

深圳金亚太科技有限公司
Shenzhen Geniatech Co.,Ltd.

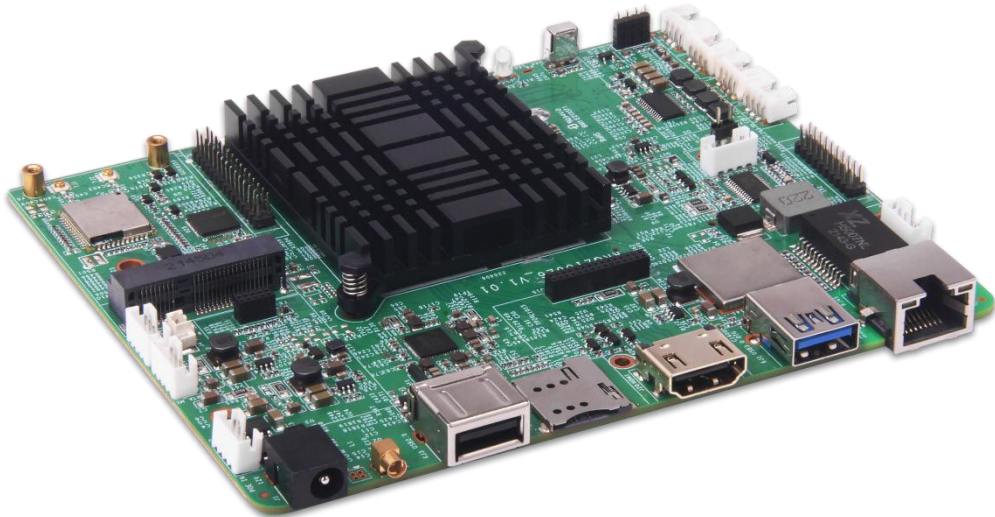
K3-3568 SPECIFICATION

深圳金亚太科技有限公司

Shenzhen Geniatech Co.,Ltd.

SPECIFICATION

MODEL: K3-3568



APPROVED BY GENIATECH		
PREPARED BY 编写	CHECKED BY 审核	APPROVED BY 批准

Please return the original copy after approved by your company with seal and signature.
请在贵公司盖章并签字后寄回正本一份。

APPROVED BY CUSTOMER		
COMMENTS 确认意见	APPROVED BY 批准签字	COMPANY SEAL 盖章

Website: www.geniatech.com

Address: Room 02-04, 10/F, Block A, Buidling 8, Shenzhen International Innovation Valley,
Dashi Road, Nshan District, Shenzhen, Guangdong, China

CONTENT

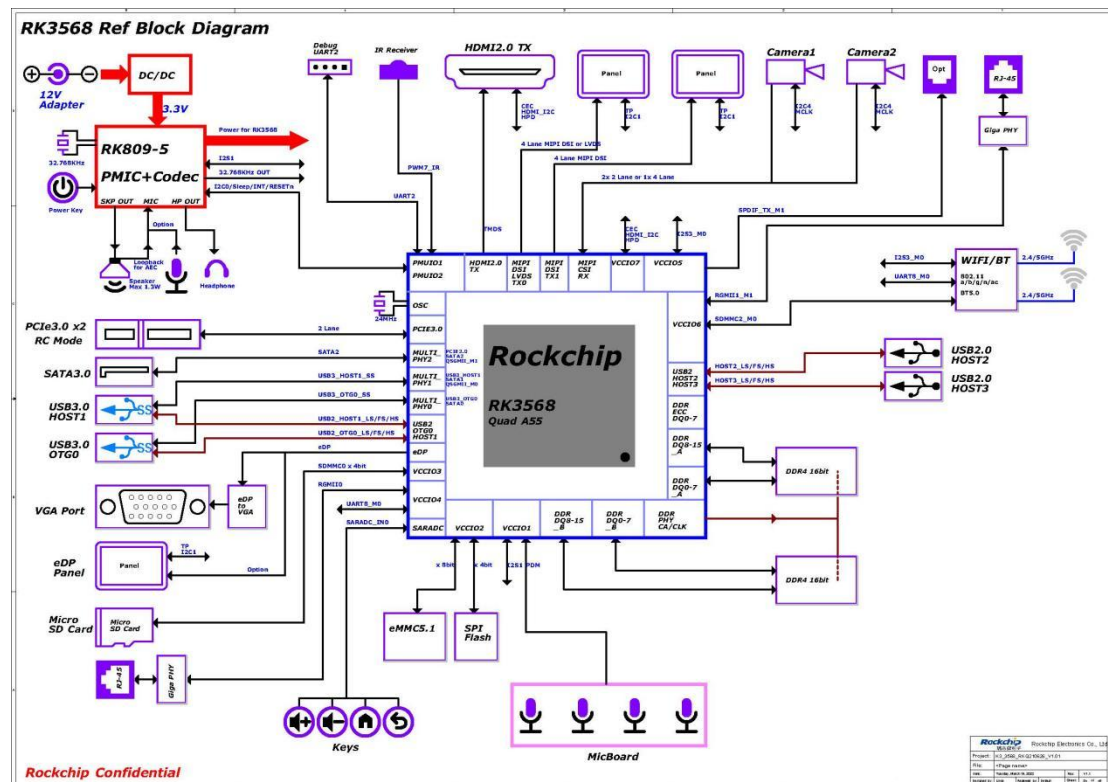
1.GENERAL DESCRIPTION.....	1
2.PRODUCT APPEARANCE.....	2
3.FEATURES.....	4
4.DECODE.....	5
5. PRECAUTIONS FOR USE	5

