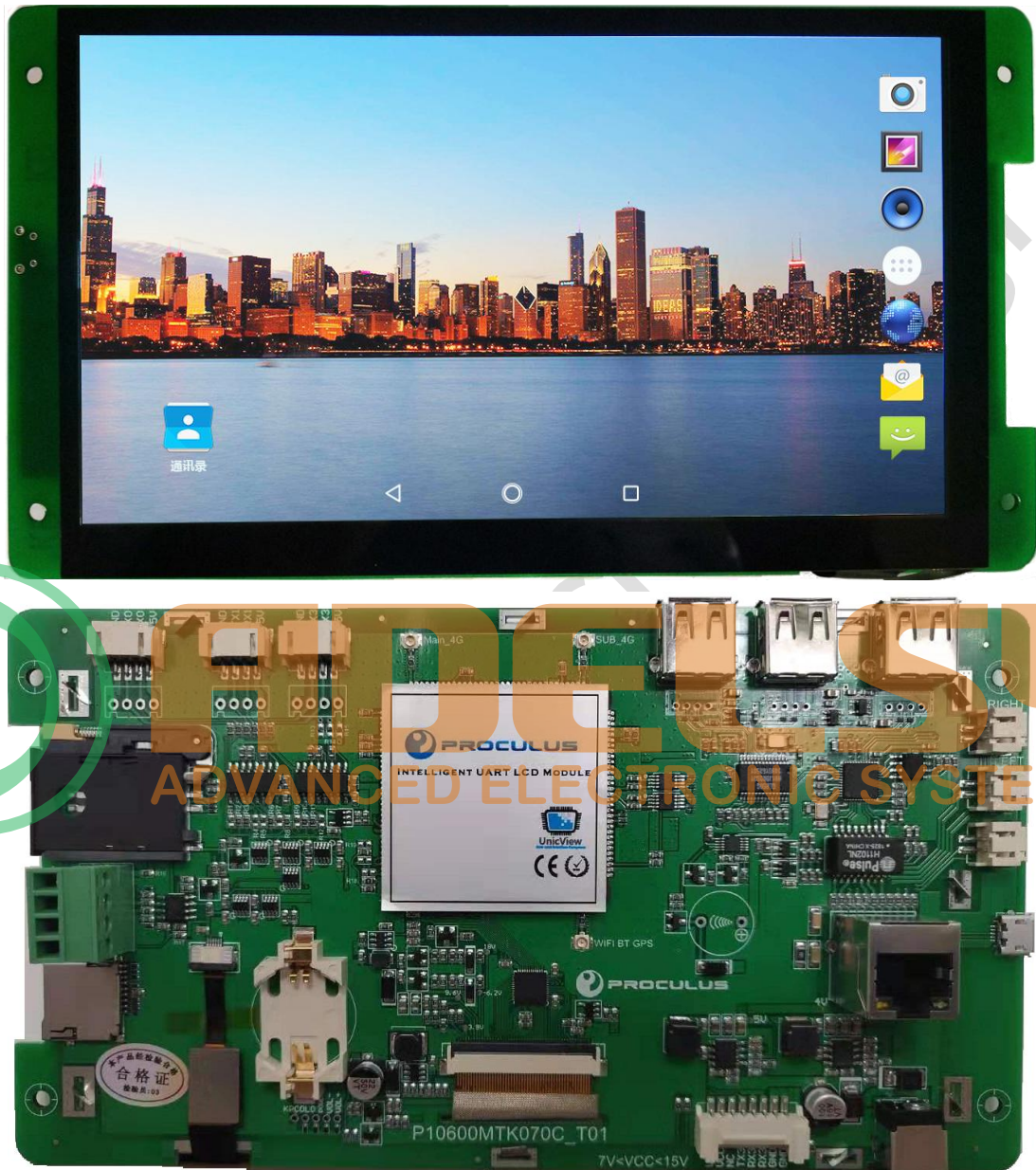


P10600MTK070I_P01

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



P10600MTK070I_P01 is an industrial level Android LCM based on MTK CPU. It is equipped with Quad-core Cortex-A53, supports most decoding solutions under 1080p@60fps, H.265/MVC/VP8 solutions under 1080p@30fps and many other great features of MTK. Meanwhile, with good jpeg picture processing performance and 3D GPU, it supports OpenGL ES2.0 and 1.1 OpenVG1.1.

