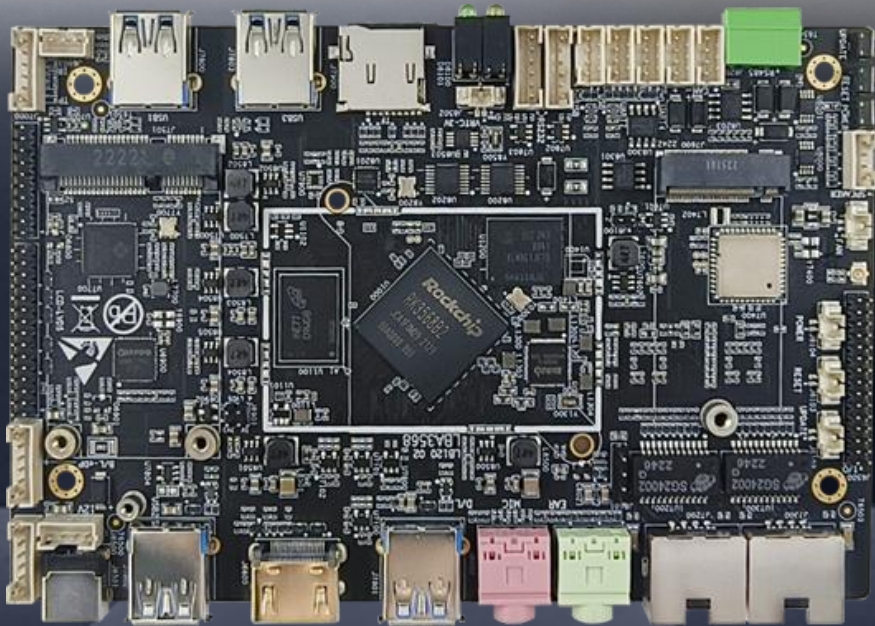


LBA3568 行业板
产品手册
V2.1



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版本历史

版本	日期	说明
V1.0	2022/8/23	初始版本
V2.0	2024/1/30	产品手册优化
V2.1	2024/7/29	数据更新

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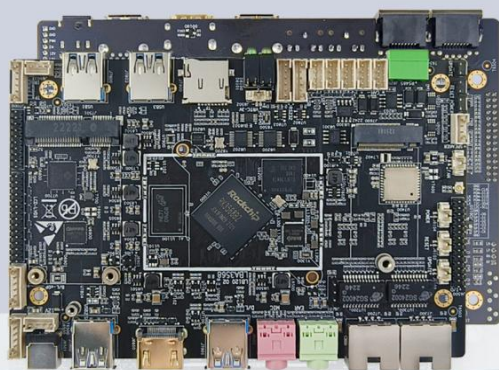
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1.产品介绍

LBA3568 是基于瑞芯微 RK3568 芯片平台精心设计的一款多功能行业应用板。整板功能多样，接口丰富，尺寸小巧，轻薄平整，适用于结构空间受限的产品。

LBA3568 板载 4 路 USB3.0 和 2 路 USB2.0 接口，可以外接多个 USB 摄像头；板载 1 个 mini-PCIe 接口，除了可以外接 4G 模块外还可以外接我司基于 RK1808 开发的 mini-PCIe 接口 NPU 计算卡，与多路摄像头组合成支持 3.0TOPS 算力的人工智能视觉计算板卡；另外，LBA3568 还支持双频 WIFI、BT5.0、1000M 以太网、UART、I2C、CANBUS 等常用通讯模块接口，支持 1 路 HDMI 输出、双通道 LVDS 等多种显示接口。

LBA3568 支持 Android、Linux 和 Ubuntu 系统，具备高性能、高可靠性、高扩展性等优势，为用户开放系统源码。用户可基于此款产品二次开发和定制，我司为开发者和企业用户提供全方位的技术支持，使其高效的完成研究开发工作，大量缩短产品研发量产周期。



2. 功能概述



高性能处理器

CPU	RK3568, 22nm, 四核 64 位 Cortex-A55, 主频最高 2.0GHz
GPU	ARM G52 2EE, 内嵌高性能 2D 加速硬件
NPU	1TOPS 算力
VPU	4K 视频解码, 1080P 视频编码
DDR	LPDDR4/4x, 可选 2/4/8GB
eMMC	eMMC 5.1, 可选 16/32GB