Revision History

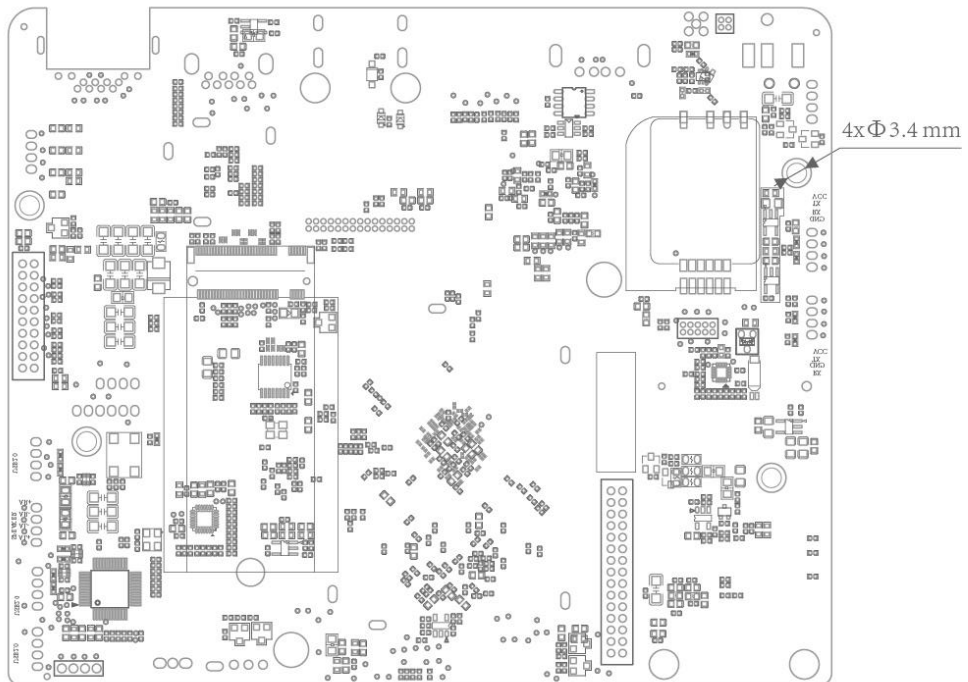
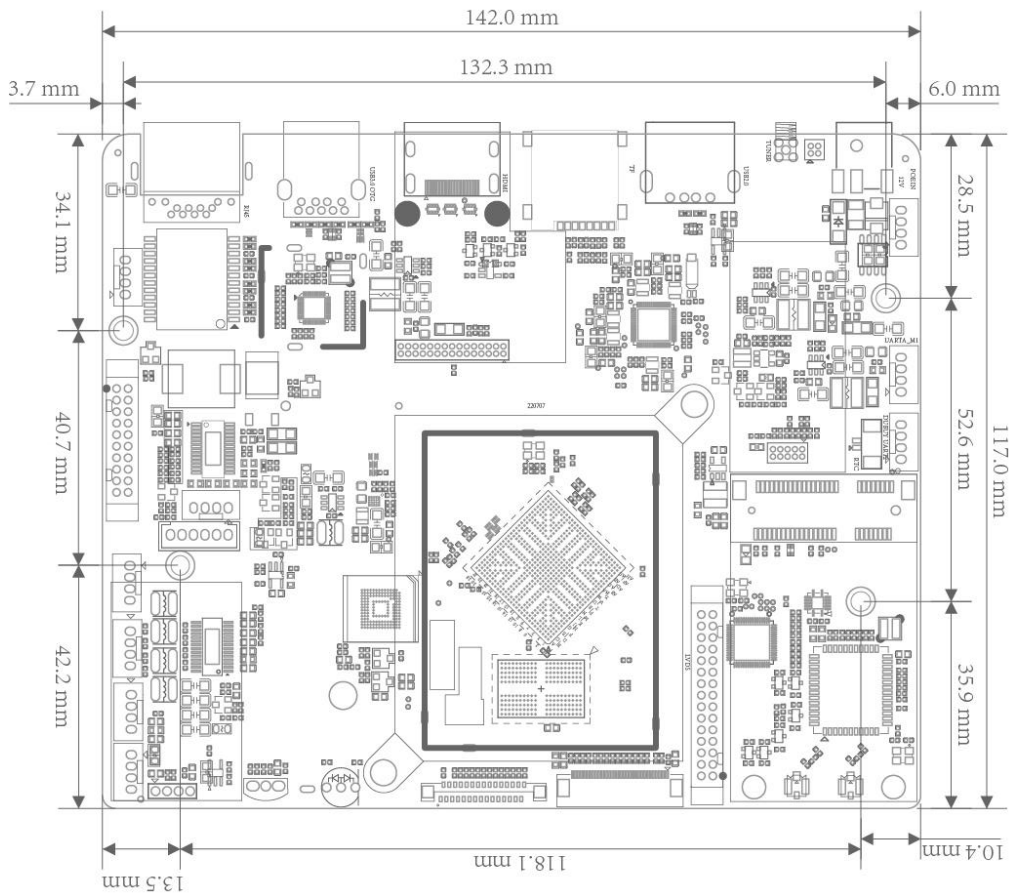
VERSION	DATE	BOARD ID	PAGE	DESCRIPTION	AUTHOR
V1.0	2021/10/22	RKQ210626_V1.0	6		
V1.1	2022/07/11	RKQ210626_V1.01	7		

