P10600HY070I_T01

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

P10600HY070I_T01 is an industrial level Android LCM based on Rockchip RK3188 ARM. It is equipped with Quad-core Coretex-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
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	350/500/1000

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	16	V
Operation Current	—	—	400	—	mA

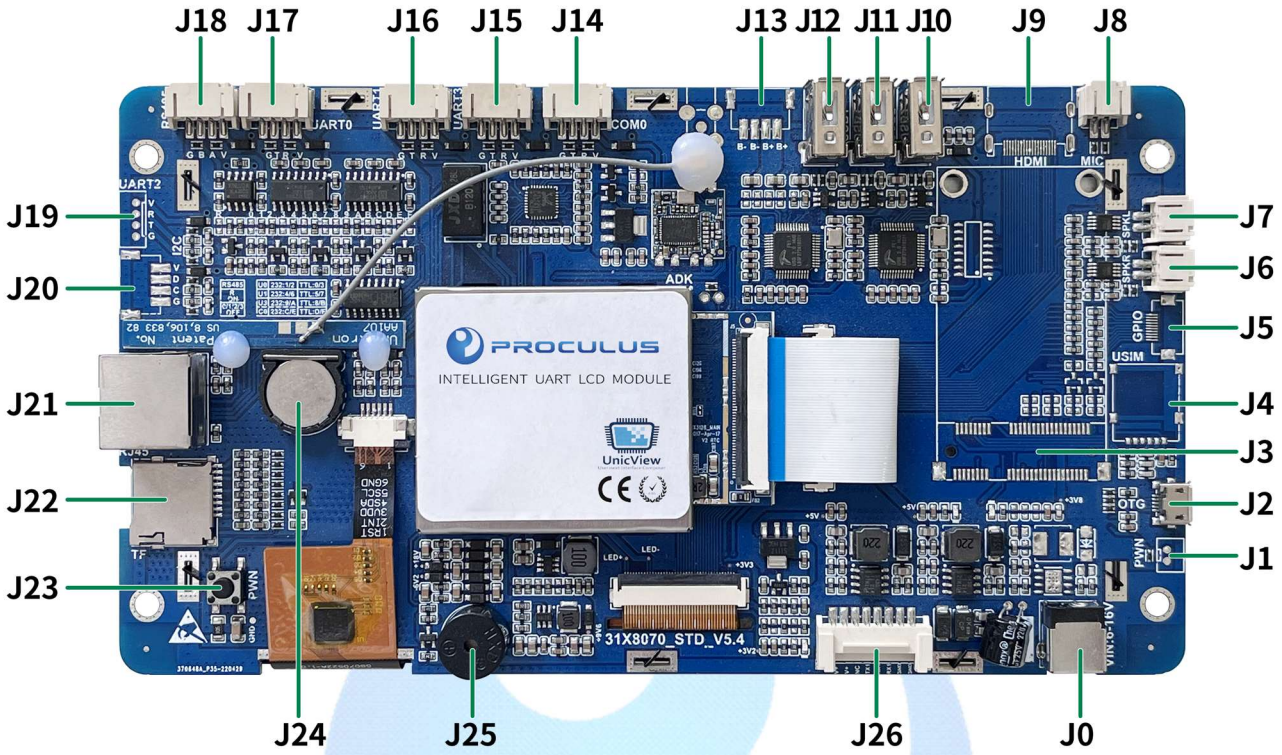
Power Supply	12V 2A DC (Recommended).

Reliability Test					
Item	**Condition**	**Min.**	**Typ.**	**Max.**	**Unit**
Working Temperature	60%RH at 12V voltage	-20	25	70	℃
Storage Temperature	—	-30	25	85	℃
Working Humidity	25℃	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*RS232/TTL/RS485)				
User Interface	Standard serial communication protocol. 8Pin_2.0mm 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)				

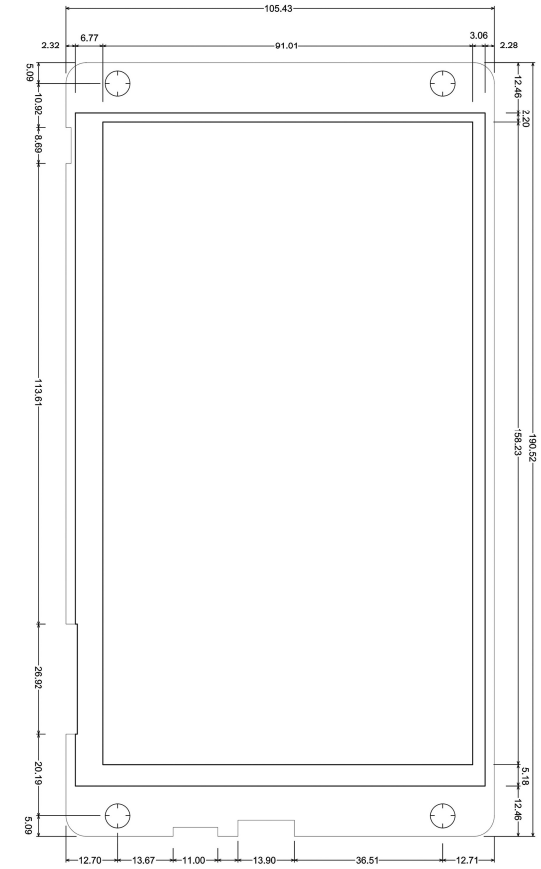
Peripherals	
Microphone	Audio input interface.
Loudspeaker	2-channel, 4Ω/3W loudspeaker.
HDMI	HDMI output interface.(Optional)
IIC	Optional
TF card	Yes
GPIO	Reserved

