



LBA3288 行业板
产品手册
V1.0

©上海临滴科技有限公司 2018 保留一切权利。未经书面许可，任何人不得复制、影印、翻译、传播本手册的任何内容。

表和插图等，仅用于解释和说明目的，与具体产品可能存在差异，请以实物为准。我们会尽力确保与实物相符。

因产品版本升级或其他需要，本公司可能会对手册进行更新，如您需要最新版手册，请与我司联系。

上海临滴科技有限公司始终以客户至上的服务宗旨，为客户提供快速高效的支持服务工作。如有任何需要，请随时联系我司，联系方式如下：

上海临滴科技有限公司

网址：www.nearidi.com

电话：+86 21 20952021

邮箱：marketing@nearidi.com

地址：上海市闵行区联航路 1505 弄 1 号 8 楼

版本历史

版本	日期	说明
V1.0	2019/8/20	初始版本

目 录

目 录.....	II
1 产品概述.....	1
1.1 产品描述.....	1
1.2 功能概要.....	2
1.3 产品框图.....	2
2 外观和尺寸.....	3
2.1 产品外观.....	3
2.2 产品尺寸.....	4
3 产品参数.....	5
4 接口定义.....	7
4.1 接口编号.....	7
4.2 pin 脚定义.....	8
4.2.1 RS485 (J4).....	8
4.2.2 DC power (J9).....	8
4.2.3 CTP (J10).....	8
4.2.4 I2C (J11).....	9
4.2.5 RS232_2 (J12).....	9
4.2.6 RS232_1 (J13).....	9
4.2.7 USB2 (J14).....	9
4.2.8 USB1 (J15).....	9
4.2.9 I02 (J17).....	10
4.2.10 I01 (J18).....	10
4.2.11 LVDS2 (J19).....	11
4.2.12 LCM_BL_2 (J20).....	12
4.2.13 LVDS1 (J21).....	12
4.2.14 ADC0 (J22).....	13
4.2.15 LCM_BL_1 (J23).....	13
4.2.16 IR (J24).....	13
4.2.17 ADC2 (J25).....	13

4.2.18	Speaker (J26)	13
4.2.19	eDP (J28)	14
4.2.20	Mic (J29)	14
4.2.21	Reset (J30)	14
4.2.22	Update (J31)	15
4.2.23	Power key (J32)	15
4.2.24	Rtc battery (J33)	15
4.2.25	MIPI_TX (J34)	15
4.2.26	CIF (J35)	16
4.2.27	MIPI_TX/RX (J38)	17
4.2.28	MIPI_RX (J39)	18
5	扩展配件	19
6	应用场景	21
6.1	产品示例	21
6.2	应用框图	21
7	支持与服务	22
7.1	技术支持	22
7.2	售后服务	22

1 产品概述

1.1 产品描述

LBA3288 是基于瑞芯微 RK3288 芯片平台精心设计的一款全功能开发板，RK3288 主频高达 1.8GHz，集成四核 Mali-T764 GPU，板载有两路双 8 位 LVDS、EDP、HDMI、MIPI（可选）多种显示接口，全面兼容主流显示屏，可直接驱动主流 5-100 寸的显示屏，支持多屏异显，最大支持 4K 硬解。板载 MINI PCIE 接口座及 SIM 座，可接 3G / 4G 移动通信模块。板载 RS232、RS485 接口，方便连接各种工业设备。

