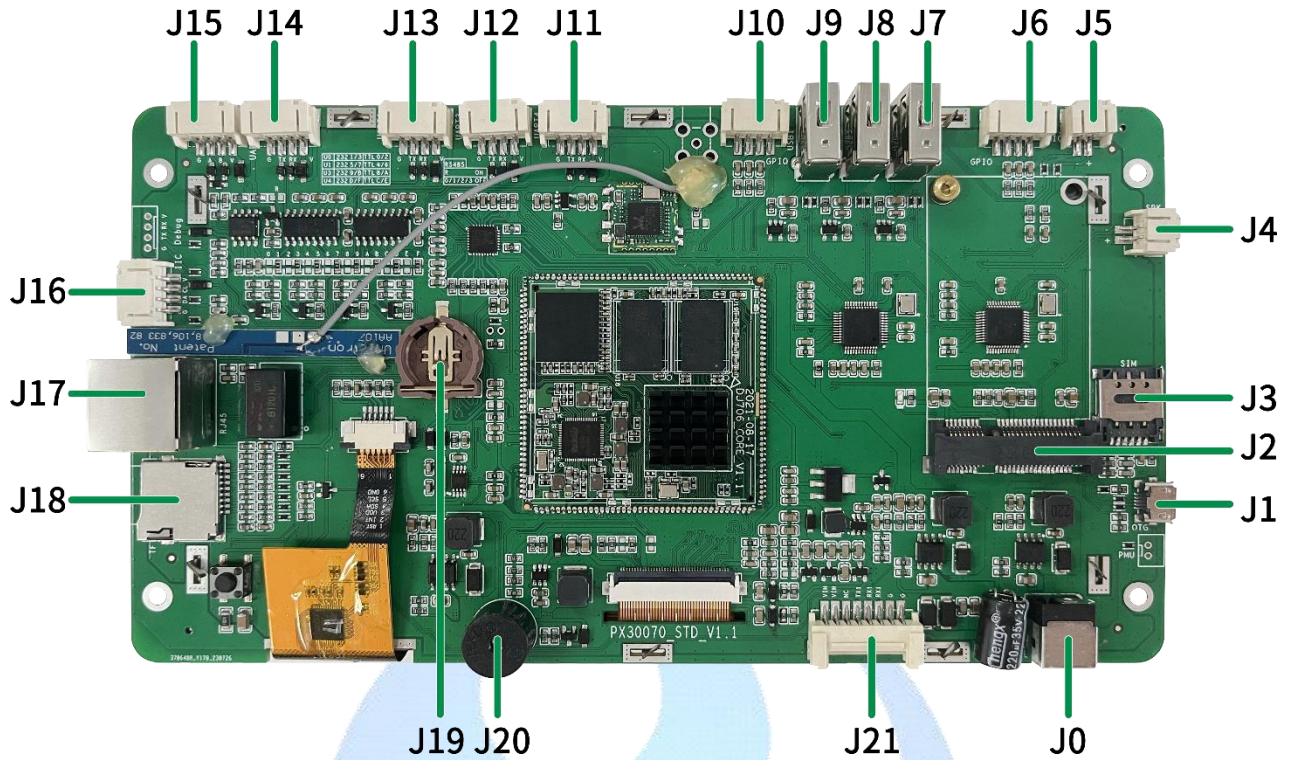
P10600HY070X\_T01 is an industrial level Android LCM based on Rockchip RK PX30 ARM. It is equipped with Quad-core Cortex-A35, supporting most decoding solutions under 1080p@60fps, H.265/H.264/MVC/VP8 solutions and many other great features of Rockchip RK PX30. Meanwhile, with good jpeg picture processing performance and 3D GPU, it supports OpenGL ES2.0 and OpenVG1.1.