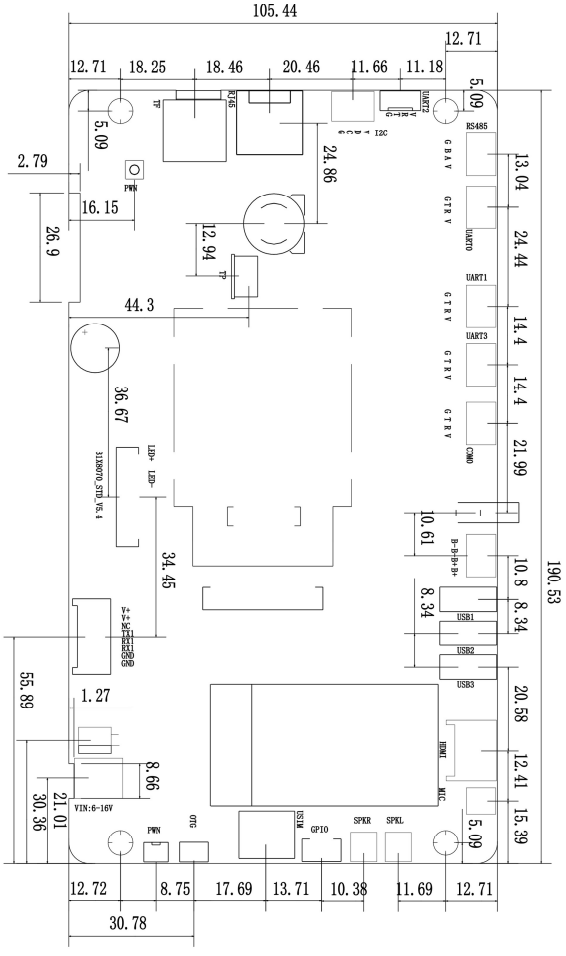
Interface Description



Num.	Interface Name	Description
J0	Power	12V/2A power supply (maximum voltage ranges from 6V to 16V DC)
J1	Wake-up	Control screen system on/off
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,GPIO Number:13,12,11,73,74,75
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
J11	USB_HOST2	Support USB Peripherals
J12	USB_HOST1	Support USB Peripherals
J13	Debug interface	not open temporarily
J14	COM0	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	Can do memory expansion
J23	Wake-up	Control screen system on/off
J24	RTC	Supply system RTC
J25	Buzzer	Buzzer
J26	User interface	Pin Definition: 12V, 12V, NC, TXD, RXD, RXD, GND, GND



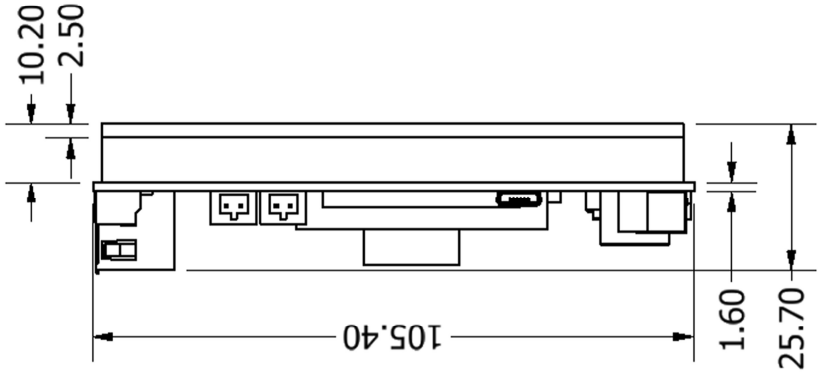


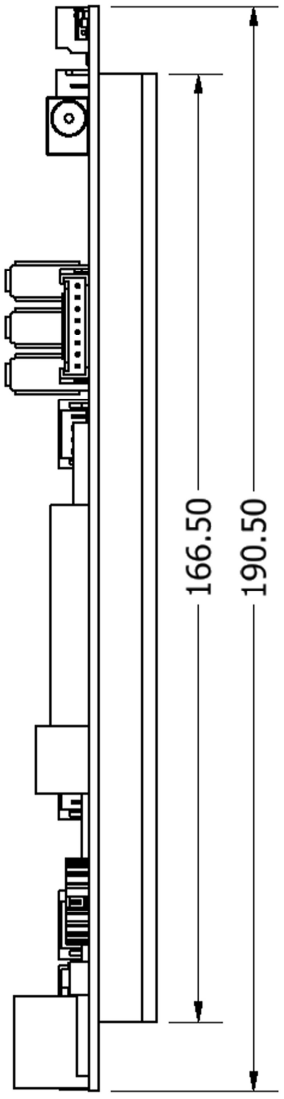
1.Location hole is used as position reference

2.Unmarked Tolerance is +/-0.3mm

Active area is marked in Dash lines

Part No.	P10600HY070I_T01_V5.4				
Datasheet	A4	Drawn by	Proculus	Date	
Proportion	1:1	Verified by		Date	
Unit	mm	Confirmed by		Date	
	PROCULUS				





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