LBA3288 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。

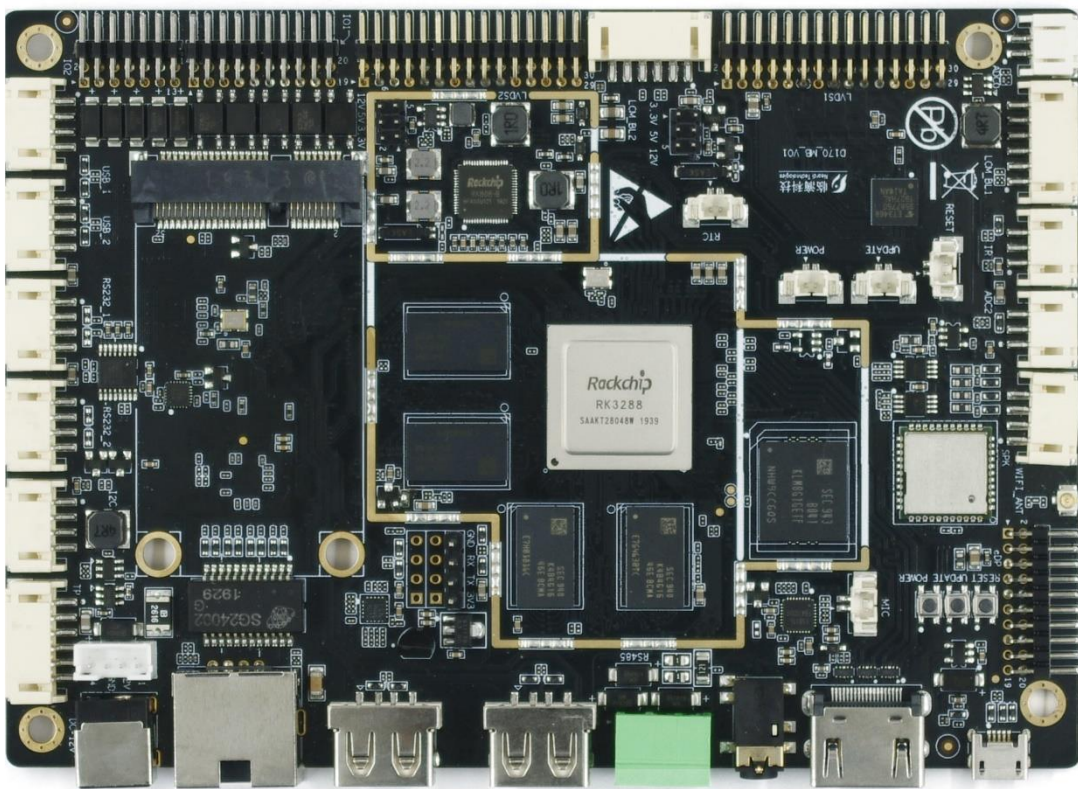


图 1-1

1.2 功能概要

- 供电方式：DC 12V/2A，支持过压，欠压，过流保护；
- 多种接口显示屏输出：HDMI，双通道 LVDS，eDP，MIPI 多种显示接口，可支持多屏异显；
- 双摄像头输入；
- 板载双频 WIFI，支持 802.11 a/b/g/n/ac 协议；
- 板载千兆以太网；
- 板载 mipi PCIe 接口，可外接 LTE 模块；
- 支持 2 路 RS-232 接口和 1 路 RS-485 接口；
- 可扩展支持 HDMI 输入，4 路 USB 摄像头输入，多路远距离 AHD 摄像头输入；
- 可扩展支持 RGB 输出，VGA 输出；
- 支持 Android, Linux, Ubuntu 多种 OS；
- 超薄型设计，总高度只有 12mm，特别适用于结构高度受限的产品

