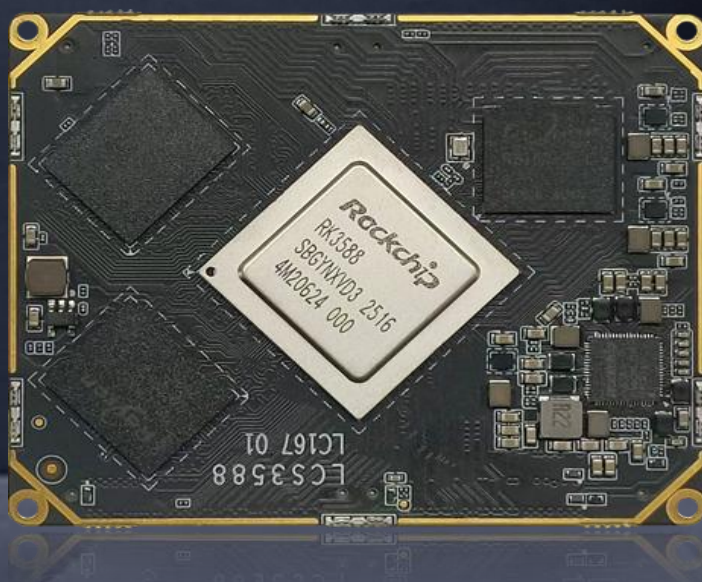


LCN3588-核心模块
产品手册
V1.1



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版本历史

版本	日期	说明
V1.0	2025/10/16	初始版本
V1.1	2026/01/08	更新产品图片

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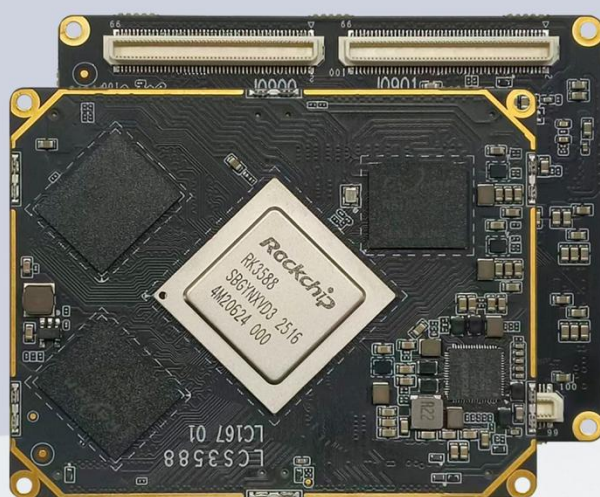
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1.产品介绍

LCN3588 核心模块是基于瑞芯微 RK3588 芯片平台精心设计的一款全功能核心模块，尺寸仅有 70mm*56mm。核心模块与底板的连接采用 4 颗松下 0.5mm pitch 的 100Pin AXK600337YG 板对板连接器，并通过 4 颗 M2 的螺丝固定；真正全部引出了 RK3588 的所有对外引脚信号，同时兼顾了高速数据传输能力、多样化的堆叠高度选项、自动化装配兼容性、抗振动和浮动功能、宽广的工作温度范围、高可靠性、环保标准符合性、防错设计以及优质的材料和表面处理，满足严苛环境和高速通信需求。

LCN3588 包含 CPU、DDR、eMMC 和 PMU 部分。CPU 为 RK3588；DDR 采用市场主流型号 LPDDR5，更低功耗更快频率，可选 4GB/8GB/16GB 配置；eMMC 采用高速 eMMC5.1 标准，可选 32GB/64GB/128GB 多种容量配置；PMU 由 RK806 及多路 DC-DC 和 LDO 组成，CPU 核心电压均支持 DVFS 动态调压。

LCN3588 采用模块化的设计理念，将需求相同、要求严格的核心部分单独设计为一个全功能模块，将 CPU 所有功能引脚全部拉出来，并经过全面的测试和批量化验证。用户基于该模块开发产品，可节省项目开发周期，降低企业成本，提高公司效率。