MTK 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

Item	Parameter
CPU	MTK: 1.3GHz Quad-core A53 ARM
RAM	1GB DDR3
eMMC	8GB eMMC
GPU	Mali400MP4
Modem	4G FDD LTE, TDD, LTE, HSPA+, TD-SCDMA, CDMA200, EDGE (Integrated in CPU. No extra 4G module needed)

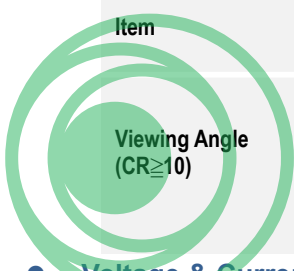
System Version

Item	Parameter
Android	Android 7.0

Display

Item	Parameter	Description
Color	16.7M (16777216) colors IPS	24-bit color 8R8G8B
Active Area (A.A.)	162.00 mm(W)×121.50 mm(H)	1024×600
View Area (V.A.)	164.00 mm(W)×124.12mm(H)	1024×600
Resolution	1024×600	
Backlight	LED	-
Brightness	350nit	-

Optical Specifications



Item	Symbol	Condition	Values			Unit	Remark
			Min.	Typ.	Max.		
Viewing Angle (CR≥10)	θ_L	$\Phi=180^\circ$ (9 o'clock)	65	75	-	Degree	-
	θ_R	$\Phi=0^\circ$ (3 o'clock)	65	75	-		
	θ_T	$\Phi=90^\circ$ (12 o'clock)	65	75	-		
	θ_B	$\Phi=270^\circ$ (6 o'clock)	65	75	-		

Voltage & Current

Item	Condition	Min	Typ.	Max	Unit
Power Voltage		7.0	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	50%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	-	-

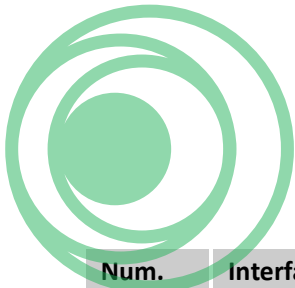
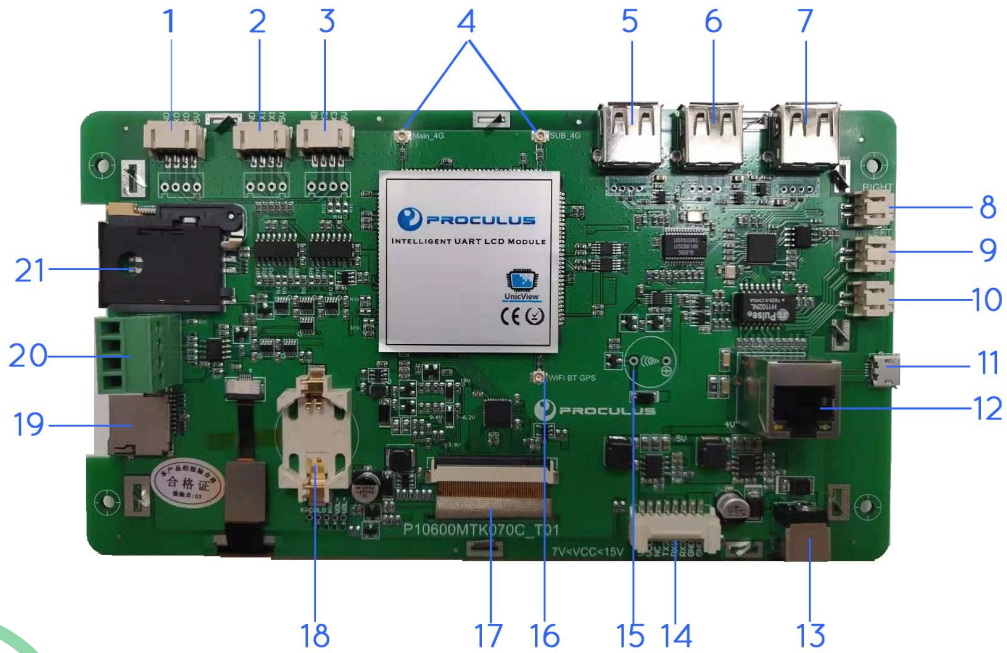
Interface

Item	Condition	Min	Typ.	Max	Unit
Baudrate	Standard	1200	115200	115200	bps
	User Define	1200	-	115200	bps
Serial Mode	TTL5V/RS232 *4				
User Interface	4Pin_2.54mm socket*3. One with 8Pin_2.0mm*1				
USB	USB DEBUG*1. USB HOST*3				
Ethernet	Support 802.11b/g/n/WIFI wireless network. Support 10m/100m Ethernet				

● Peripherals

Peripherals CTP, TF Card, Bluetooth, GPS, Dual-channel loudspeaker, MIC, etc.