1.3 产品框图

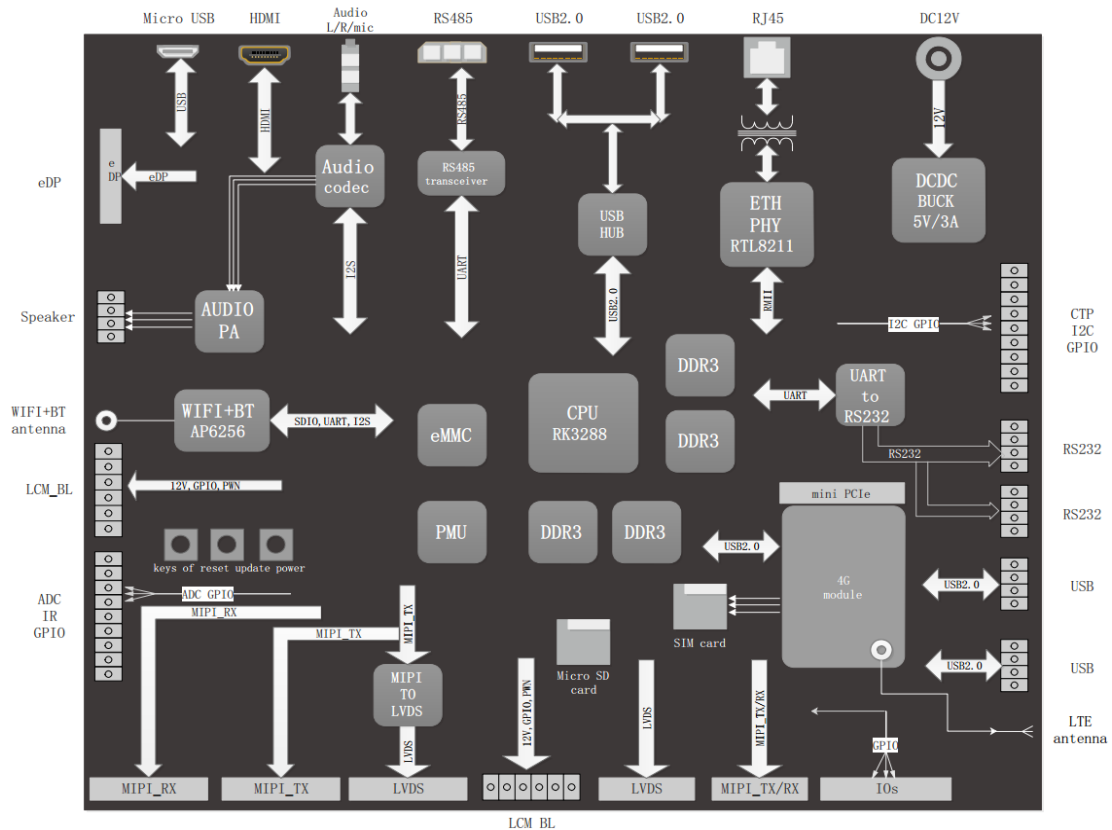


图 1-2

2 外观和尺寸

2.1 产品外观

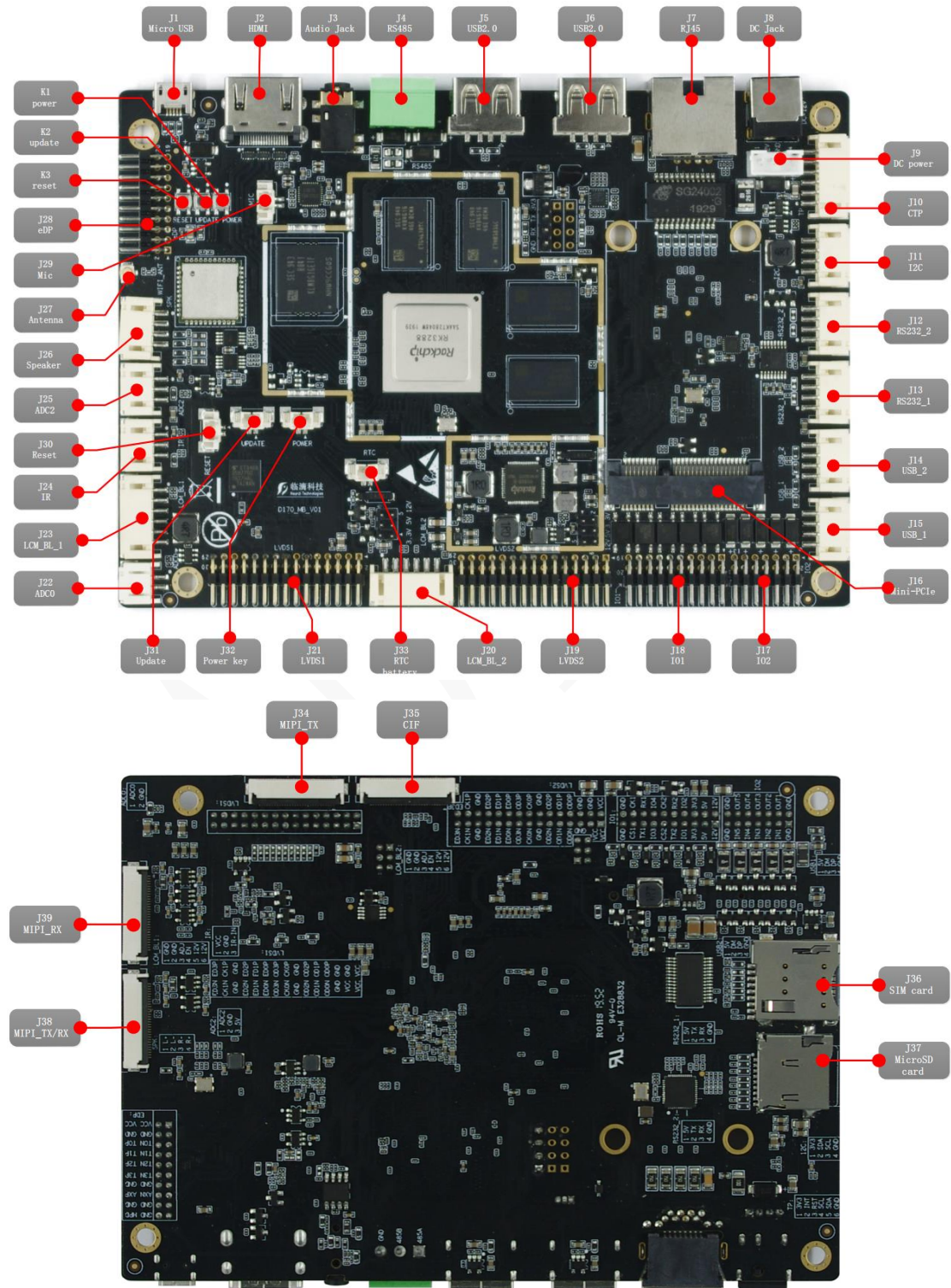


图 2-1

2.2 产品尺寸

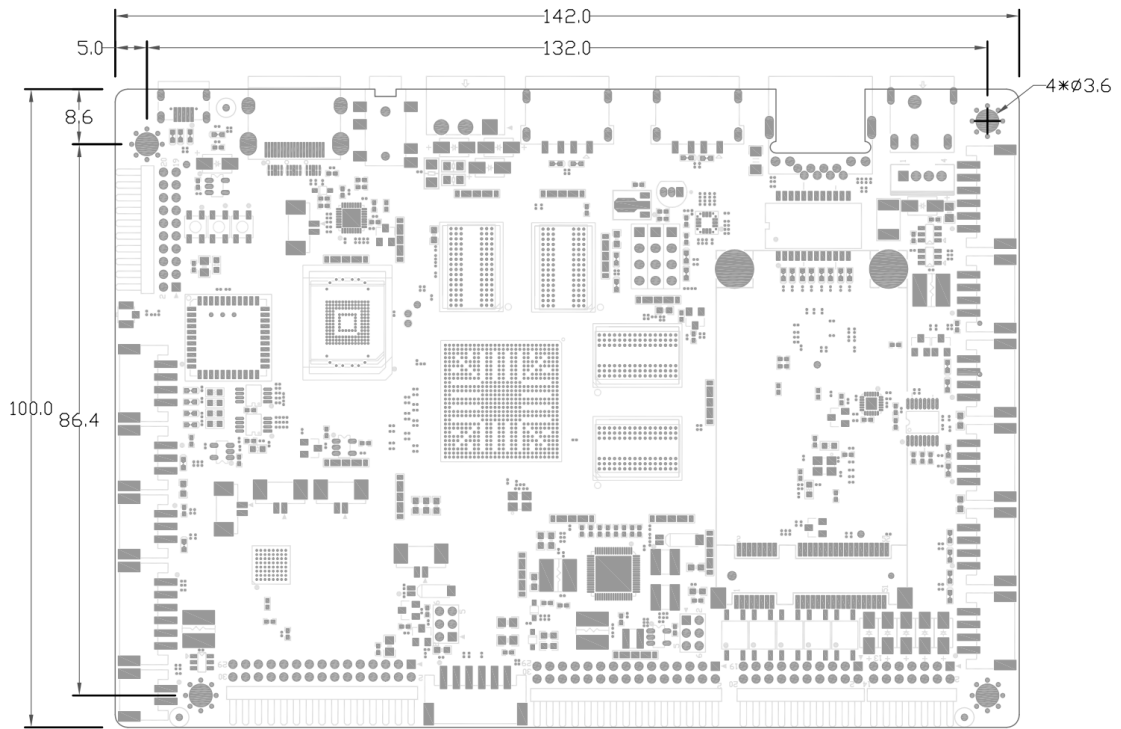


图 2-2

3 产品参数

表 3-1

Function	Description
CPU	RK3288, Quad-core ARM Cortex-A17, up to 1.8GHZ frequency
GPU	ARM Mali- T764 GPU core High performance OpenGL ES1.1/2.0/3.0, OpenCL 1.2, DirectX 11 High performance 2D Graphics Engine
VPU	Real-time video decoder of MPEG-1, MPEG-2/4, H.263/264, AVS, VC-1, VP8, MVC H.264 up to HP level 5.1: 2160p@24fps MPEG-1/2/4 VP8/AVS/MVC up to 1080p@60fps VC-1/ up to 1080p@30fps video encoder for H.264, MVC and VP8
DDR	DDR3, 1GB/2GB(Optional)
eMMC	eMMC 5.1, 8GB/16GB/32GB/64GB/128GB(Optional)
PMU	RK808
Net work	10/100/1000Mbps Ethernet (Realtek RTL8211E) Wi-Fi 2.4GHz/5GHz, 802.11a/b/g/n/ac, up to 433 Mbps (AP6256) BT V5.0 with BLE supported 2G/3G/4G LTE module supported (optional)
Storage	MicroSD (TF) Card Compatible with SDIO3.0
OS	Android / Ubuntu / Buildroot
PCB size	L* W (mm): 142 * 100 (PCB 1.6mm)
Screw size	φ3.6mm
Hardware Interface	
Power	DC12V - 2A (DC Jack 5.5*2.1mm / PH2.0 wafer connector)
USB	2*Type-A USB2.0 HOST + 2*4Pin PH2.0 USB2.0 HOST connector
Display	Type-A HDMI 2.0 up to 4K@60HZ MIPI-DSI up to 1080P@60HZ eDP1.1 20Pin PH2.0 up to 4Kx2K @ 30fps 2x Duel channel LVDS up to 1080P@60HZ
Audio	φ3.5mm earphone Jack with L/R audio out and Mic in 1x analog microphone 1x HDMI audio out 2x 3W/4Ω speaker out with L/R channel
Camera	2x MIPI-CSI interface with ISP built-in

PCIe	mini PCIe for 2G/3G/4G LTE module
SD card	Compatible with SDIO 3.0 protocol, system boot up supported
SIM card	Micro sim slot for Mini-PCIe 4G LTE module
RJ-45	10/100/1000-Mbps data transfer rates
RTC	2Pin GH1.25 connector, RTC power on and off supported
Serial port	2x RS232 and 1x RS485
Keys	3x keys (power, reset, update)
Power output	12V, 5V, 3.3V
INPUT & OUTPUT	5x INPUT detect with optocoupler isolation, 5x 12V voltage output with GPIO control
Others	2x ADC, 2x I2C(CTP supported), IR in, 2x SPI, 4x GPIO

4 接口定义

4.1 接口编号

表 4-1

Part reference	Part Name	Part Specifications	Part Description