接口丰富

-
- 4 路 Type-A USB3.0, 2 路 USB2.0 接口
 - 2 路 UART 接口, 1 路 RS232 接口, 1 路 CANBUS 接口, 1 路 RS485 接口
 - 2 路千兆网口, 双频 WIFI6, BT5.0
 - 1 路 mipi PCIe 接口, 可扩展 4/5G 模块
 - 1 路 M.2 M-Key 接口, 支持外接 NVMe 协议 SSD
 - 1 路 HDMI TX, 1 路 LVDS
-



操作系统

Android

Linux (Buildroot / Debian / Ubuntu)



开源资料

WIKI 资料 <http://www.neardi.com/cms/index/wiki.html>

快速入门

升级固件

Android 开发

Linux 开发

内核驱动

DEMO

系统定制

配件

常见问题

发布说明

硬件资料

芯片 Datasheet

核心板引脚定义

底板参考原理图

底板参考 PCB

关键物料清单

产品 2/3D 图

软件资料

烧写工具及驱动

Android 源码及镜像

uboot 及内核源码

Debian/Ubuntu/Buildroot 的系统文件

3.规格参数

基本参数

SOC	RK3568,22nm,四核 64 位 Cortex-A55, 主频最高 2.0GHz
GPU	ARM G52 2EE, OpenGL ES 1.1/2.0/3.2, OpenCL 2.0, Vulkan 1.1, high quality 2D Graphics Engine build in
NPU	up to 1 TOPS; INT8/INT16/FP16/BFP16 MAC hybrid operation supported; TensorFlow, TF-lite, Pytorch, Caffe, ONNX, MXNet, Keras, Darknet deep-learning frameworks supported
VPU	4K VP9 and 4K H265 up to 60fps video decoding 1080P up to 100fps H265/H264 video encoding 8M ISP with HDR
DDR	LPDDR4, 可选 1GB/2GB/4GB/8GB(Optional)
eMMC	eMMC 5.1, 可选 8GB/16GB/32GB/64GB/128GB (Optional)
PMU	RK806
系统	Android / Ubuntu / Buildroot / Debian

硬件参数

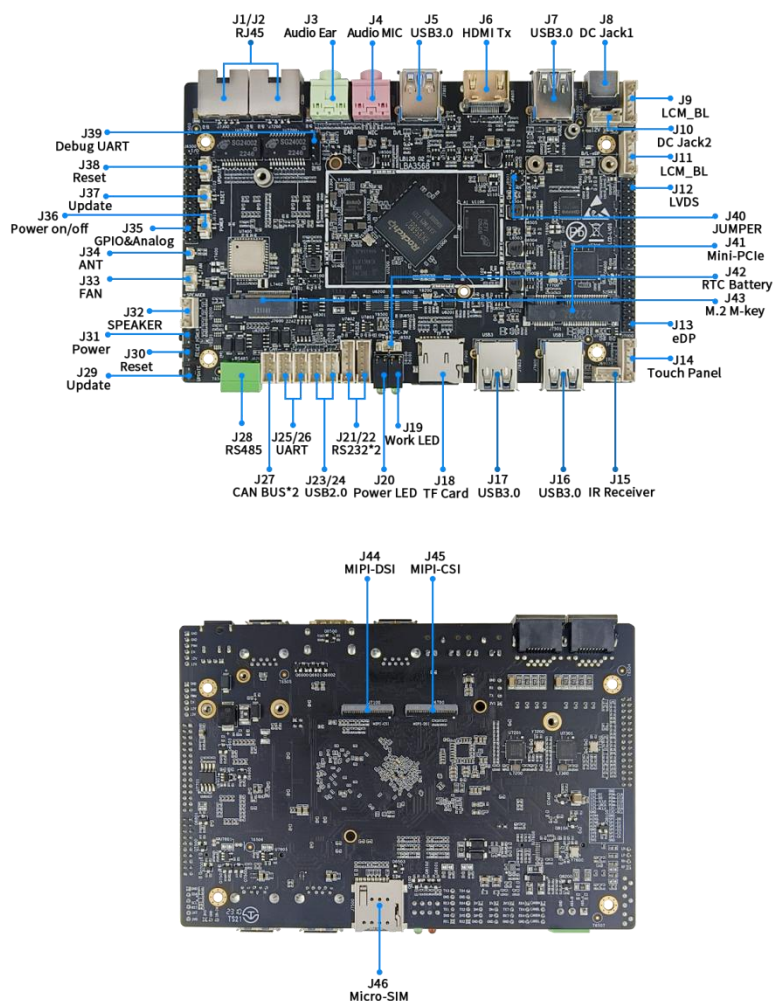
Power	DC12V - 2A (DC Jack 5.5*2.1mm / PH2.0 wafer connector)
USB	4*Type-A USB3.0+ 2*4Pin PH2.0 USB2.0 connector
Display	Type-A HDMI 2.0 up to 4K@60fps Duel channel LVDS up to 1080P@60HZ

