ABPanelPC®
Industrial, Rugged, Reliable

AB080-A6

The whole machine adopts self-developed industrial motherboard, built-in independent NPU with 1TOPS AI arith-metic power, supporting lightweight AI application development; fanless and fully enclosed design, general-pur-pose face frame, aluminium alloy structure, and IP65-rated dustproof and waterproof front panel. The whole machine has good scalability, practicality and EMC compatibility.

Features

- Independent moulding, R&D and production of appearance
- Pure flat panel IP65 dust-proof and waterproof.
- 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, Support secondary development and upgrade customization

Product Model

Product Size	8"
Non-touch	AB080-A600
Capacitive touch	AB080-A610
Resistive touch	AB080-A620

Product Interface

Product Specifications

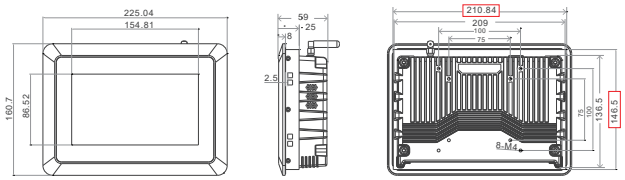
Screen Parameters

LCD size	8" TFT LCD
Resolution	1024*768
Viewing angle	85/85/85/85 (L/R/U/D)
Colour	16.7M
Brightness	300 cd/m²
Contrast ratio	800:1

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	/

Product Size



Physical Characteristics

Overall dimensions	W225.04x H160.7x D59mm
Size of opening	W212.84 x H148.5mm

Interface Parameters

Industrial terminals	1*12P Phoenix terminal (Power supply/RS232*1/RS485*1/CAN*1/GPIO*3)
Power interface	1*DC2.1, 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

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	WIFI Support
Storage	32G eMMC (64G/128G Optional)	Bluetooth	Support Bluetooth 5.2
GPU	ARM Mali-G52 2EE	Operating system	Android 12.0, Linux5.10, Ubuntu/Debian

Power Parameters

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

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