J1	Micro USB	Micro USB 2.0 otg	USB2.0 otg, system image download, ADB debug
J2	HDMI	Type-A HDMI2.0	HDMI 2.0 up to 4K@60HZ
J3	Audio Jack	φ3.5mm 4-L Jack	L/R audio out and Mic in
J4	RS485	RS485 Serial communication bus	Data Rate up to 250 kbps and up to 256 Nodes
J5	USB2.0	Type-A USB2.0 host	USB2.0 host
J6	USB2.0	Type-A USB2.0 host	USB2.0 host
J7	RJ45	Gigabit Ethernet	10/100/1000-Mbps data transfer rates
J8	DC Jack	DC 5.5*2.1mm	Main power supply, DC12V – 2A
J9	DC power	PH2.0mm 4pin wafer	DC12V-2A power in or out
J10	CTP	PH2.0mm 6pin wafer	I2C bus and GPIO input type for CTP module
J11	I2C	PH2.0mm 4pin wafer	Reserved for external devices
J12	RS232_2	PH2.0mm 4pin wafer	The second channel of RS232 bus
J13	RS232_1	PH2.0mm 4pin wafer	The first channel of RS232 bus
J14	USB_2	PH2.0mm 4pin wafer	The second USB2.0 host for external devices
J15	USB_1	PH2.0mm 4pin wafer	The first USB2.0 host for external devices
J16	Mini-PCIe	Mini-PCIe 52pin socket	For 2G/3G/4G LTE module used
J17	IO2	PH2.0mm 2x7pin header	Signal input detect and power output control
J18	IO1	PH2.0mm 2x10pin header	Power output, SPI and GPIO
J19	LVDS2	PH2.0mm 2x15pin header	The second dual channel 24bit LVDS output
J20	LCM_BL_2	PH2.0mm 6pin wafer	The second LCM backlight control
J21	LVDS1	PH2.0mm 2x15pin header	The first dual channel 24bit LVDS output
J22	ADC0	PH2.0mm 2pin wafer	Analog signal input to digital
J23	LCM_BL_1	PH2.0mm 6pin wafer	The first LCM backlight control
J24	IR	PH2.0mm 3pin wafer	infra-red remote control input
J25	ADC2	PH2.0mm 3pin wafer	Analog signal input to digital
J26	Speaker	PH2.0mm 4pin wafer	3W/4Ω or 1.5W/8Ω speaker for L&R channel
J27	Antenna	Ipex RF connector	WIFI+BT 2.4GHZ&5GHZ antenna
J28	eDP	PH2.0mm 2x10pin header	eDP1.1 up to 4Kx2K @ 30fps
J29	Mic	GH1.25mm 2pin wafer	Analog microphone input
J30	Reset	GH1.25mm 2pin wafer	System reset control
J31	Update	GH1.25mm 2pin wafer	Recovery key and function key signal input
J32	Power key	GH1.25mm 2pin wafer	Power on/off and suspend/resume signal input
J33	RTC battery	GH1.25mm 2pin wafer	RTC battery voltage input
J34	MIPI_TX	30pin 0.5mm pitch FPC connector	MIPI-DSI 4lane for external displays