Rockchip RK PX30 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						
<b>CPU</b>	1.5 GHz Quad-core A35 ARM					
<b>RAM</b>	2GB DDR3					
<b>eMMC</b>	8GB					
<b>GPU</b>	Mali-G31					
<b>Power Management</b>	RK809					
System Version						
<b>Android</b>	Android 8.1					
<b>Ubuntu</b>	Ubuntu16.04 or linux+QT5.12 (Default system is Android. Need to refresh firmware to choose Ubuntu. Apps need to be developed separately.)					
Display						
<b>Color</b>	16.7M (16777216) colors, 24-bit color 8R8G8B.					
<b>Active Area (A.A.)</b>	154.08 mm(W)×85.92 mm(H), 1024×600.					
<b>View Area (V.A.)</b>	155.96 mm(W)×88.87mm(H), 1024×600.					
<b>Resolution</b>	1024×600					
<b>Backlight</b>	LED					
<b>Brightness</b>	350					
Optical Specifications						
Item	Symbol	Condition	Min.	Typ.	Max.	Unit
<b>Viewing Angle (CR≥10)</b>	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
<b>Power Voltage</b>			6	12	35	V
<b>Operation Current</b>	—		—	400	—	mA

<b>Power Supply</b>	12V 2A DC (Recommended).				
<b>Reliability Test</b>					
Item	Condition	Min.	Typ.	Max.	Unit
<b>Working Temperature</b>	60%RH at 12V voltage	-20	25	70	°C
<b>Storage Temperature</b>	—	-30	25	85	°C
<b>Working Humidity</b>	25°C	10%	60%	90%	RH
<b>Protection Paint</b>	—	—	None	—	—
<b>Interface</b>					
Item	Condition	Min.	Typ.	Max.	Unit
<b>Baud Rate</b>	Standard	1200	9600	115200	bps
	User Defined	1200	—	115200	bps
<b>Serial Mode</b>	Serial Port*3 (3*RS232/TTL, 1*RS232/RS485/TTL)				
<b>USB</b>	USB HOST*3				
<b>Ethernet</b>	Support 10m/100m Ethernet.				
<b>Wi-Fi/Bluetooth</b>	Support 802.11b/g/n Wi-Fi wireless network; Bluetooth 4.0				
<b>4G LTE Module</b>	4G LTE Module(Onboard)/GPS(Optional)				
<b>Peripherals</b>					
<b>Microphone</b>	Audio input interface.				
<b>Loudspeaker</b>	Audio output interface. 1.3W				
<b>TF card</b>	Yes				
<b>IIC</b>	1				
<b>IO interface</b>	6				