	φ3.5mm earphone Jack with L/R audio out
Audio	φ3.5mm micphone Jack with Mic in
	2x 2.7W ClassD audio Output
Camera	1x MIPI-CSI Camera Interface
PCIe	mini PCIe for 2G/3G/4G LTE module
M.2	M.2 NGFF (M-KEY) PCIE V2.1 x4 with NVMe SSD supported
SD card	Compatible with SDIO 3.0 protocol, system boot up supported
SIM card	Micro sim slot for Mini-PCIe 4G LTE module
Serial port	2x Uart, 2x RS232, 1x RS485, 1x CAN BUS
Keys	3x keys (power, reset, update)
	10/100/1000Mbps Ethernet (Realtek RTL8211E)
Net work	Wi-Fi 2.4GHz/5GHz,802.11a/b/g/n/ac,up to 433 Mbps (AP6275SR3)
	BT V5.0 with BLE supported
	2G/3G/4G LTE module supported (optional)
Storage	MicroSD (TF) Card Compatible with SDIO3.0

其他参数

尺寸	L*W*H(mm) 150*100*14.2
温度	工作温度 -10 - 70°C
重量	约 116.5g (不含外设)
功耗	典型功耗: 4.7W

5.接口定义



Part reference	Part Name	Part Specifications	Part Description
J1	RJ45	Gigabit Ethernet 0	10/100/1000-Mbps data transfer rates
J2	RJ45	Gigabit Ethernet 1	10/100/1000-Mbps data transfer rates
J3	Audio Jack1	φ3.5mm 3-L Jack	L/R audio out
J4	Audio Jack2	φ3.5mm 3-L Jack	Micphone In
J5	USB3.0	Type-A USB3.0	USB3.0 / Debug
J6	HDMI Tx	Type-A HDMI 2.0	HDMI 2.0 Transmitter up to 4K@30HZ
J7	USB3.0	Type-A USB3.0	USB3.0
J8	DC Jack1	DC 5.5*2.1mm	Main power supply, DC12V – 3A
J9	LCM_BL	PH2.0mm 6pin wafer	LVDS LCM backlight control
J10	DC Jack2	PH2.0mm 4pin wafer	DC12V-3A power in
J11	LCM_BL	PH2.0mm 6pin wafer	eDP LCM backlight control
J12	LVDS	PH2.0mm 2x15pin header	Dual channel 24bit LVDS output
J13	eDP	PH2.0mm 2x10pin header	eDP LCM

J14	Touch Panel	PH2.0mm 6pin wafer	I2C and power for Touch Panel
J15	IR Receiver	PH2.0mm 3pin wafer	IR Receiver
J16	USB3.0	Type-A USB3.0	USB3.0
J17	USB3.0	Type-A USB3.0	USB3.0
J18	TF Card	Push-Push TF socket	TF Card
J19	Work LED	Green led *2	Work status and 3G/4G Module Status Indicator
J20	Power LED	Red and Green LEDs	Power status indicate
J21	RS232*2	PH2.0mm 6pin wafer	Dual channel RS232
J22	RS232*2	PH2.0mm 6pin wafer	Dual channel RS232
J23	USB2.0_1	PH2.0mm 4pin wafer	The first USB2.0 for external devices
J24	USB2.0_2	PH2.0mm 4pin wafer	The second USB2.0 for external devices
J25	UART	PH2.0mm 4pin wafer	UART 3.3V
J26	UART	PH2.0mm 4pin wafer	UART 3.3V
J27	CAN BUS*2	PH2.0mm 4pin wafer	Dual channel CAN Bus
J28	RS485	3.81mm pitch 3Pin Connector	MIPI-CSI 4lane or 2*2Lane for external cameras
J29	Update	push-button	Key for system recovery or other function
J30	Reset	push-button	Key for system reset
J31	Power	push-button	Key for system Power ON/Off
J32	SPEAKER	PH2.0mm 4pin wafer	Dual channel audio Output for Speaker
J33	FAN	PH2.0mm 2pin wafer	12V Output for FAN Power
J34	ANT	I-PXE,MHF $\Phi=2.0$	Antenna0 for WiFi
J35	GPIO&Analog	PH2.0mm 2x15pin header	GPIO and analog signal
J36	Power on/off	PH2.0mm 2pin wafer	Socket for External Power Key
J37	Update	PH2.0mm 2pin wafer	Socket for External Update Key
J38	Reset	PH2.0mm 2pin wafer	Socket for External Reset Key
J39	Debug UART	PH2.0mm 4pin wafer	Debug UART for CPU
J40	JUMPER	PH2.0mm 2x2pin header	Voltage Select for LVDS Panel Power
J41	Mini-PCIe	Mini-PCIe 52pin socket	For 2G/3G/4G LTE module used
J42	RTC Battery	PH2.0mm 2pin wafer	Battery for RTC 3.0V Input
J43	M.2 M-key	Standard M.2 M-key connector	M.2 NGFF (M-KEY) with PCIE V3.0 x2
J44	MIPI-DSI	30pin 0.5mm pitch FPC connector	For MIPI-LCM 4Lane
J45	MIPI-CSI	30pin 0.5mm pitch FPC connector	For MIPI-Camera 4Lane
J46	Micro-SIM	Push-Push Micro SIM Socket	For Micro SIM Card (1.8/3.3V)