J35	CIF	30pin 0.5mm pitch FPC connector	DVP, GPIO, I2C, SPI, 1.8V, 2.8V, 3.3V for camera
J36	Sim card	Micro Sim card slot	Micro push-to-push sim card
J37	Micro SD card	Micro SD (TF) Card Slot	SDIO 3.0 protocol, system boot up supported
J38	MIPI_TX/RX	30pin 0.5mm pitch FPC connector	MIPI-DSI or MIPI-CSI 4lane for displays or cameras
J39	MIPI_RX	30pin 0.5mm pitch FPC connector	MIPI-CSI 4lane for external cameras
K1	Power	push-button	Key for Power on/off and system suspend/resume
K2	Update	push-button	Key for system recovery or other function
K3	Reset	push-button	Key for system reset
Notes:			
LVDS1(J21) and MIPI_TX(J34) cannot be exist at the same time			

4.2 pin 脚定义

4.2.1 RS485 (J4)

表 4-2-1

Pin number	Pin name	Voltage level	Notice
1	RS485-A	RS485	UART4
2	RS485-B	RS485	UART4
3	GND	GND	-

4.2.2 DC power (J9)

表 4-2-2

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

4.2.3 CTP (J10)

表 4-2-3

Pin number	Pin name	Voltage level	Notice
1	VCC3V3_TP	3.3V	-
2	TOUCH_INT	3.3V	GPIO7_A6_U
3	TOUCH_RST	3.3V	GPIO7_A5_D
4	TOUCH_SCL	3.3V	GPIO7_C2_U/I2C4_SCL
5	TOUCH_SDA	3.3V	GPIO7_C1_U/I2C4_SDA
6	GND	GND	GND

4.2.4 I2C (J11)

表 4-2-4

Pin number	Pin name	Voltage level	Notice
1	VCC3V3_I2C	3.3V	-
2	I2C_SDA	3.3V	GPIO8_A4_U/I2C1_SDA
3	I2C_SCL	3.3V	GPIO8_A5_U/I2C1_SCL
4	GND	GND	GND

4.2.5 RS232_2 (J12)

表 4-2-5

Pin number	Pin name	Voltage level	Notice
1	VCC5V_RS232	5.0V	-
2	RS232_TX	RS232	GPIO5_B1_D/UART1_TX
3	RS232_RX	RS232	GPIO5_B0_U/UART1_RX
4	GND	GND	GND

4.2.6 RS232_1 (J13)

表 4-2-6

Pin number	Pin name	Voltage level	Notice
1	VCC5V_RS232	5.0V	-
2	RS232_TX	RS232	GPIO7_B0_D/UART3_TX
3	RS232_RX	RS232	GPIO7_A7_U/UART3_RX
4	GND	GND	GND

4.2.7 USB2 (J14)

表 4-2-7

Pin number	Pin name	Voltage level	Notice
1	VCC5V0_USB	5V	-
2	USB_DM	-	HUB_USB3_DM
3	USB_DP	-	HUB_USB3_DP
4	GND	GND	-

4.2.8 USB1 (J15)

表 4-2-8

Pin number	Pin name	Voltage level	Notice
1	VCC5V0_USB	5V	-

2	USB_DM	-	HUB_USB4_DM
3	USB_DP	-	HUB_USB4_DP
4	GND	GND	-

4.2.9 I02 (J17)

表 4-2-9

Pin number	Pin name	Voltage level	Notice
1	GND	GND	-
2	GND	GND	-
3	INPUT1	3.3V~12V	GPIO5_C0_U Optocoupler isolation
4	OUTPUT1	12V	GPIO6_A6_D
5	INPUP2	3.3V~12V	GPIO5_C2_D Optocoupler isolation
6	OUTPUT2	12V	GPIO6_A5_D
7	INPUT3	3.3V~12V	GPIO0_B1_U Optocoupler isolation
8	OUTPUT3	12V	GPIO6_B3_D
9	INPUT4	3.3V~12V	GPIO0_B0_U Optocoupler isolation
10	OUTPUT4	12V	GPIO6_A7_D
11	INPUT5	3.3V~12V	GPIO0_B5_D Optocoupler isolation
12	OUTPUT5	12V	GPIO7_B3_D
13	GND	GND	-
14	GND	GND	-

4.2.10 I01 (J18)

表 4-2-10

Pin number	Pin name	Voltage level	Notice
1	VCC12V	12V	-
2	VCC12V	12V	-
3	VCC5V	5V	-
4	VCC5V	5V	-
5	VCC3V3	3.3V	-
6	VCC3V3	3.3V	-
7	UART1_RTS	3.3V	GPIO5_B3_U
8	UART1_CTS	3.3V	GPIO5_B2_U
9	SPI2_TXD	3.3V	GPIO8_B1_D
10	SPI2_RXD	3.3V	GPIO8_B0_d
11	SPI2_CSN0	3.3V	GPIO8_A7_U
12	SPI2_CLK	3.3V	GPIO8_A6_D
13	UART3_RTS	3.3V	GPIO7_B2_U
14	UART3_CTS	3.3V	GPIO7_B1_U
15	SPI1_TXD	3.3V	GPIO7_B7_D

