

# TSAIO-238-A26

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       | 23.8" TFT LCD         |  |  |
| Resolution     | 1920*1080(16:9)       |  |  |
| Viewing angle  | 89/89/89/89(L/R/U/D)  |  |  |
| Colour         | 16.7M                 |  |  |
| Brightness     | 250 cd/m <sup>2</sup> |  |  |
| Contrast ratio | 1000:1                |  |  |

### Touch Parameters

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

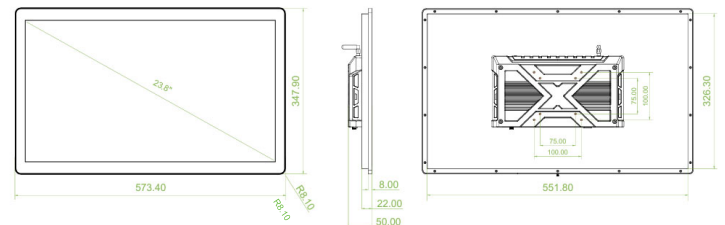
### Hardware Configuration

|         |   |                  |  |
|---------|---|------------------|--|
| 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 | W573.4x H347.9x D50mm |
| Size of opening    | W553.8x H328.3mm      |

### 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 |
| Waterproof grade     | The front panel reaches IP65 protection level    |