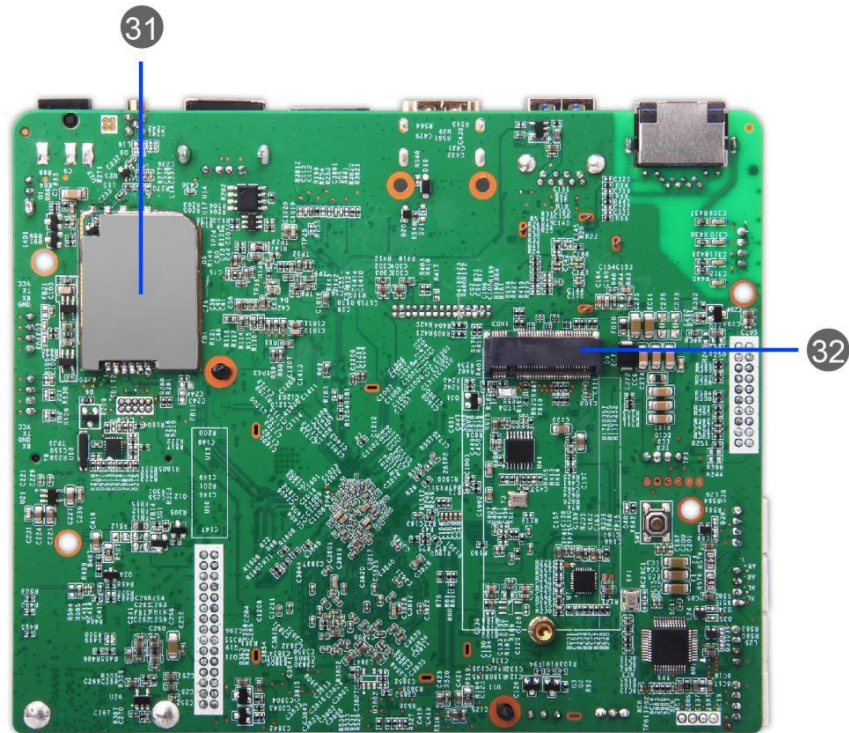
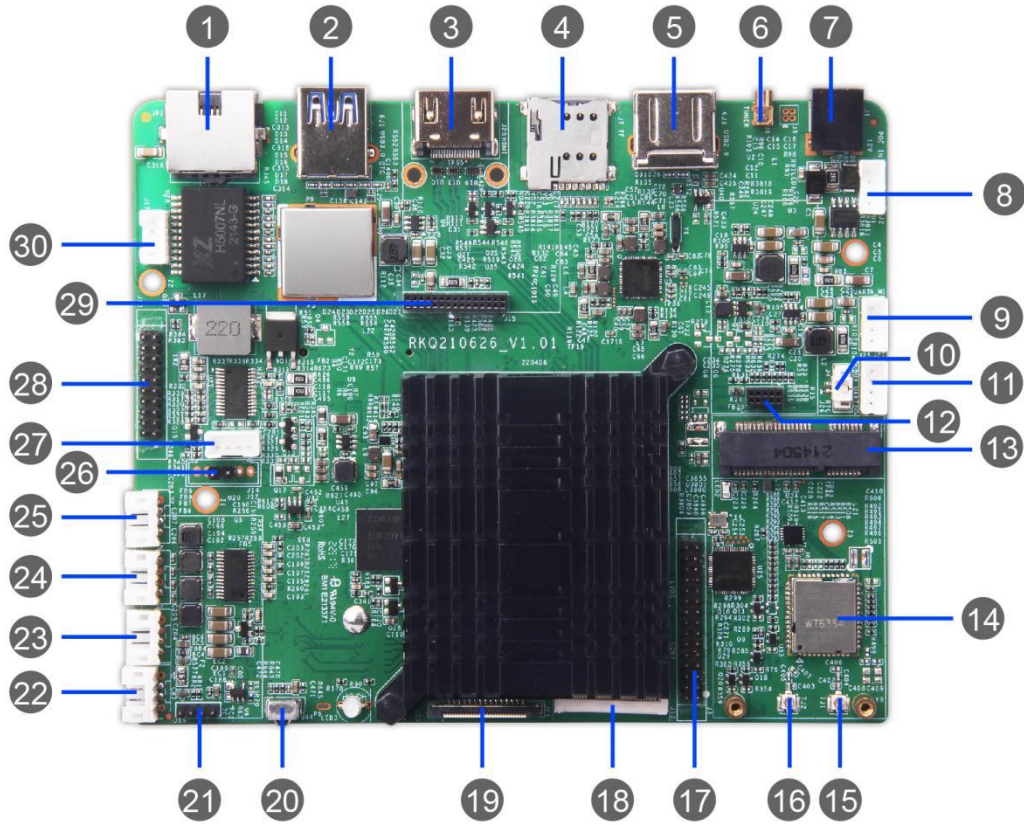
1. GENERAL DESCRIPTION

K3-3568 is using Rockchip RK3568 processor, a high-performance and low power quad-core application processor designed for commercial display equipment development board or AIoT equipments and other applications, it integrates Quad-core ARM Cortex-A55 CPU and Neural network acceleration engine with processing performance up to 1 TOPS. Android 11.0 OS with 2GB /4GB/8GB RAM, 8GB/16GB/32GB/64GB eMMC flash to choose, lots of high-performance interface to get very flexible solution, such as multi-pipe display with LVDS, eDP, MIPI DSI, HDMI2.0. Built-in WiFi & 1000M LAN, USB, external storage, support program playback. It is designed to support multi-format video decoders including H.264/H.265/VP9 up to 4Kx2K@60fps, especially, H.264/H.265 decoders support 10bits coding, and also supports H.264/MVC/VP8 encoders by 1080p@30fps, high-quality JPEG encoder/decoder, and special image preprocessor and postprocessor.