6. 引脚定义

RJ45(J1/J2)

Pin number	Pin name	Voltage level	Notice
1	DA+	-	-
2	DA-	-	-
3	DB+	-	-
4	DC+	-	-
5	DC-	-	-
6	DB-	-	-
7	DD+	-	-
8	DD-	-	-

Audio Jack1 (J3)

Pin number	Pin name	Voltage level	Notice
1	GND	-	-
2	EarPhone right out	-	0.5V RMS @32Ohm Load
3	NC	-	-
4	Detect	-	Low-Plug Out; High-Plug In
5	EarPhone right out	-	0.5V RMS @32Ohm Load

Audio Jack2 (J4)

Pin number	Pin name	Voltage level	Notice
1	GND	GND	-
2	Mic in	-	Vp-p < 0.8V
3	NC	-	-
4	NC	-	-
5	Mic in	-	Vp-p < 0.8V

USB3.0 (J5)

Pin number	Pin name	Voltage level	Notice
1	VBUS	+5V	5V/1A Output @ Host mode / +5V Input @ Device mode
2	D-	GND	USB 1.1/2.0 DP
3	D+	-	USB 1.1/2.0 DM
4	GND	GND	-
5	RX-	-	USB3.0 SSRX-
6	RX+	-	USB3.0 SSR+
7	GND	-	-
8	TX-	-	USB3.0 SSTX-
9	TX+	-	USB3.0 SSTX+

HDMI Tx (J6)

Pin number	Pin name	Voltage level	Notice
1	D2P	-	-
2	D2_GND	GND	-
3	D2N	-	-
4	D1P	-	-
5	D1_GND	GND	-
6	D1N	-	-
7	D0P	-	-
8	D0_GND	GND	-
9	D0N	-	-
10	CLKP	-	-
11	CLK_GND	GND	-
12	CLKN	-	-
13	NC	-	Not Connected
14	NC	-	Not Connected
15	SCL	-	-
16	SDA	-	-
17	GND	GND	-
18	+5V	+5V	-
19	HPD	-	-

USB3.0 (J7)

Pin number	Pin name	Voltage level	Notice
1	VBUS	+5V	5V/1A Output
2	D-	GND	USB 1.1/2.0 DP
3	D+	-	USB 1.1/2.0 DM
4	GND	GND	-
5	RX-	-	USB3.0 SSRX-
6	RX+	-	USB3.0 SSR+
7	GND	-	-
8	TX-	-	USB3.0 SSTX-
9	TX+	-	USB3.0 SSTX+

DC Jack 1 (J8)

Pin number	Pin name	Voltage level	Notice
1	DC-IN	12V	-
2	GND	GND	-
3	GND	GND	-
4	Earth	Earth	Connented to GND through 1M Ohm Resistor parallel with 1nF capacitor

LCM BackLight for LVDS (J9)

Pin number	Pin name	Voltage level	Notice
1	GND	GND	-
2	GND	GND	-
3	BL_ADJ	3.3V	GPIO0_C4_PWM5
4	BL_EN	3.3V	GPIO0_C5_D
5	VCC12V_BL	12V	-
6	VCC12V_BL	12V	-

DC Jack 2 (J10)

Pin number	Pin name	Voltage level	Notice
1	DC-IN	12V	-
2	DC-IN	12V	-
3	GND	GND	-
4	GND	GND	-

LCM_BL for eDP (J11)

