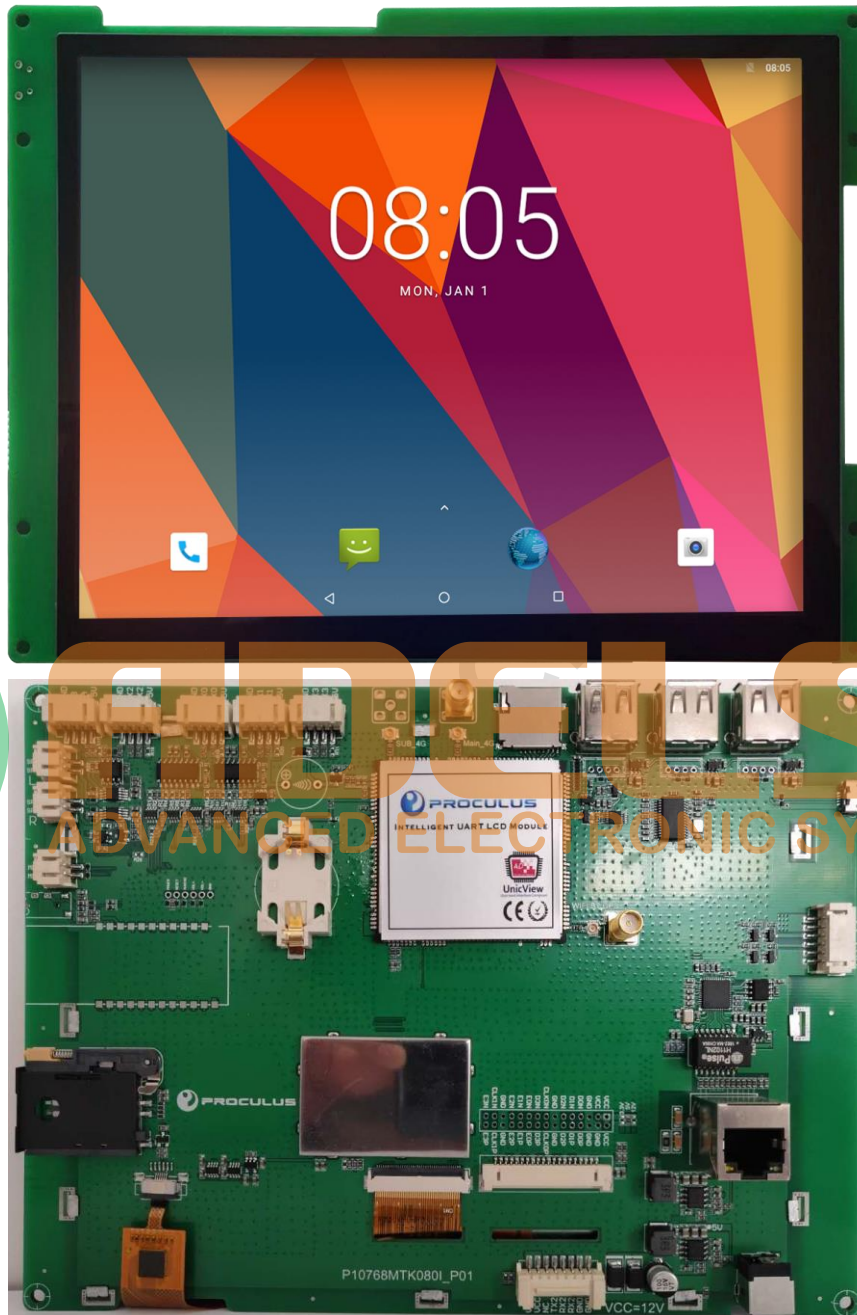


P10768MTK080I_P01

8.0 Inches, 1024xRGBx768, 16.7M Colors, Android LCM



P10768MTK080I_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	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	24-bit color 8R8G8B
Active Area (A.A.)	162.04 mm(W)×121.5 mm(H)	1024×768
View Area (V.A.)	165.15 mm(W)×124.45mm(H)	1024×768
Resolution	1024×768	
Backlight	LED	-
Brightness	350nit	-

