

TPC104-A29

Adopting self-developed industrial motherboard, built-in independent NPU, with 1TOPS AI arithmetic, support for lightweight AI application development; the shell adopts closed aluminum alloy structure, back cover die-casting, with high strength and toughness and high heat dissipation, light weight, high strength, corrosion-resistant and heat conductive, compression and impact resistance, adaptable to multi-purpose application environments.

Features

- High-precision die-cast aluminum molding with high-strength toughness and high heat dissipation effect
- Self-developed ARM architecture industrial motherboard
- RK3568, 4-core 64-bit Cortex-A55, 2.0GHz main frequency
- Built-in independent NPU with 1TOPS AI computing power
- Support secondary development and upgrade customization



Model

| | |
|------------------|--------------|
| Product size | 10.4" |
| Non-touch | TPC104-A2900 |
| Capacitive touch | TPC104-A2910 |
| Resistive touch | TPC104-A2920 |

I/O Interface



Specification

Screen Parameter

| | |
|--------------------|-----------------------|
| Display type | 10.4" TFT LCD screen |
| MAX.resolution | 1024*768(4:3) |
| Viewing angle(H/V) | 80/80/80/80 (L/R/U/D) |
| Luminance (cd/m²) | 400 cd/m² |
| Contrast ratio | 1000:1 |

Touch Parameter

| Touchscreen | Projection capacitive touch 10-point multi touch | Resistive touch single point | Non-touch |
|--------------------|--|------------------------------|-----------|
| Light transmission | ≥88% | ≥78% | ≥92% |
| Controller | USB (COM customized) | USB (COM customized) | / |

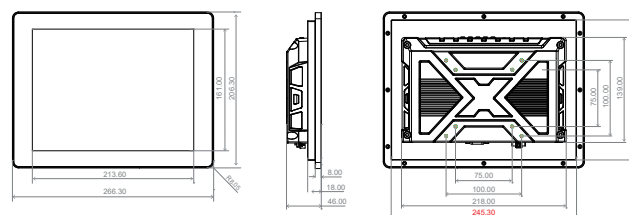
Power Parameter

| | |
|---------------|------------|
| Power input | DC 12V-36V |
| Power adapter | 24V/2.5A |

Configuration

| | | | |
|------------------|--|---------------------|--------------------------------|
| CPU | RK3568, Quad-Core/4-Wire 2.0GHz CPU | Wi-Fi | Wi-Fi 6, Dual Band 2.4GHz+5GHz |
| Memory/RAM | 2GB (Optional 4GB/8GB) | Bluetooth | BT5.3 |
| Storage | 32GB eMMC (Optional 64GB/128GB/256GB) | Watchdog Timer | Support |
| NPU | Built-in NPU with 1TOPS AI computing power | RTC real time clock | Support |
| Operating system | Android12/14, Linux5.10/Ubuntu20.04/Ubuntu22.04/Debian11 | Timer switch | Support |

Dimension



Physical Characteristic

| | |
|--------------------|--|
| Overall dimensions | W266.3x H206.3x D46mm |
| VESA | 75x75mm, 100x100mm, M4 screw hole |
| Material | Aluminum alloy |
| Color | Black, optional silve |
| Installation | Supports Back mounted/Wall mounted/Desktop/Louver/Cantilever Boom type, etc. |

Interface Parameter

| | |
|------------------|---|
| PowerSW | 1*PowerSW |
| Power interface | 3.81-2P Phoenix Terminal (optional upgrade to DC 2.0*1). |
| Phoenix terminal | 3.5-12P Phoenix terminals (2321/4851/CAN1/NC4). |
| USB | 4*USB (2*USB2.0, 2*USB3.0) |
| TF | 1*TF card standard interface |
| SIM | 1*SIM card slot (should be work with 3G/4G module) |
| HDMI | 1*HDMI output, up to 4K |
| Ethernet | 1*LAN, 10M/100M/1000M adaptive Ethernet, 3G/4G customized |
| Audio | 1*Audio I/O, Support audio input and output |
| Serial port | 1*COM (The default is RS232, optional RS485/RS422) |
| UBOOT | 1*UBOOT |
| Wi-Fi antenna | 1*Wi-Fi antenna |
| Grounding | 1*GND |
| Speaker | 2*(8Ω2W) |

Reliability Parameter

| | |
|-----------------------|---|
| Operating temperature | -10°C~60°C (-20°C~70°C can be customized) |
| Storage temperature | -20°C~70°C |
| Relative humidity | 95% non-condensing |