Pin number	Pin name	Voltage level	Notice
1	GND	GND	-
2	GND	GND	-
3	BL_ADJ	3.3V	GPIO2_C5_D
4	BL_EN	3.3V	GPIO4_D2_D
5	VCC12V_BL	12V	-
6	VCC12V_BL	12V	-

LVDS LCM (J12)

Pin number	Pin name	Voltage level	Notice
1	VCC_LVDS	3.3V/5V	-
2	VCC_LVDS	optional by	-
3	VCC_LVDS	jumper	-
4	GND	GND	-
5	GND	GND	-
6	GND	GND	-
7	RXO0M	-	-
8	RXO0P	-	-
9	RXO1M	-	-
10	RXO1P	-	-
11	RXO2M	-	-
12	RXO2P	-	-
13	GND	GND	-
14	GND	GND	-
15	RXOCM	-	-

16	RXOCP	-	-
17	RXO3M	-	-
18	RXO3P	-	-
19	RXE0M	-	-
20	RXE0P	-	-
21	RXE1M	-	-
22	RXE1P	-	-
23	RXE2M	-	-
24	RXE2P	-	-
25	GND	GND	-
26	GND	GND	-
27	RXECM	-	-
28	RXECP	-	-
29	RXE3M	-	-
30	RXE3P	-	-

eDP (J13)

Pin number	Pin name	Voltage level	Notice
1	VDD	3.3V or 5V	Default 3.3V
2	VDD	3.3V or 5V	Default 3.3V
3	GND	GND	-
4	GND	GND	-
5	EDP_TX_D0N	-	-
6	EDP_TX_D0P	-	-
7	EDP_TX_D1N	-	-
8	EDP_TX_D1P	-	-
9	EDP_TX_D2N	-	-
10	EDP_TX_D2P	-	-
11	EDP_TX_D3N	-	-
12	EDP_TX_D3P	GND	-
13	GND	-	-
14	GND	-	-
15	EDP_TX_AUXN	-	-
16	EDP_TX_AUXP	-	-
17	GND	GND	-
18	GND	GND	-
19	GND	GND	-
20	EDP_HPDI	3.3V	GPIO0_C0-D

Touch Panel (J14)

Pin number	Pin name	Voltage level	Notice
1	GND	GND	-
2	I2C_SDA_TP	3.0V	GPIO4_B4-I2C2_SDA

3	I2C_SCL_TP	3.0V	GPIO4_B5-I2C2_SCL
4	TP_RESET	3.3V	GPIO0_B6-u
5	TP_INT	3.3V	GPIO0_B5-u
6	VCC3V0_TOUCH	3.0V	Power for Touch panel

IR Receiver (J15)

Pin number	Pin name	Voltage level	Notice
1	VCC3V3_PMU	+3.3V	3.3V Output for IR Module
2	GND	GND	-
3	IR_IN	3.3V	GPIO0_C2-PWM3

USB3.0 (J16/J17)

Pin number	Pin name	Voltage level	Notice
1	VBUS	+5V	5V/1A Output
2	D-	GND	USB 1.1/2.0 DP
3	D+	-	USB 1.1/2.0 DM
4	GND	GND	-
5	RX-	-	USB3.0 SSRX-
6	RX+	-	USB3.0 SSR+
7	GND	GND	
8	TX-	-	USB3.0 SSTX-
9	TX+	-	USB3.0 SSTX+

TF Card (J18)

Pin number	Pin name	Voltage level	Notice
1	Data2	VCCIO_SD	GPIO1_D7
2	Data3	VCCIO_SD	GPIO2_A0
3	CMD	VCCIO_SD	GPIO2_A1
4	VDD	VCCIO_SD	-
5	CLK	VCCIO_SD	GPIO2_A2
6	GND	-	-
7	Data0	VCCIO_SD	GPIO1_D5
8	Data1	VCCIO_SD	GPIO1_D6
9	Card-Detect	3.3V	GPIO0_A4-u

Work LED (J19)

Pin number	Pin name	Voltage level	Notice
1	LED1+	-	Green LED for 3G/4G Module
2	LED1-	-	-
3	LED2+	-	Green LED for system status
4	LED2-	-	-

Power LED (J20)

Pin number	Pin name	Voltage level	Notice
1	LED1+	-	Red LED for Power OK
2	LED1-	-	-
3	LED2+	-	Green LED for system status
4	LED2-	-	-

RS232 * 2 (J21/J22)

Pin number	Pin name	Voltage level	Notice
1	RS232_RX1	-	-
2	VCC5V0_EXT	+5V	+5V Output
3	RS232_TX1	-	-
4	RS232_RX3	-	-
5	GND	GND	-
6	RS232_TX3	-	-