● Voltage & Current

Item	Condition	Min	Typ.	Max	Unit
Power Voltage		7.0	12.0	35.0	V
Operation Current		-	400	-	mA
Recommended power supply: 12V 3A DC					

● 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	-	-

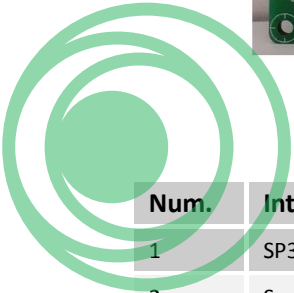
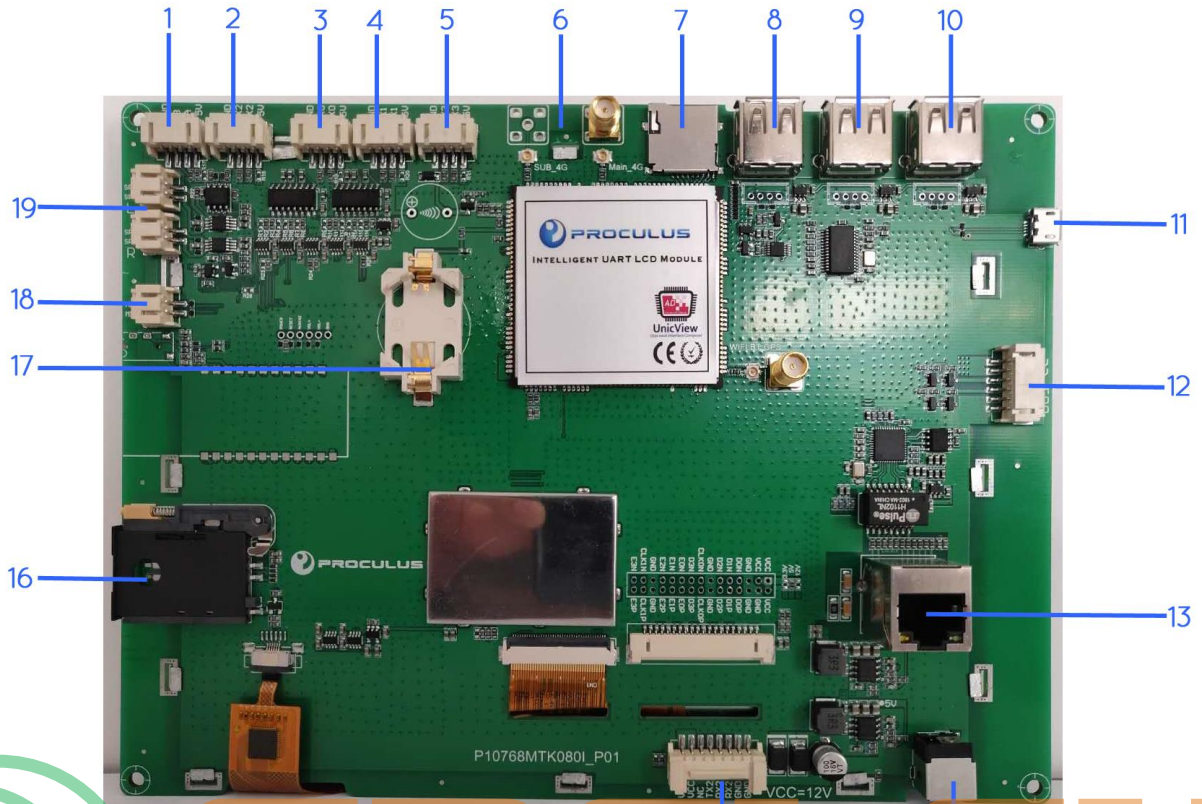
● Interface

Item	Condition	Min	Typ.	Max	Unit
Baudrate	Standard	1200	115200	115200	bps
	User Defin	1200	-	115200	bps
Serial Mode	TTL5V/RS232 *4. RS485*1				
User Interface	Standard serial communication protocol. 4Pin_2.54mm socket*3. 8Pin_2.0mm*1				
USB	USB DEBUG*1. USB HOST*3				
Ethernet	Support 802.11b/g/nWIFI wireless network. Support 10m/100m Ethernet				

