

Embedded Single Board for OEM/ODM

# ONYX RICO-3288

Pico-ITX Fanless Board with HDMI Rockchip ARM Cortex™-A17 Quad-Core Processor



## Features

- Rockchip RK3288 ARM Cortex™-A17 Quad-core 1.6 GHz
- Onboard DDR3L Memory 2 GB
- Onboard eMMC 16 GB
- MicroSD Slot up to 64 GB
- Gigabit Ethernet x 1
- 18/24-bit Dual-Channel LVDS, eDP and HDMI
- RS-232 x 1, RS-232/422/485 x 1
- USB 2.0 x 3, USB OTG x 1, Mini-PCIe x 1 (for 3G/4G Module)
- Optional 7.4V Battery Power Input
- Optional High Accuracy GPS Module, NFC Module



## Specifications

### System

Form Factor	Pico-ITX
CPU	Rockchip RK3288 ARM Cortex™-A17 Quad-core 1.6 GHz (up to 1.6 GHz)
GPU	Mali-T764
Graphics	Video Decode: MPEG-1, MPEG-2, MPEG-4, H.263, H.264, AVS, VC-1, VP8, MVC Video Encode: H.264 (BP@level4.0, MP@level4.0, HP@level4.0), MVC and VP8
Memory Capacity	DDR3L 2GB
Storage / SSD	16GB eMMC and Micro SD card
Operating System	Android 6.0
Kernel	Kernel 4.4
Watchdog Timer	Integrated
Power Requirement	+12V DC input, Optional 7.4V battery
Power Consumption	0.6A@12V, full load, Quad CPU
System Cooling	Heat-spreader, cooler optional
Dimension (L x W)	3.94" x 2.84" (100 mm x 72 mm)
Gross Weight	0.88 lb (0.4 kg)
Operating Temperature	32°F ~ 140°F (0°C ~ 60°C)
Storage Temperature	-40°F ~ 176°F (-40°C ~ 80°C)
Operating Humidity	0% ~ 90% relative humidity, non-condensing
MFTB (Hours)	80,000
Certification	CE / FCC

### Display

HDMI	HDMI(1.4) up to 4k x 2k @60Hz
eDP	Up to 2560 x 1440 @60Hz
LVDS	support 18/24-bit up to 1920 x 1080 @60Hz
MIPI	Up to 2560 x 1440 @60Hz

### I/O

Ethernet	GbE x 1
USB Port	Micro USB OTG x 1, USB 2.0 Type A x 2 USB2.0 Pin header x 1
Serial Port	RS-232/422/485 x 1 RS-232 Pin header x 1, Debug port pin header x 1
Audio	2.5W (by 4Ω) Speaker/ Microphone/ Earphone
GPIO	8-bit (4-in, 4-out)
Expansion Slot	Full-size mini-PCIe slot x 1 (For 3G/4G card)
SIM Slot	Nano-SIM
SD Socket	Supports Micro SD card
Camera	—