16	SPI1_RXD	3.3V	GPIO7_B6_D
17	SPI1_CSNO	3.3V	GPIO7_B5_U
18	SPI1_CLK	3.3V	GPIO7_B4_D
19	GND	GND	-
20	GND	GND	-

4.2.11 LVDS2 (J19)

表 4-2-11

Pin number	Pin name	Voltage level	Notice
1	VCC_LVDS	3.3V/5V/12V	-
2	VCC_LVDS	optional by	-
3	VCC_LVDS	jumper	-
4	GND	GND	-
5	GND	GND	-
6	GND	GND	-
7	LVDS_OD0N	-	-
8	LVDS_OD0P	-	-
9	LVDS_OD1N	-	-
10	LVDS_OD1P	-	-
11	LVDS_OD2N	-	-
12	LVDS_OD2P	-	-
13	GND	GND	-
14	GND	GND	-
15	LVDS_ODCKN	-	-
16	LVDS_ODCKP	-	-
17	LVDS_OD3N	-	-
18	LVDS_OD3P	-	-
19	LVDS_ED0N	-	-
20	LVDS_ED0P	-	-
21	LVDS_ED1N	-	-
22	LVDS_ED01P	-	-
23	LVDS_ED2N	-	-
24	LVDS_ED2P	-	-
25	GND	GND	-
26	GND	GND	-
27	LVDS_ED3N	-	-
28	LVDS_ED3P	-	-
29	LVDS_EDCKN	-	-
30	LVDS_EDCKP	-	-

4.2.12 LCM_BL_2 (J20)

表 4-2-12

Pin number	Pin name	Voltage level	Notice
1	GND	GND	-
2	GND	GND	-
3	BL_ADJ	3.3V	GPIO7_A0_D/PWM0
4	BL_EN	3.3V	GPIO7_A2_D
5	VCC12V_BL	12V	-
6	VCC12V_BL	12V	-

4.2.13 LVDS1 (J21)

表 4-2-13

Pin number	Pin name	Voltage level	Notice
1	VCC_LVDS	3.3V/5V/12V	-
2	VCC_LVDS	optional by jumper	-
3	VCC_LVDS		-
4	GND		GND
5	GND	GND	-
6	GND	GND	-
7	LVDS_OD0N	-	-
8	LVDS_OD0P	-	-
9	LVDS_OD1N	-	-
10	LVDS_OD1P	-	-
11	LVDS_OD2N	-	-
12	LVDS_OD2P	-	-
13	GND	GND	-
14	GND	GND	-
15	LVDS_ODCKN	-	-
16	LVDS_ODCKP	-	-
17	LVDS_OD3N	-	-
18	LVDS_OD3P	-	-
19	LVDS_ED0N	-	-
20	LVDS_ED0P	-	-
21	LVDS_ED1N	-	-
22	LVDS_ED1P	-	-
23	LVDS_ED2N	-	-
24	LVDS_ED2P	-	-
25	GND	GND	-
26	GND	GND	-
27	LVDS_ED3N	-	-

28	LVDS_ED3P	-	-
29	LVDS_EDCKN	-	-
30	LVDS_EDCKP	-	-

4.2.14 ADC0 (J22)

表 4-2-14

Pin number	Pin name	Voltage level	Notice
1	ADC_IN	0V~1.8V	ADC_IN0
2	CIF_D0	1.8V	GPIO2_A0

4.2.15 LCM_BL_1 (J23)

表 4-2-15

Pin number	Pin name	Voltage level	Notice
1	GND	GND	-
2	GND	GND	-
3	BL_ADJ	3.3V	GPIO7_A0_D/PWM0
4	BL_EN	3.3V	GPIO5_C3_D
5	VCC12V_BL	12V	-
6	VCC12V_BL	12V	-

4.2.16 IR (J24)

表 4-2-16

Pin number	Pin name	Voltage level	Notice
1	VCC3V3_IR	3.3V	-
2	GND	GND	-
3	IR_IN	3.3V	GPIO0_A7_U

4.2.17 ADC2 (J25)

表 4-2-17

Pin number	Pin name	Voltage level	Notice
1	ADC_IN	0V~1.8V	ADC_IN2
2	GND	GND	-
3	VCC5V_ADC	5V	-

4.2.18 Speaker (J26)

表 4-2-18

Pin number	Pin name	Voltage level	Notice
1	SPK_L+	-	Speaker left channel positive
2	SPK_L-	-	Speaker left channel negative
3	SPK_R-	-	Speaker right channel negative
4	SPK_R+	-	Speaker right channel positive

4.2.19 eDP (J28)

表 4-2-19

Pin number	Pin name	Voltage level	Notice
1	VCC_EDP	3.3V/5V/12V	-
2	VCC_EDP	optional by jumper	-
3	GND	GND	-
4	GND	GND	-
5	EDP_TX0N	-	-
6	EDP_TX0P	-	-
7	EDP_TX1N	-	-
8	EDP_TX1P	-	-
9	EDP_TX2N	-	-
10	EDP_TX2P	-	-
11	EDP_TX3N	-	-
12	EDP_TX03P	-	-
13	GND	GND	-
14	GND	GND	-
15	EDP_AUXN	-	-
16	EDP_AUXP	-	-
17	GND	GND	-
18	GND	GND	-
19	GND	GND	-
20	NC	NC	-

4.2.20 Mic (J29)

表 4-2-20

Pin number	Pin name	Voltage level	Notice
1	Mic+	-	-
2	Mic-	-	-

4.2.21 Reset (J30)

表 4-2-21

Pin number	Pin name	Voltage level	Notice
------------	----------	---------------	--------