● Peripherals

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



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Num.	Interface Name	Description
1	SP3485	
2	Serial port 2	Device name ttyMT2. Support TTL/RS232.
3	Serial port 0	Device name ttyMT0. Support TTL/RS232. Used as debugging serial port.
4	Serial port 1	Device name ttyMT1. Support TTL/RS232.
5	Serial port 3	Device name ttyMT3. Support TTL/RS232.
6	4G Antenna Socket	
7	MicroSD Socket	
8	USB HOST	
9	USB HOST	
10	USB HOST	
11	USB OTG	
12	Backlight Interface	6Pin
13	Ethernet Socket	Support 10M/100M network
14	DC Power Socket	
15	Power Socket	8Pin_2.0mm
16	SIM Card Socket	For 4G network
17	RTC Socket	
18	MIC socket	
19	Loudspeaker socket	

● Electricity Level Switch

Serial Port	Electricity Level		
		TTL	RS232
0	ON	R9, R12	R10, R11
	OFF	R10, R11	R9, R12
1	ON	R5, R7	R6, R8
	OFF	R6, R8	R5, R7
3	ON	R13, R15	R14, R16
	OFF	R14, R16	R13, R15

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 R23 and R24.

	ON	OFF
Serial Port 1	Set R24 ≠ 0R and pull-up high level to turn on Serial Port 1	Set R24=0R and pull-down low level to turn off Serial Port 1
SP3485	Set R23 ≠ 0R and pull-up high level to turn on SP3485	Set R23=0R and pull down low level to turn off SP3485

Switch of SP3485 power supply:

Control of the power supply of SP3485 can be done by connecting and disconnecting R22. Default setting is ON.

Switch of 5V power supply of serial ports:

R17, R18, R19, R20, R21 can be used to control the 5V power supply of serial ports.

R17 corresponds to SP3485.

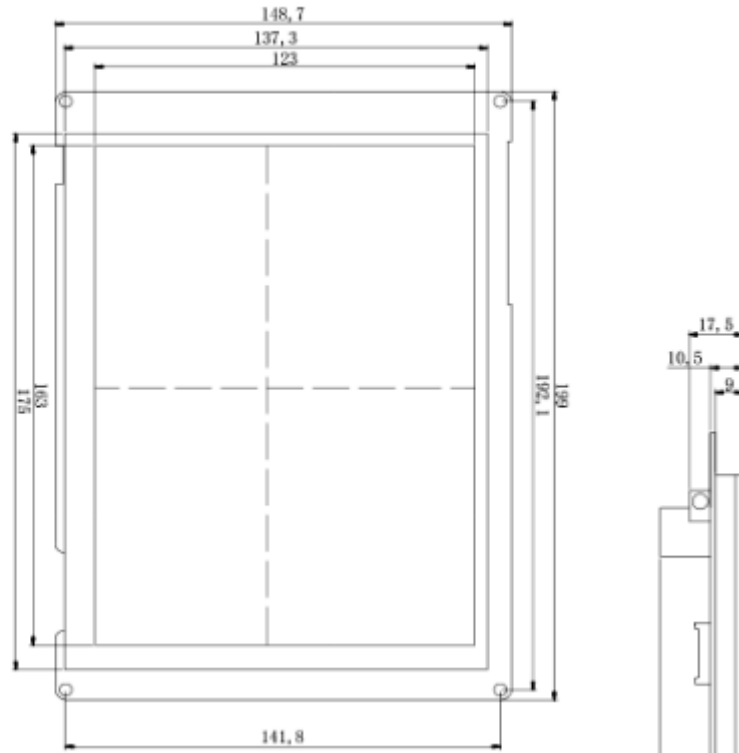
R18 corresponds to serial port 2.


R19 corresponds to serial port 0.

R20 corresponds to serial port 1.

R21 corresponds to serial port 3.

Note: Unmarked tolerance: ±0.3mm



Part No.		P10768MTK080I_P01			
Datashet	A4	Drawn by	Proculus	Date	
Proportion	1:1	Verified by		Date	
Unit	mm	Confirmed by		Date	
			PROCLUS TECHNOLOGIES INC.		

