

P10600HY070X_T01

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



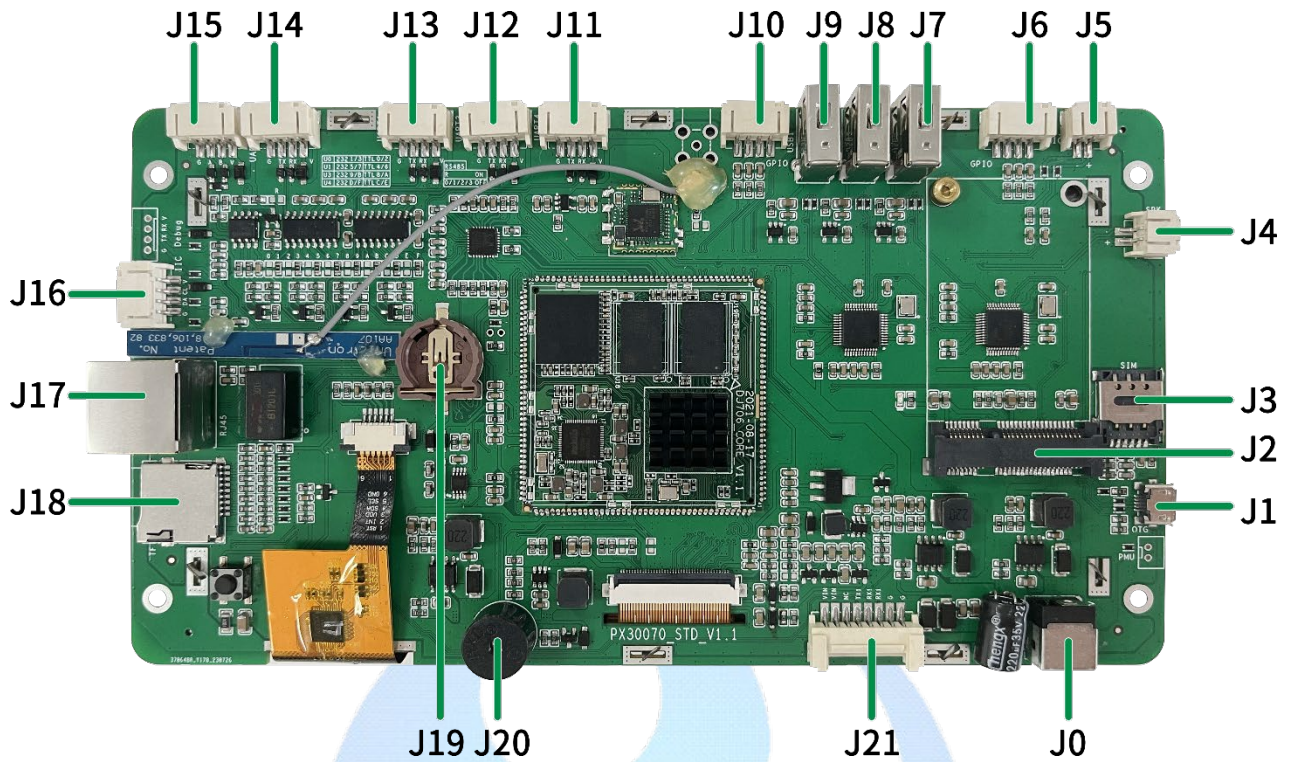
P10600HY070X_T01 is an industrial level Android LCM based on Rockchip RK PX30 ARM. It is equipped with Quad-core Cortex-A35, supporting most decoding solutions under 1080p@60fps, H.265/H.264/MVC/VP8 solutions and many other great features of Rockchip RK PX30. Meanwhile, with good jpeg picture processing 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						
CPU	1.5 GHz Quad-core A35 ARM					
RAM	2GB DDR3					
eMMC	32GB					
GPU	Mali-G31					
Power Management	RK809					
System Version						
Android	Android 8.1					
Ubuntu	Ubuntu16.04 or linux+QT5.12 (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	350					
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			6	12	35	V
Operation Current	—		—	400	—	mA

Power Supply	12V 2A DC (Recommended).				
Reliability Test					
Item	Condition	Min.	Typ.	Max.	Unit
Working Temperature	60%RH at 12V voltage	-20	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 Defined	1200	—	115200	bps
Serial Mode	Serial Port*3 (3*RS232/TTL, 1*RS232/RS485/TTL)				
USB	USB HOST*3				
Ethernet	Support 10m/100m Ethernet.				
Wi-Fi/Bluetooth	Support 802.11b/g/n Wi-Fi wireless network; Bluetooth 4.0				
4G LTE Module	4G LTE Module(Onboard)/GPS(Optional)				
Peripherals					
Microphone	Audio input interface.				
Loudspeaker	Audio output interface. 1.3W				
TF card	Yes				
IIC	1				
IO interface	6				

