

Operational Description

1. Introduction

P10 is a intelligent mobile POS.The wireless communication part of the product is based on BT/WIFI/NFC/2G/3G/4G/ rev. technology, which was designed in full-compliance to the international standard including its RF standard.

2. General information

Product Name:

P10 Stylish POS Terminal

Hardware Version:

V1.0

Software Version:

SW1.0

Antenna Type:

Internal Antenna

Antenna Gain:

700MHz~960MHz: 0dBi

1710MHz~2690MHz: 3dBi

Bluetooth/Wi-Fi: 3dBi

Device Operating Configurations:

BT: BR/EDR/BLE

2.4G WIFI: 802.11b/802.11g/802.11n (HT20)

5G_WIFI: 802.11a/n (HT20/HT40) /802.11ac (VHT20/VHT40/VHT80)

NFC

GSM: 2/3/5/8

WCDMA: 1/2//4/5/8

LTE: 1/2/3/4/5/7/12/17/25/26/28/38/41

Modulation Type:

BR/EDR: FHSS/ GFSK/ $\pi/4$ DQPSK/8DPSK

BLE: GFSK

802.11b CCK/DSSS

802.11a OFDM

802.11g CCK/DSSS/OFDM

802.11n MIMO-OFDM/DSSS/CCK

NFC: ASK

GSM:GMSK/8PSK

WCDMA:QPSK/16QAM

LTE:QPSK/16QAM/64QAM

Operating frequency Range: (MHz):

BR/EDR/BLE: 2402-2480

802.11b/g/n (HT20): 2412-2462

U-NII-1: 5150MHz-5250

U-NII-2A:5250MHz -5350

U-NII-3: 5725MHz -5850

NFC: 13.56

GSM850:

UL/824.2-848.8

DL/869.2-893.8
GSM900:
UL/880.2-914.8
DL/925.2-959.8
DCS1800:
UL/1710.2-1784.8
DL/1805.0-1889.2
PCS1900:
UL/1850.2-1909.8
DL/1930.21989.8
WCDMA_B1:
UL/1882.4-1977.6
DL/2112.4-2167.4
WCDMA_B2:
UL/1852.4-1907.6
DL/1932.4-1987.6
WCDMA_B4:
UL/1712.4-1752.6
DL/2112.4-2152.6
WCDMA_B5:
UL/826.4-846.6
DL/871.4-891.6
WCDMA_B8:
UL/832.4-837.6
DL/877.4-882.6
LTE_FDD_B1:
UL/1920-1979.9
DL/2110-2169.9
LTE_FDD_B2:
UL/1850.0-1909.9
DL/1930-1989.9
LTE_FDD_B3:
UL/1710-1784.9
DL/1805-1879.9
LTE_FDD_B4:
UL/1710-1754.9
DL/2110-2154.9
LTE_FDD_B5:
UL/824-848.9
DL/869-893.9
LTE_FDD_B7:
UL/2500-2569.9
DL/2620-2689.9
LTE_FDD_B12:
UL/699-715.9
DL/729-745.9
LTE_FDD_B17:
UL/704-715.9
DL/734-745.9

Dimensions (L x W x D)	186*79*49.5mm
Weight	About 450g
Display	6.517" HD+ (720 x 1600) +TFT IPS
Power	User replaceable Battery 7.2V / 2600mAh
Interface	Waterproof USB Type C Connector (USB 2.0 OTG)
CPU	MT8766V/WBA IMG GE8300 4*A53@ 2.0GHz
Operating System	Android 11 32 位 GO 版本
Memory	EMMC 8GB+LPDDR4X:8Gb/ EMMC 16GB+LPDDR4X:16Gb
Operating Temp.	-10°C ~ +45°C
Storage Temp.	-20°C ~ +70°C
Humidity	5%~95% Non-condensing
POPIG charging	Quick Charging (10W) Charging Time : under 4 hours Output voltage / output current: :5V/2A

4. RECOMMENDED OPERATING CONDITIONS

Parameter	Condition	Symbol	Min.	Typ.	Max.	Unit
Supply Voltage	GMSK	V_{BATT}	3.0	3.5	4.6	V
	EDGE/TD-SCDMA/TDD-LTE		3.0	3.6	4.6	V
		V_{CC}	3.0		4.6	V
GMSK Input Power		P_{IN}	-1	3	6	dBm
Operating Case Temperature	GMSK/EDGE 1-4 Slots (12.5%-50% duty cycle)	T_{CASE}	-20	25	+85	°C
	TD-SCDMA/TDD-LTE		-20	25	+85	

Recommended Operating Conditions

Parameter	Condition	Min.	Typ.	Max.	Unit
Supply Voltage	V_{CC1}	0.55	3.4	4.5	V
	V_{CC2}, V_{CC2_2}	0.55	3.4	4.5	
	V_{BATT}	3.0	3.4	4.6	
MIPI RFFE Supply	V_{IO}	1.65	1.8	1.95	V
MIPI RFFE Signal Levels for SCLK, SDATA	Low	0.0		$0.2 \times V_{IO}$	mA
	High	$0.8 \times V_{IO}$	1.8	V_{IO}	
Leakage Current	$V_{BATT}=3.4\text{ V}$			10	uA
	$V_{CC1}, V_{CC2}, V_{CC2}=3.4\text{ V}$			10	
Operating Temperature	T_{RANGE}	-20	+25	+85	°C