2. PRODUCT APPEARANCE





No.	Name	Description
1	RJ45	*1 (10/100/1000M Ethernet)
2	USB3.0	*1
3	HDMI Slot	*1 (Support HDMI 2.0a)
4	TF Card Slot	*1 (Up to 512GB)
5	USB2.0	*1
6	RF	*1
7	DC IN	*1(12V Adapter)
8	POE In	*1
9	UART	*1
10	RTC Battery In	*1
11	DEBUG	*1
12	GTIoT	*1(External IoT module)
13	MiniPCIe Slot	*1(for 3G/4G module)
14	Wifi Module	*1
15	Wifi Antenna	*2
16		
17	LVDS Slot	*1
18	MIPI DSI Slot	*1
19	MIC Array Slot	*1
20	IR	*1
21	USB Slot	*1(for wifi module)
22	USB Slot	*1
23	USB Slot	*1
24	Speaker Slot	*1
25	USB Slot	*1
26	Backlight Slot1	*1
27	Backlight Slot2	*1
28	eDP Slot	*1
29	HDMI IN Slot	*1
30	POE Out Slot	*1
31	Tuner Module	*1 (Support DVB-T/T2、ATSC1.0/3.0、ISDB-T)
32	M.2 Slot	*1 (KEY-B for 5G module)

3.FEATURES

CHIPSET	Rockchip RK3568	
MARKET AREA	Global	
OSD LANGUAGE	English/Chinese (multi language OSD)	
Processor	OS	Android 11.0/ Debian 10
	CPU	Quad-core ARM Cortex-A55
	GPU	Mali-G52-2EE

	LPDDR4	2GB (Optional 4G/8G)
	EMMC FLASH	16GB(Up to 128GB)
Network	Wifi	WLAN 802.11 a/b/g/n/ac 2.4/5GHz 2T2R MIMO (Optional WLAN 802.11.AX 2.4/5GHz 2T2R MIMO)
	Bluetooth	BT5.0(BT4.2)
DC IN	12V/2A	
Dimensions	142 x 117 mm	

4. DECODE

Video Decoder

H.265 HEVC/MVC Main10 Profile yuv420@L5.1 up to 4096x2304@60fps
H.264 AVC/MVC Main10 Profile yuv400/yuv420/yuv422/@L5.1 up to 4096x2304@60fps
VP9 Profile0/2 yuv420@L5.1 up to 4096x2304@60fps
VP8 verision2,up to 1920x1088@60fps
VC1 Simple Profile@low, medium, high levels, Main Profile@low, medium, high levels, Advanced Profile@level0~3,up to 1920x1088@60fps
MPEG-4 Simple Profile@L0~6,Advanced Simple Profile@L0~5,up to 1920x1088@60fps
MPEG-2 Main Profile, low, medium and high levels, up to 1920x1088@60fps
MPEG-1 Main Profile, low, medium and high levels, up to 1920x1088@60fps
H.263 Profile0,levels 10-70,up to 720x576@60fps

Video Encoder

H.264/AVC BP/MP/HP@level4.2. up to 1920x1080@60fps
H.265/HEVC MP@level4.1, up to 1920x1080@60fps (4096x4096@10fps with TILE)
Support YUV/RGB video source with rotation and mirror

JPEG decoder

JPEG Baseline interleaved, max resolution up to 8176x8176, performance up to 76 million pixels per second

JPEG encoder

Baseline Non-progressive
up to 8192x8192
up to 90 million pixels per second

5.PRECAUTIONS FOR USE

- 1.Relative humidity: 5~95 % .
- 2.CPU Operation temperature: Automotive (0 °C - 80°C)
- 3.Do not squeeze、 distort or disassemble the PC.
- 4.Keep the Board away from static electricity .
- 5.Keep the Board away from water and other liquid.
- 6.Don't use long connect wires which may affect performance and image quality.