

TSAIO-185-PCT

It adopts a self-developed industrial motherboard with a built-in independent NPU, with 1TOPS AI computing power, and supports lightweight AI application development. The shell adopts a closed aluminum alloy structure, which has high strength and toughness and high heat dissipation effect, light weight, high strength, corrosion resistance, heat conductivity, compression and impact resistance, and is suitable for multi-purpose application environments.

Features

- Ultra-slim body built for flush mounting applications
- It has high strength, toughness and high heat dissipation
- The front panel is IP65 dust and water resistant
- Self-developed ARM architecture industrial motherboard
- RK3568 quad-core 64-bit Cortex-A55 core architecture, Up to 2.0GHz
- Built-in independent NPU with 1TOPS AI computing power
- Provide SDK package and support secondary development



Product Interface



Product Specifications

Screen Parameters

LCD size	18.5" TFT LCD
Resolution	1920*1080(16:9)
Viewing angle	89/89/89/89(L/R/U/D)
Colour	16.7M
Brightness	400 cd/m ²
Contrast ratio	1000:1

Touch Parameters

Touch type	10-point touch projection Capacitive touch screen	Single-point Resistance touch screen	Non-touch
Transmittance	≥88%	≥78%	≥92%
Input mode	Handwriting or Capacitance pen	Fingertip or stylus	/
Controller communication	USB	USB	/

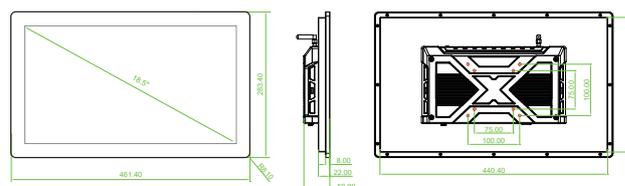
Hardware Configuration

CPU	RK3568, Quad-core 64-bit Cortex-A55 core architecture, Up to 2.0GHz	NPU	Built-in NPU with 1TOPS AI computing power
Memory	2G LPDDR4 (Optional 4G/8G)	WiFi	WiFi6 Single Band, 2.4GHz
Storage	32G eMMC (optional 64G/128G, It supports up to 256G)	Bluetooth	Support Bluetooth 5.2
GPU	ARM Mali-G52 2EE	Operating system	Android12/Linux5.10/ubuntu20.04/debian11

Power Parameters

Power input	DC 12V-36V	Static power	18W
-------------	------------	--------------	-----

Product Size



Physical Characteristics

Overall dimensions	W461.4x H283.4x D50mm
Size of opening	W442.4x H264.4mm

Interface Parameters

Power interface	1*DC 【5.5*2.1mm】 Supporting 12V-36V power input
USB	2*USB3.0
TF	1*TF card standard interface
HDMI	1*HDMI, Supporting HDMI data output, Up to 4K
SIM	1*SIM, Supporting various formats (Depending on 3G/4G module)
Network interface	1*LAN, 10M/100M/1000M adaptive Ethernet
Audio interface	1*Audio I/O, Support audio input and output
COM	1*RS232
Reset key	Support (1*UBOOT)
WiFi antenna	1*WiFi antenna
Grounding post	1*Grounding post (GND)

Product Reliability Parameters

Working temperature	-10°C~60°C
Storage temperature	-20°C~70°C
Relative humidity	Humidity: 95% Non-Condensing
Vibration protection	IEC 60068-2-64, Random, 5~500 Hz, 1 hr/axis
Impact protection	IEC 60068-2-27, Half sine wave, Lasting for 11ms
Product certification	CCC/CE/FCC/EMC/CB/ROHS
Waterproof grade	The front panel reaches IP65 protection level