1	Reset	5V	-
2	GND	GND	-

4.2.22 Update (J31)

表 4-2-22

Pin number	Pin name	Voltage level	Notice
1	AD_KEY	0V~1.8V	ADC_IN1
2	GND	GND	-

4.2.23 Power key (J32)

表 4-2-23

Pin number	Pin name	Voltage level	Notice
1	POWER_ON	5V	-
2	GND	-	-

4.2.24 Rtc battery (J33)

表 4-2-24

Pin number	Pin name	Voltage level	Notice
1	VCC3V0_RTC	2.5V~3.3V	RTC battery positive
2	GND	GND	-

4.2.25 MIPI_TX (J34)

表 4-2-25

Pin number	Pin name	Voltage level	Notice
1	VCC12V_LCM	12V	-
2	VCC12V_LCM	12V	-
3	VCC12V_LCM	12V	-
4	VCC5V_LCM	5V	-
5	VCC5V_LCM	5V	-
6	VCC3V3_LCM	3.3V	-
7	VCC3V3_LCM	3.3V	-
8	VCC1V8_LCM	1.8V	-
9	I2C_SCL_LCM	3.3V	GPIO8_A5_U/I2C1_SCL
10	I2C_SDA_LCM	3.3V	GPIO8_A4_U/I2C1_SDA
11	LCM_BL_ADJ	3.3V	GPIO7_A0_D/PWM0
12	LCM_BL_EN	3.3V	GPIO7_A2_D
13	LCM_PWR_EN	3.3V	GPIO7_A3_D
14	LCM_RST	3.3V	GPIO7_A4_U

15	GND	GND	-
16	MIPI_TX_D3N	-	-
17	MIPI_TX_D3P	-	-
18	GND	GND	-
19	MIPI_TX_D2N	-	-
20	MIPI_TX_D2P	-	-
21	GND	GND	-
22	MIPI_TX_CLKN	-	-
23	MIPI_TX_CLKP	-	-
24	GND	GND	-
25	MIPI_TX_D1N	-	-
26	MIPI_TX_D1P	-	-
27	GND	GND	-
28	MIPI_TX_D0N	-	-
29	MIPI_TX_D0P	-	-
30	GND	GND	-

4.2.26 CIF (J35)

表 4-2-26

Pin number	Pin name	Voltage level	Notice
1	VCCA2V8_DVP	2.8V	-
2	VCCA2V8_DVP	2.8V	-
3	VCC2V8_DVP	2.8V	-
4	VCC1V5_DVP	1.5V	-
5	VCC1V5_DVP	1.5V	-
6	I2C2_SDA_DVP	3.3V	GPIO6_B1_U
7	I2C2_SCL_DVP	3.3V	GPIO6_B2_U
8	VCC1V8_DVP	1.8V	-
9	I2C3_SCL_DVP	1.8V	GPIO2_C0_U
10	I2C3_SDA_DVP	1.8V	GPIO2_C1_U
11	CIF_PDN	1.8V	GPIO2_B6_D
12	CIF_RST	1.8V	GPIO2_B4_D
13	GND	GND	-
14	CIF_PCLK_IN	1.8V	GPIO2_B2_D
15	GND	GND	-
16	CIF_MCLK_OUT	1.8V	GPIO2_B3_D
17	GND	GND	-
18	CIF_VSYNC	1.8V	GPIO2_B0_D
19	CIF_HREF	1.8V	-
20	NC	-	-
21	NC	-	-
22	CIF_D7	1.8V	GPIO2_A7_D

23	CIF_D6	1.8V	GPIO2_A6_D
24	CIF_D5	1.8V	GPIO2_A5_D
25	CIF_D4	1.8V	GPIO2_A4_D
26	CIF_D3	1.8V	GPIO2_A3_D
27	CIF_D2	1.8V	GPIO2_A2_D
28	CIF_D1	1.8V	GPIO2_A1_D
29	CIF_D0	1.8V	GPIO2_A0_D
30	GND	GND	-

4.2.27 MIPI_TX/RX (J38)

表 4-2-27

Pin number	Pin name	Voltage level	Notice
1	VCCA2V8_DVP	2.8V	-
2	VCCA2V8_DVP	2.8V	-
3	VCC2V8_DVP	2.8V	-
4	VCC1V5_DVP	1.5V	-
5	VCC1V5_DVP	1.5V	-
6	I2C2_SDA_DVP	3.3V	GPIO6_B1_U
7	I2C2_SCL_DVP	3.3V	GPIO6_B2_U
8	VCC1V8_DVP	1.8V	-
9	I2C3_SCL_DVP	1.8V	GPIO2_C0_U
10	I2C3_SDA_DVP	1.8V	GPIO2_C1_U
11	CIF_PDN	1.8V	GPIO2_B6_D
12	CIF_RST	1.8V	GPIO2_B4_D
13	GND	GND	-
14	MIPI_TX/RX_MCLK	1.8V	GPIO2_B3_D
15	GND	GND	-
16	MIPI_TX/RX_D3N	-	-
17	MIPI_TX/RX_D3P	-	-
18	GND	GND	-
19	MIPI_TX/RX_D2N	-	-
20	MIPI_TX/RX_D2P	-	-
21	GND	GND	-
22	MIPI_TX/RX_CLKN	-	-
23	MIPI_TX/RX_CLKP	-	-
24	GND	GND	-
25	MIPI_TX/RX_D1N	-	-
26	MIPI_TX/RX_D1P	-	-
27	GND	GND	-
28	MIPI_TX/RX_D0N	-	-
29	MIPI_TX/RX_D0P	-	-
30	GND	GND	-