● Interface Description



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Num.	Interface Name	Description
1	Serial port 0	Device name ttyMT0. Support TTL/RS232. Used as debugging serial port.
2	Serial port 1	Device name ttyMT1. Support TTL/RS232.
3	Serial port 3	Device name ttyMT3. Support TTL/RS232.
4	4G Antenna Socket	
5	USB Host	
6	USB Host	
7	USB Host	
8	Loudspeaker	Right sound channel
9	Loudspeaker	Left sound channel
10	MIC socket	
11	USB OTG	
12	RJ45 Interface	Support 10M/100M network
13	DC Power Socket	
14	8Pin_2.0mm Power Socket	
15	Buzzer	
16	Wifi Antenna	
17	RGB Signal Interface	

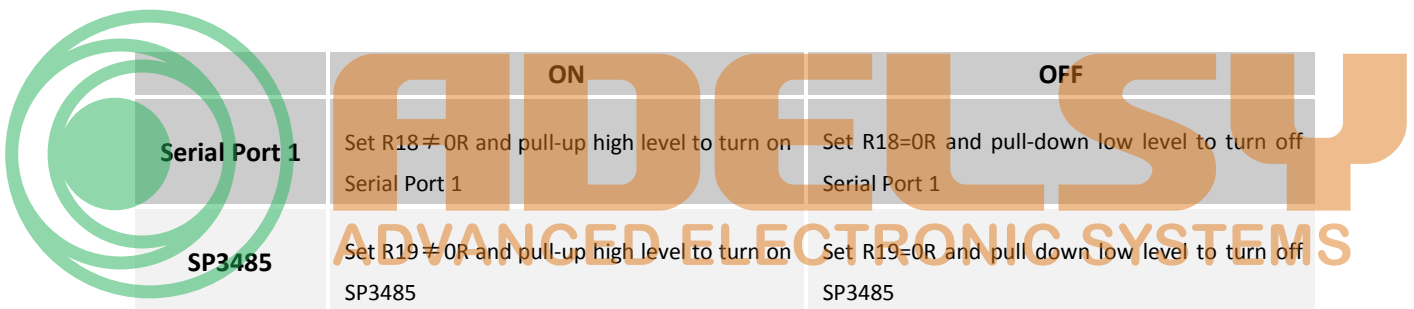
18	RTC Socket	
19	MicroSD Socket	
20	RS485 Socket	
21	SIM Card Socket	

● Electricity Level Switch

Serial Port	Electricity Level		
		TTL	RS232
0	ON	R1, R4	R2, R3
	OFF	R2, R3	R1, R4
1	ON	R5, R7	R6, R8
	OFF	R6, R8	R5, R7
3	ON	R9, R12	R10, R11
	OFF	R10, R11	R9, R12

Note: Serial Port 1 is closed by default.

Serial Port 1 and SP3485 shares one signal channel. They are mutex. It could switch from one to the other by changing R18 and R19.



Switch of SP3485 power supply:

Control of the power supply of SP3485 can be done by connecting and disconnecting R17. Default setting is ON.

