

# IB3-761

## ARM EMBEDDED MOTHERBOARD



Rockchip®  
RK3568 processor



1 x HDMI, 1 x LVDS  
Up to 3840 x 2160 @60 Hz



Onboard Wi-Fi/BT module  
Support 3G/4G module



3.5inch form-factor  
146 mm x 102 mm (5.75" x 4.02")

### CPU

<b>CPU</b>	Rockchip® RK3568 processor
<b>Processing Units</b>	4 Cores Cortex-A55
<b>TDP</b>	6 W

### Network

<b>Network Controller</b>	1 x Realtek RTL8211E Gigabit Ethernet
<b>Wi-Fi/BT</b>	Onboard Wi-Fi/BT module
<b>Cellular Network</b>	1 x Full-size Mini-PCIe for 3G/4G, 1 x SIM Slot

### System

<b>GPU</b>	ARM Mali-G52
<b>Graphic Engine</b>	OpenGL ES 1.1/2.0/3.2, OpenCL 2.0, Vulkan 1.1
<b>Multi-Media</b>	4K 60fps H.265/H.264/VP9 decoders 1080P 60fps H.265/H.264 encoders
<b>System Memory</b>	2 GB, Onboard DDR4 (Optional: 4 GB)
<b>Storage</b>	32 GB, Onboard eMMC 1 x TF Card Reader
<b>Watchdog Timer</b>	Yes
<b>Auto Power On</b>	Yes
<b>RTC</b>	Set up independently every day, a week as a cycle
<b>Power Requirement</b>	DC-IN, 12 V
<b>Dimensions</b>	146 mm x 102 mm (5.75" x 4.02")
<b>Cooling System</b>	Fanless, passive cooling
<b>Operating system</b>	Android 11/Debian 10
<b>Operating Temperature</b>	0°C ~ 60°C (32°F ~ 104°F) @0.7m/s Air Flow
<b>Storage Temperature</b>	-20°C ~ 75°C (-4°F ~ 167°F)
<b>Humidity</b>	95% @ 60°C (non-condensing)

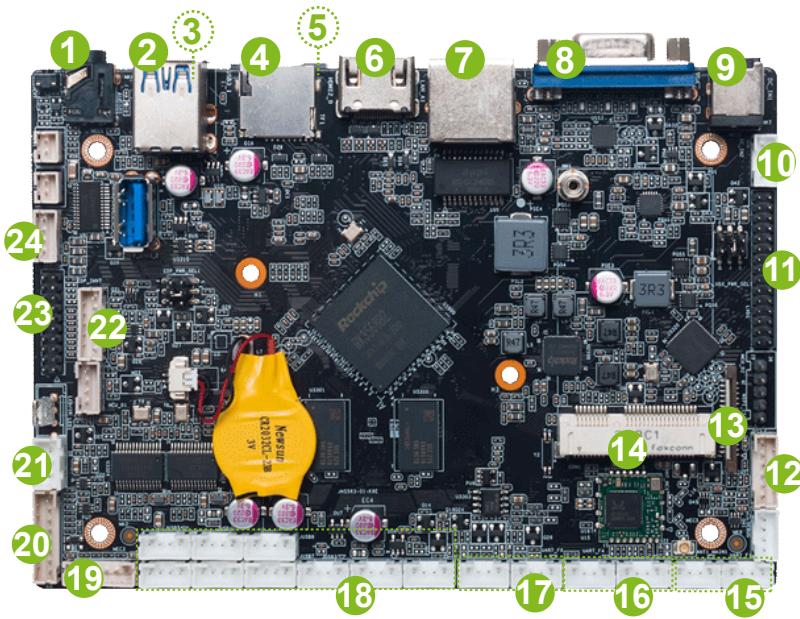
### Rear I/O

<b>USB</b>	1 x USB3.2 Gen1, 1 x USB3.2 Gen1 OTG
<b>Display</b>	1 x HDMI2.0 (Max.3840 x 2160 @60 Hz) Optional:1 x VGA (Max. 2048 x 1536 @60Hz)
<b>Audio</b>	1 x 2-IN-1 Headset (AUDIO-OUT & MIC-IN)
<b>Ethernet Interface</b>	1 x RJ45
<b>Button</b>	1 x Power on, 1 x Recovery

### Internal I/O

<b>USB</b>	1 x USB3.2 Gen1 9 x USB2.0, signal by 9 x 4pin header
<b>Display</b>	2 x 15pin dual channel 24bit LVDS(Max. 1920 x 1200@24 Hz) 2 x 10pin eDP(Max.1920 x 1080 @60Hz)
<b>Camera</b>	1 x MIPI-CSI jack
<b>Serial port</b>	2 x RS232, signal by 2 x 4pin header, 2 x RS485, signal by 2 x 4pin header, 2 x TTL, signal by 2 x 4pin header,
<b>IO</b>	1 x 8pin IO-KEY, 1 x 3pin IR
<b>Audio</b>	1 x 2pin MIC-IN, 1 x 4pin SPK (5W)
<b>Others</b>	1 x 6pin TP_I2C, 1 x 4pin DC_IN, 1 x 6pin LVDS_BL, 1 x 6pin eDP_BL, 1 x 8pin GPIO

## Dimensions and Drawing



No.	Dimensions	No.	Dimensions
1	HEADSET	19	TP_I2C
2	USB3.2GEN1	20	IO-KEY
3	USB3.2GEN1 OTG	21	IR
4	SIM SLOT	22	EDP_INT
5	TF CARD READER	23	EDP
6	HDMI2.0	24	SPK
7	RJ45		
8	VGA (Optional)		
9	DC-IN		
10	DC-IN		
11	LVDS		
12	LVDS_BL		
13	MIPI-CSI		
14	MINI-PCIE for 3G/4G		
15	2*TTL		
16	2*RS485		
17	2*RS232		
18	9*USB2.0		

**HDMI**<sup>®</sup>  
HIGH DEFINITION MULTIMEDIA INTERFACE

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