4.2.28 MIPI_RX (J39)

表 4-2-28

Pin number	Pin name	Voltage level	Notice
1	VCCA2V8_DVP	2.8V	-
2	VCCA2V8_DVP	2.8V	-
3	VCC2V8_DVP	2.8V	-
4	VCC1V5_DVP	1.5V	-
5	VCC1V5_DVP	1.5V	-
6	I2C2_SDA_DVP	3.3V	GPIO6_B1_U
7	I2C2_SCL_DVP	3.3V	GPIO6_B2_U
8	VCC1V8_DVP	1.8V	-
9	I2C3_SCL_DVP	1.8V	GPIO2_C0_U
10	I2C3_SDA_DVP	1.8V	GPIO2_C1_U
11	MIPI_RX_PDN	1.8V	GPIO2_B7_D
12	MIPI_RX_RST	1.8V	GPIO2_B5_D
13	GND	GND	-
14	MIPI_RX_MCLK	1.8V	GPIO2_B3_D
15	GND	GND	-
16	MIPI_RX_D3N	-	-
17	MIPI_RX_D3P	-	-
18	GND	GND	-
19	MIPI_RX_D2N	-	-
20	MIPI_RX_D2P	-	-
21	GND	GND	-
22	MIPI_RX_CLKN	-	-
23	MIPI_RX_CLKP	-	-
24	GND	GND	-
25	MIPI_RX_D1N	-	-
26	MIPI_RX_D1P	-	-
27	GND	GND	-
28	MIPI_RX_D0N	-	-
29	MIPI_RX_D0P	-	-
30	GND	GND	-

5 扩展配件

基于 LBA3288 开发板，配合我司开发的扩展模块，可以扩展更多的功能。配件列表如下：

表 5-1

Module number	Module name	Module description	LBD3399 接口
LA-MID7	7 寸 mipi 屏	Mipi 接口, 1024*600	J25(TP), J26(MIPI-TX0)
LA-MID8	8 寸 mipi 屏	Mipi 接口, 800*1280	J25(TP), J26(MIPI-TX0)
LA-LV17	17.3 寸 lvds 屏	双 8 位 LVDS 接口, 1920*1080	J26(MIPI-TX0)
LA-ED17	17.3 寸 eDP 屏	30 线 edp 接口, 1920*1080	J23(eDP)
LA-MI2C	双摄像头转接板	双路 mipi 接口; 可选配我司 2M, 5M, 8M, 13M 摄像头并同时接其中任意两颗。	J27 (MIPI-RX0) J29 (MIPI-TX/RX1)
LA-MIAH	AHD 摄像头转接板	2M 高清 AHD 摄像头, 远距离传输	J27 (MIPI-RX0) J29 (MIPI-TX/RX1)
LA-USCV	CVBS 摄像头转接板	接模拟摄像头, 远距离传输	USB 接口
LA-MIHD	HDMI 输入转接板	HDMI 输入	J27 (MIPI-RX0) J28 (I2S-IN)



图 5-1

6 应用场景

6.1 产品示例



图 6-1

6.2 应用框图

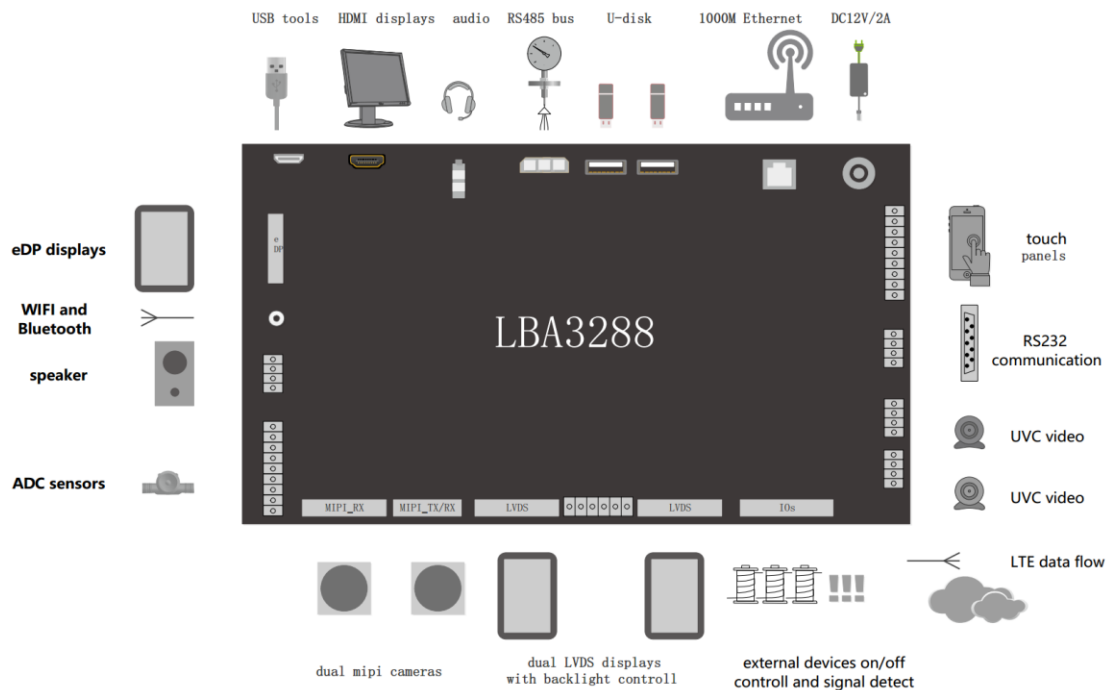


图 6-2

7 支持与服务

7.1 技术支持

- 为客户提供开发相关的技术咨询；
- 为签约客户提供相关设计资料的检查工作；

7.2 售后服务

- 按照国家规定提供产品售后服务；
- 为客户提供个性化定制服务，如有任何需求，请联系我司；