

RICO-3568 Developer Kit

Developer Kit for RICO-3568



Features

- Rockchip RK3568
- NPU: 0.8 TOPS
- Onboard LPDDR4 4GB
- Onboard eMMC 16GB and Micro-SD Card Slot
- HDMI 2.0, eDP 1.3, LVDS, MIPI
- Wi-Fi 802.11 a/b/g/n/ac, BT V5.0
- GbE x 2 (One located in Daughter board)
- USB 3.2 Gen 1: Type-C OTG x 1, Type A x 1
- USB 2.0: Type-A x 1, Pin Header x 1
- RS-232/422/485 x 1, RS-232 x 1, Debug Port x 1
- 8-bit GPIO, I2C, mPCIe Slot x 1 (mSATA/USB)
- +12V DC Input
- 12V-24V Input, PoE, CAN Bus x 1, USB 2.0 x 2 via Daughter board, PER-T650
- OS Support: Android™ 12/Debian® 10
- Small Board Size: 100mm x 80mm
- 10.1" WXGA (1280 x 800) Color TFT LCD Display with P-CAP

Specifications

System	
Form Factor	Pico-ITX Plus (100mm x 80mm)
CPU	Rockchip RK3568 Quad-Core Arm® Cortex®-A55 Processor NPU: 0.8 TOPS
GPU	Arm® Mali™-G52 GPU
Graphics	Video Encode: 1080P @60fps H.264/H.265 Video Decode: 4K@60fps H.264/H.265/AV1 4KP60 AVS2/VP9 1080P MPEG1/VP8
Memory Capacity	Onboard LPDDR4 4GB
Storage/SSD	16GB eMMC and Micro-SD card Full-size mini-PCIe slot x 1 (mSATA / USB)
Operating System	Android™ 12 Debian® 10
Kernel	Kernel 4.19.219 (Android 12)
Watchdog Timer	Integrated
Power Requirement	+12V DC input AT: Default, ATX: Optional
Power Consumption (Typical)	0.96A @12V, full load, Quad-core CPU
Dimension	Board: 3.94" x 3.15" (100mm x 80mm) Kit: 15.75" x 13.19" x 5.51" (400mm x 335mm x 140mm)
Gross Weight	Board: 0.44 lb (0.2 Kg) Kit: 7.72 lb (3.5kg)
Operating Temperature	-4°F ~ 140°F (-20°C ~ 60°C)
Storage Temperature	-40°F ~ 176°F (-40°C ~ 80°C)
Operating Humidity	0% ~ 90% relative humidity, non-condensing
MTBF (Hours)	100,000
Certification	CE/FCC
Display	
HDMI	HDMI 2.0, up to 4K x 2K @60Hz
eDP	eDP 1.3, up to 2560 x 1600 @60Hz
LVDS	7" WSVGA (1024 x 600) Color TFT LCD Display 10.1" WXGA (1280 x 800) Color TFT LCD Display 18/24-bit LVDS, up to 1280 x 800 @60Hz JP2, 3.3V/5V: LVDS Power Selection JP3, 5V/12V: Backlight Power Selection LCD Backlight connector
MIPI	Up to 2048 x 1536 @60Hz for Dual-MIPI Mode