USB2.0 (J23/J24)

Pin number	Pin name	Voltage level	Notice
1	+5V	+5V	5V/1A Output
2	D-	-	-
3	D+	-	-
4	GND	GND	-

UART (J25/J26)

Pin number	Pin name	Voltage level	Notice
1	VCC3V3_EXT	+3.3V	3.3V Output
2	UART7_TX	-	GPIO3_C4
3	UART7_RX	-	GPIO3_C5
4	GND	GND	-

CAN BUS *2 (J27)

Pin number	Pin name	Voltage level	Notice
1	CAN0_H	-	-
2	CAN0_L	-	-
3	CAN1_H	-	-
4	CAN1_L	-	-

RS485 (J28)

Pin number	Pin name	Voltage level	Notice
1	RS485-A	-	UART9
2	RS485-B	-	UART9
3	GND	-	-

Update Key(J29)

Pin number	Pin name	Voltage level	Notice
1	SARADC_VIN0	0~1.8V	Key for system recovery or other function

Reset Key (J30)

Pin number	Pin name	Voltage level	Notice
1	RESETn	-	Push to Reset the system

Power ON/OFF (J31)

Pin number	Pin name	Voltage level	Notice
1	PWR_KEY	-	-

SPEAKER (J32)

Pin number	Pin name	Voltage level	Notice
1	SPK_OUT_R+	-	2.7W ClassD audio Output
2	SPK_OUT_R-	-	
3	SPK_OUT_L+	-	2.7W ClassD audio Output
4	SPK_OUT_L-	-	

FAN (J33)

Pin number	Pin name	Voltage level	Notice
1	Fan Power out	+12V	+12V out for fan power
2	GND	GND	-

ANT (J34)**RF Port 1 for WIFI (AP6275SR3)****GPIO&Analog (J35)**

Pin number	Pin name	Voltage level	Notice
1	GND	GND	-
2	GND	GND	-
3	PDM_CLK1_M0_ADC	3.3V	GPIO1_A4-d
4	I2S3_SDI_M0	3.3V	GPIO3_A6-d
5	PDM_SDI3_M0_ADC	3.3V	GPIO1_B0-d
6	I2S3_SDO_M0	3.3V	GPIO3_A5-d
7	PDM_SDI2_M0_ADC	3.3V	GPIO1_B1-d
8	I2S3_SCLK_M0	3.3V	GPIO3_A3-d

9	PDM_SDI1_M0_ADC	3.3V	GPIO1_B2-d
10	I2S3_LRCK_M0	3.3V	GPIO3_A4-d
11	I2C3_SDA_M0	3.3V	GPIO1_A0-u
12	I2S3_MCLK_M0	3.3V	GPIO3_A2-d
13	I2C3_SCL_M0	3.3V	GPIO1_A1-u
14	GND	GND	-
15	GND	GND	-
16	Anolog-In4	0~15V	SARADC_VIN4
17	SPI_Flash_D0	1.8V	GPIO1_D1-u
18	Anolog-In5	0~15V	SARADC_VIN5
19	SPI_Flash_D1	1.8V	GPIO1_D2-u
20	Anolog-In6	0~15V	SARADC_VIN6
21	eMMC_RSTn/FSPI_D2/FLASH_WPn	1.8V	GPIO1_C7_d
22	Anolog-In7	0~15V	SARADC_VIN7
23	SPI_Flash_D3	1.8V	GPIO1_D4-u
24	GND	GND	-
25	SPI_Flash_CS0n	1.8V	GPIO1_D3-u
26	VCCA_1V8	1.8V	1.8V Output (200mA)
27	FSPI_CLK	1.8V	GPIO1_D0-d
28	VCC3V3_EXT	3.3V	3.3V Output (2A)
29	GND	GND	-
30	VCC5V0_EXT	+5V	5V Output (2A)

Power for External Key (J36)

Pin number	Pin name	Voltage level	Notice
1	PWR_KEY	-	Socket for External Power Key
2	GND	GND	-

Update for External Key (J37)

Pin number	Pin name	Voltage level	Notice
1	SARADC_VIN0	-	Socket for External Update Key
2	GND	GND	-

Reset for External Key (J38)

Pin number	Pin name	Voltage level	Notice
1	RESETn	-	Socket for External Reset Key
2	D-	GND	-

Debug UART (J39)

Pin number	Pin name	Voltage level	Notice
1	VCC3V3_PMU	3.3V	+3.3V Output
2	CPU_DBG_TX	3.3V	GPIO0_D1_u
3	CPU_DBG_RX	3.3V	GPIO0_D0_u
4	GND	GND	-