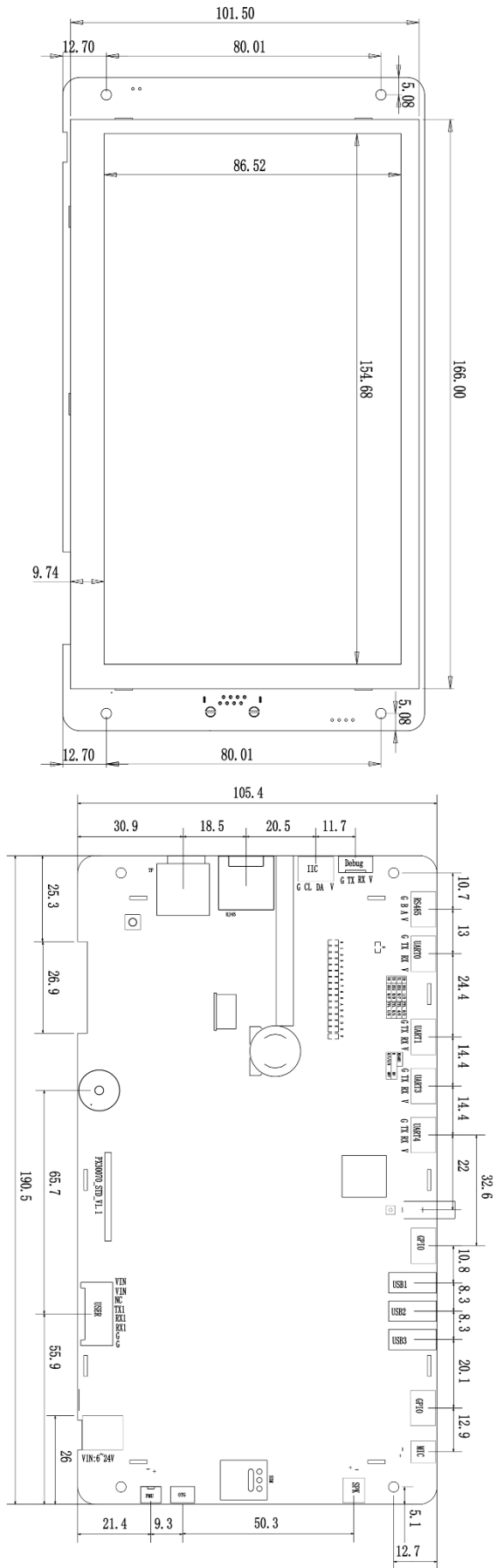
Interface Description



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



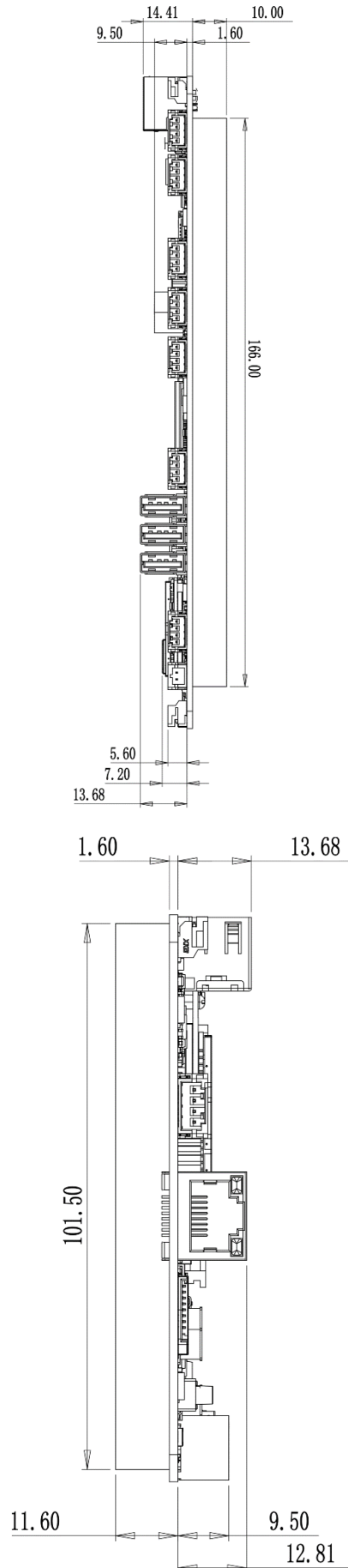


1. Location hole is used as position reference

2. Unmarked Tolerance is +/-0.3mm

Active area is marked in Dash lines

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



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				
Datasheet	A4	Drawn by	Proculus		Date
Proportion	1:1	Verified by		Date	
Unit	mm	Confirmed by		Date	