### Interface Description

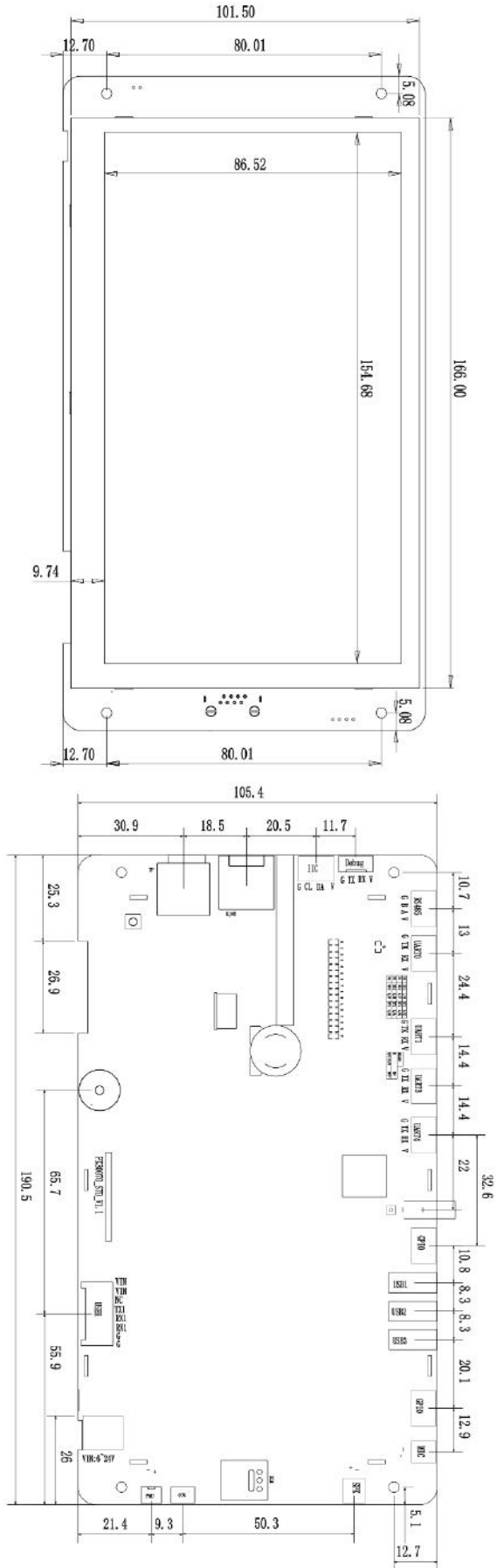


Num.	Interface Name	Description
J0	Power	12V/2A power supply (maximum voltage ranges 35V DC)
J1	USB_Micro	OTG /App debugging/ Firmware upgrade interface
J2	MINI PCIE 4G	4G LTE Module/GPS (Optional)
J3	SIM card	Nano-SIM supported (Optional)
J4	SPK	audio output interface
J5	MIC	Audio input interface
J6	GPIO interface	GND、GPIO3_A1、GPIO1_D6、GPIO1_D7 (The default is output)
J7	USB_HOST1	Support USB Peripherals
J8	USB_HOST2	Support USB Peripherals
J9	USB_HOST3	Support USB Peripherals
J10	GPIO interface	GND、GPIO2_B0、GPIO2_B6、GPIO3_A2 (The default is output)
J11	UART4	Device name: ttyS4, The default RS232 supports TTL Pin definition: GND,TXD,RXD,5V
J12	UART3	Device name: ttyS3, The default RS232 supports TTL Pin definition: GND,TXD,RXD,5V
J13	UART1	Device name: ttyS1, The default RS232 supports TTL Pin definition: GND,TXD,RXD,5V
J14	UART0	Device name: ttyS0, The default RS232 supports TTL/RS485 Pin definition: GND,TXD,RXD,5V

J15	UART0	Device name: ttyS0, RS485 interface
J16	IIC interface	Pin definition:GND,DA,CL,V
J17	RJ45 interface	Support 10M/100M network
J18	TF card	Can do memory expansion
J19	RTC	Supply system RTC
J20	Buzzer	Buzzer
J21	User interface	Pin Definition: VIN, VIN, NC, TXD, RXD, RXD, GND, GND

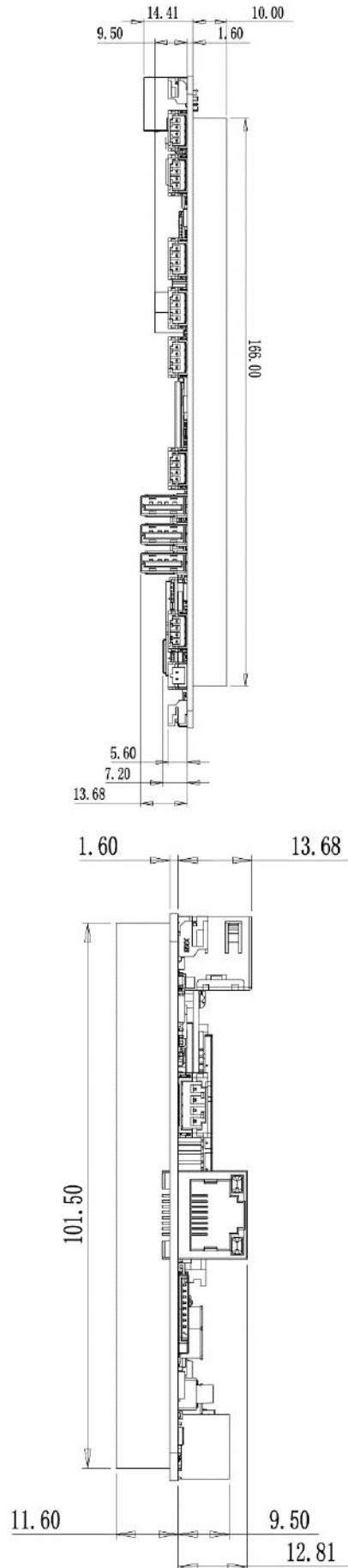






- 1. Location hole is used as position reference
  - 2. Unmarked Tolerance is +/-0.3mm
- Active area is marked in Dash lines

Part No.	P10600HY070X_T01_V1.1				
Datasheet	A4	Drawn by	Proclus		Date
Proportion	1:1	Verified by		Date	
Unit	mm	Confirmed by		Date	



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