Jumper for LVDS Power select (J40)

1	1,2 shorted	+3.3V	LVDS Panel Power(J12): +3.3V
2	3,4 shorted	+5V	LVDS Panel Power(J12): +5V

Mini-PCIe (J41)

Pin number	Pin name	Voltage level	Notice
2,24,39,41,52	VCC3V6_4G	+3.6V	Power Supply for 4G module
4,9,15,18,21,26,27,29,34,35,37,40,43,50	GND	GND	-
8	SIM_VCC	1.8/3.3V	Depending on the Module
10	4G_SIM_SIO	SIM_VCC	-
12	4G_SIM_CLK	SIM_VCC	-
14	4G_SIM_RST	SIM_VCC	-
22	4G_RESET	OC	GPIO2_D0_d Active High
36	4G_USB_DM	-	-
38	4G_USB_DP	-	-
42	4G_LED	Current Sink	-
17	4G_USB_SSRXN	-	-
19	4G_USB_SSRXP	-	-
31	HOST_WAKEUP_4G	OC	GPIO2_D1_d Active High
49	4G_USB_SSTXN	-	-
51	4G_USB_SSTXP	-	-
All the other pins	NC	-	Not Connected

RTC Battery (J42)

Pin number	Pin name	Voltage level	Notice
1	VRTC_IN	3.0V	-
2	GND	GND	-

M.2 M-Key (J43)

Pin number	Pin name	Voltage level	Notice
1,3,9,15,21,27,33,39,45,51,57,63,65,67	GND	GND	-
2,4,12,14,16,18,62,6	VCC3V3	+3.3V	-

4,66				
29	PCIE30_RX1N	-	-	
31	PCIE30_RX1P	-	-	
35	PCIE30_TX1N	-	-	
37	PCIE30_TX1P	-	-	
41	PCIE30_RX0N	-	-	
43	PCIE30_RX0P	-	-	
47	PCIE30_TX0N	-	-	
49	PCIE30_TX0P	-	-	
53	PCIE30_REFCLKN	-	-	
55	PCIE30_REFCLKN	-	-	
38	DEVSLP	3.3V	Pulled up by 10K Ohm Resistor to 3.3V	
50	PCIE30X2_PERSTn_3V3_L	3.3V	-	
52	PCIE30X2_CLKREQn_3V3_L	3.3V	-	
54	PCIE30X2_WAKEn_3V3_L	3.3V	-	
All the other pins	NC	-	Not Connected	

MIPI-DSI for LCD 4-Lane (J44)

Pin number	Pin name	Voltage level	Notice
15,18,21,24,27,30	GND	GND	-
1,2,3	VCC12V_DCIN	+12V	+12V Output
4,5	VCC5V0_EXT	+5.0V	+5V Output
6,7	VCC3V3_EXT	+3.3V	+3.3V Output
8	VCCA1V8_IMAGE	+1.8V	+1.8V Output
9	I2C_SCL_MIPI	1.8V	GPIO4_B3-d
10	I2C_SDA_MIPI	1.8V	GPIO4_B2-d
11	MIPI_BL_PWM	3.3V	GPIO0_C4-d
12	MIPI_BL_EN	3.3V	GPIO0_C5-d
13	MIPI_PWR_EN	1.8V	GPIO3_D1_d
14	MIPI_LCD_RST	1.8V	GPIO3_D0-d
16	MIPI_DSI_TX0_D3N/LVDS_TX0_D3N	-	-
17	MIPI_DSI_TX0_D3P/LVDS_TX0_D3P	-	-
19	MIPI_DSI_TX0_D2N/LVDS_TX0_D2N	-	-
20	MIPI_DSI_TX0_D2P/LVDS_TX0_D2P	-	-
22	MIPI_DSI_TX0_CLKN/LVDS_TX0_CLKN	-	-

23	MIPI_DSI_TX0_CLKP/LVDS_TX0_CLKP	-	-
25	MIPI_DSI_TX0_D1N/LVDS_TX0_D1N	-	-
26	MIPI_DSI_TX0_D1P/LVDS_TX0_D1P	-	-
28	MIPI_DSI_TX0_D0N/LVDS_TX0_D0N	-	-
29	MIPI_DSI_TX0_D0P/LVDS_TX0_D0P	-	-

MIPI-CSI for Camera (J45)