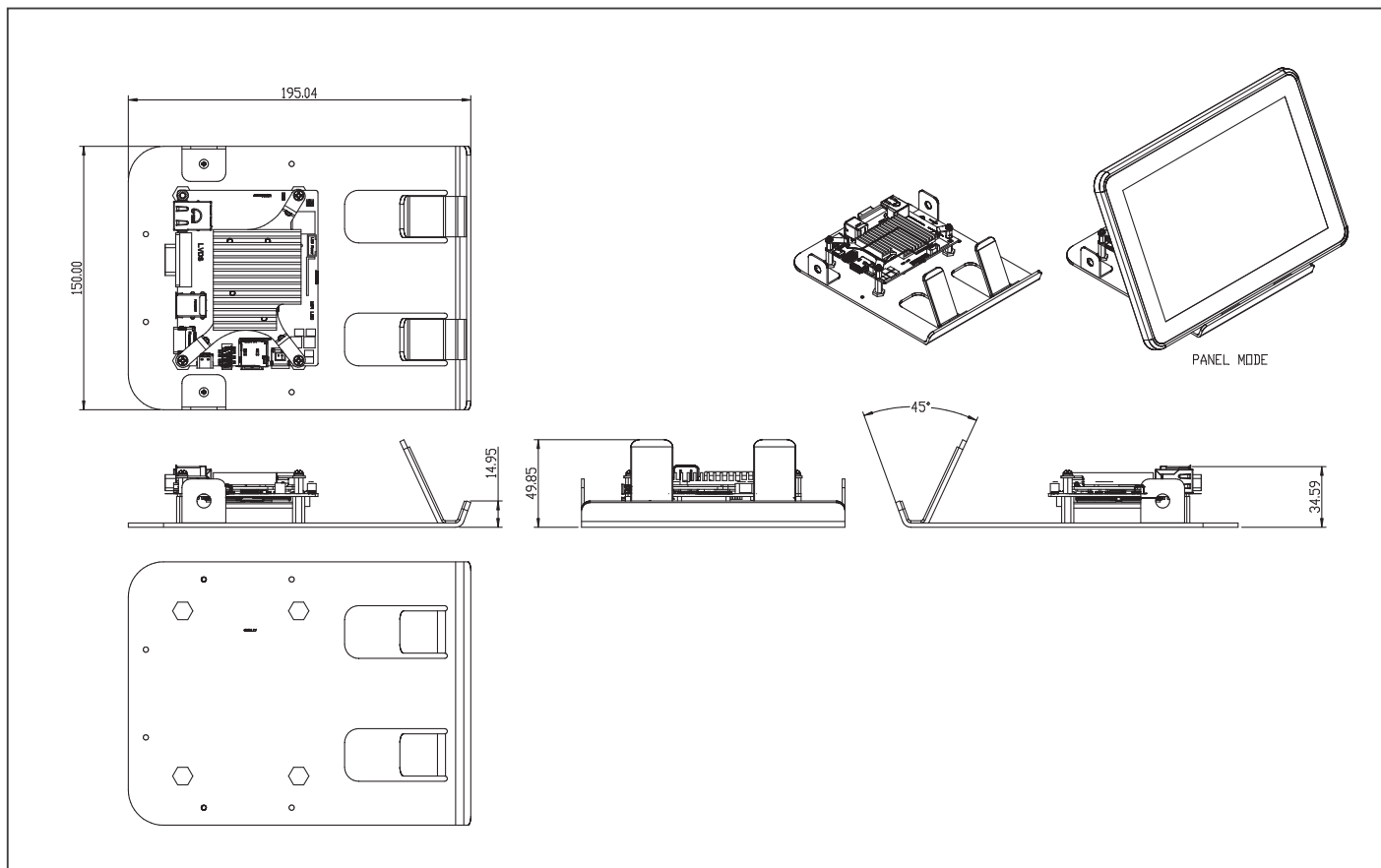


RF Function	
WiFi	Onboard 802.11 a/b/g/n/ac ANT1 for Antenna
BT	Bluetooth V5.0 + EDR
I/O	
Ethernet	GbE x 2 RJ-45 x 2 (Onboard x 1 + T650 Daughter Board RJ-45 Port or T650 Wide-Voltage Board RJ-45 Port)
USB Port	USB 3.2 Gen 1 OTG (Type-C) x 1 USB 3.2 Gen 1 x 1 USB 2.0 x 2 (Type-A x 1, Pin Header with Integrated USB, I2C, 5V x 1)
Serial Port	RS-232/422/485 x 1 JP1, 5V/12V: RS-232/422/485 Voltage Output Selection RS-232 / Debug port 7-pin wafer x 1 CN3: UART (Tx/Rx only), I2C, USB, Others
Audio	Microphone/ Earphone (3.5mm)
GPIO	GPIO x 8, 2x6 Wafer x 1
Expansion Slot	Full-size mini-PCIe slot x 1 (mSATA / USB) Connect to Daughter board: 40-pin FPC connector x 1
SIM Slot	Nano-SIM, Push-Push type with tray
SD Socket	Micro-SD card, Push-Push type
Camera	—



Dimension

Unit: mm



Packing List

- **RICO-3568**
- **125530060Y**
12V/60W Power Adapter
- **170X000799**
Power Cord for US
- **TS58101033**
10" P-CAP TOUCH PANEL
- **TS070X0004**
7" P-CAP TOUCH PANEL

Ordering Information

- **RICO-3568-DK-001**
RICO-3568 10" Developer Kit
- **RICO-3568-DK-000**
RICO-3568 7" Developer Kit