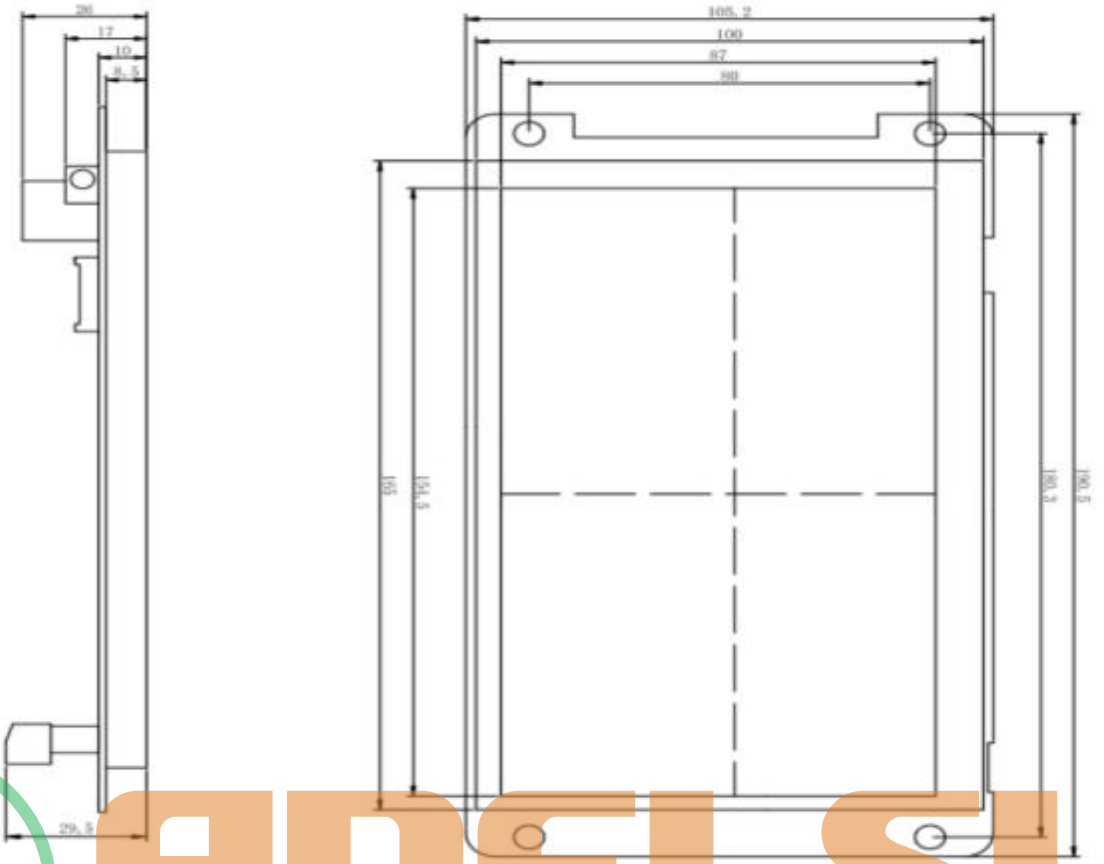
Switch of 5V power supply of serial ports:

R13, R14, R15 can be used to control the 5V power supply of serial ports.

R13 corresponds to serial port 0.

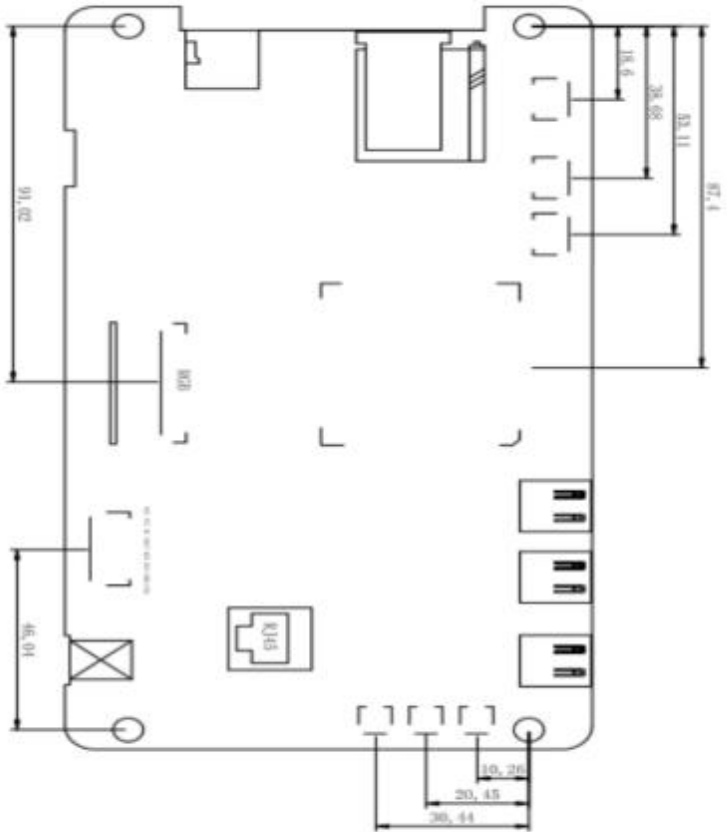
R14 corresponds to serial port 1.

R15 corresponds to serial port 3.



Unmarked Tolerance: $\pm 0.3\text{mm}$

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Part No.							
Datasheet	A4	Drawn by		Proclus		Date	
Proportion	1:1	Verified by				Date	
Unit	mm	Confirmed by				Date	
				 PROCLUS TECHNOLOGIES, INC.			