Pin number	Pin name	Voltage level	Notice
1,4,7,10,13,16,19	GND	GND	-
2	MIPI_CSI_RX_D0P	-	-
3	MIPI_CSI_RX_D0N	-	-
5	MIPI_CSI_RX_D1P	-	-
6	MIPI_CSI_RX_D1N	-	-
8	MIPI_CSI_RX_CLK0N	-	-
9	MIPI_CSI_RX_CLK0P	-	-
11	MIPI_CSI_RX_D2P	-	-
12	MIPI_CSI_RX_D2N	-	-
14	MIPI_CSI_RX_D3P	-	-
15	MIPI_CSI_RX_D3N	-	-
17	MIPI_CSI_RX_CLK1P	-	-
18	MIPI_CSI_RX_CLK1N	-	-
20	CIF_CLKOUT	1.8V	GPIO4_C0-d
21	MIPI_CAM_X2_RST0	1.8V	GPIO3_D4-d
22	MIPI_CAM0_PDN_L	1.8V	GPIO3_D5-d
23	MIPI_CAM_X2_RST1	1.8V	GPIO3_D2-d
24	MIPI_CAM1_PDN_L	1.8V	GPIO3_D3-d
25	I2C_SCL_CAM	1.8V	GPIO4_B5-I2C2_1V8
26	I2C_SDA_CAM	1.8V	GPIO4_B4-I2C2_1V8
27	VCC1V8_DOVDD_DVP0	1.8V	1.8V Output (300mA)
28	VDD1V2_DVDD_DVP0	1.2V	1.2V Output (300mA)
29	VCC2V8_DVP0	2.8V	2.8V Output (300mA)
30	VCC2V8_AVDD_DVP0	2.8V	2.8V Output (300mA)

Note: This MIPI can be used as a 4-Lane or 2*2Lane input.

Micro-SIM Card (J46)

Pin number	Pin name	Voltage level	Notice
1	CD	SIM_VCC	SimCard insert detect - Low:SIM card plugged in; High: SIM card pulled out.
2	NC	-	-
3	NC	-	-
4	SIM-IO	SIM_VCC	-
5	SIM-Clock	SIM_VCC	-
6	NC	-	-

7.应用场景



人工智能



机器视觉



工业控制



能源电力



智慧平板



虚拟现实 VR



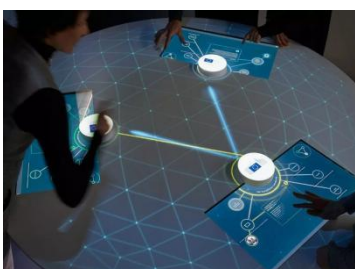
智慧物流



新零售



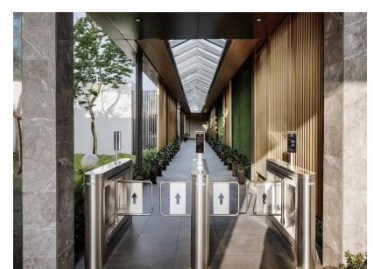
智慧商显



物体识别



车载终端



安防监控

8. 订购型号

产品型号	状态	CPU 型号	DDR 容量	eMMC 容量	工作温度
LB12021600	ACTIVE	RK3568	2GB	16GB	-10°C - 70°C
LB12043200	ACTIVE	RK3568	4GB	32GB	-10°C - 70°C
LB12083200	ACTIVE	RK3568	8GB	32GB	-10°C - 70°C

*非标定制请邮件咨询 sales@neardi.com

9.关于临滴

上海临滴科技有限公司成立于 2014 年，国家级高新技术企业，瑞芯微战略合作伙伴，黑芝麻智能授权代理商。专注于企业级开源硬件平台的研发和生产，为客户提供核心模块、行业板、开发板、触控平板和工控主机等产品。公司坚持技术创新和专业服务的核心理念，以临滴科技的技术优势和行业经验，帮助合作伙伴实现产品快速量产。



公众号



淘宝店铺



B 站

Rockchip-产品线

核心模块



LCB3588/J



LCB3568/J



LCB3566



LCB3399Pro



LCB3399

开发板/行业板



LKD3588/J



LKD3568/J



LKD3566



LKD3399Pro



LKD3399

嵌入式智能计算机



LPB3588



LPM3588



LPC3588



LPB3568



LPB3399Pro

BST 黑芝麻-产品线



SOM-A-A1000



SOM-π-A1000



SOM-B-A1000



SOM-A1000 开发者套件

车载终端-产品线



LPA3588



LPA3568



LPA3399Pro



LPS3399Pro

WIFI 模块-产品线



FD7352S



FD7352P



FD7352M



FD7155U



FD7256S