2. 功能概述



高性能处理器

CPU	8nm 先进制程, 8 核 64 位架构, 高性能, 低功耗
GPU	ARM Mali-G610 MC4 GPU, 专用 2D 图形加速模块
NPU	6TOPS 算力, 3 核架构; 支持 int4/int8/int16/FP16/BF16/TF32
VPU	支持 H.265/H.264/AV1/VP9/AVS2 视频解码, 最高支持 8K60FPS 支持 H.264/H.265 视频编码, 最高支持 8K30FPS
DDR	LPDDR5, 可选 4/8/16GB
eMMC	eMMC 5.1, 可选 32/64/128GB



操作系统

Android

Linux (Buildroot / Debian / Ubuntu)

Kylin



开源资料

WIKI 资料 <https://wiki.neardi.net/zh-Hans/docs/welcome>

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

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	RK3588 8nm; 8 核 64 位架构处理器 (4*A76+4*A55)
GPU	ARM Mali-G610 MC4; OpenGL ES 1.1/2.0/3.1/3.2; Vulkan 1.1/1.2 OpenCL 1.1/1.23/2.0; 高性能 2D 图像加速模块
NPU	6TOPS 算力; 3 核架构; 支持 int4/int8/int16/FP16/BF16/TF32
VPU	支持 H.265/H.264/AV1/VP9/AVS2 视频解码, 最高支持 8K60FPS 支持 H.264/H.265 视频编码, 最高支持 8K30FPS
DDR	LPDDR5, 可选 4GB/8GB/16GB
eMMC	eMMC 5.1, 可选 32GB/64GB/128GB
PMU	RK806
OS	Android / Ubuntu / Buildroot / Debian/Kylin

硬件参数

MIPI interface :	
Video Input interface	2 * MIPI(4 lanes) + 4 * MIPI(2 lanes), totally support 6 cameras input;
	3 * MIPI(4 lanes) + 2 * MIPI(2 lanes), totally support 5 cameras input;
	4 * MIPI(4 lanes) , totally support 4 cameras input;
DVP interface:	
8/10/12/16-bit standard DVP interface, up to 150MHz input data;	

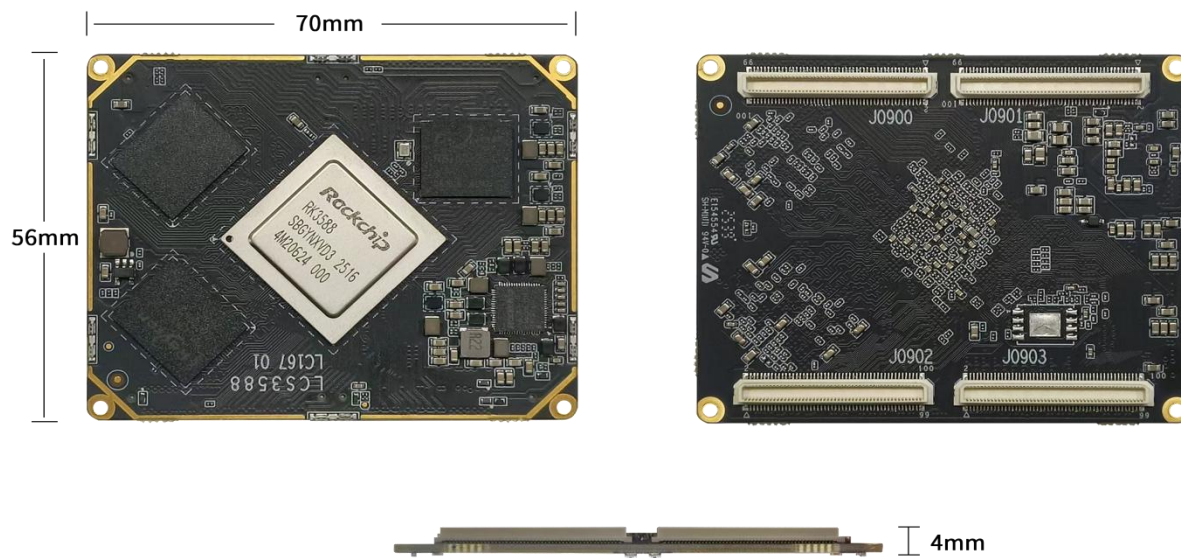
HDMI RX interface:	
HDMI 2.0 2160p@60 Hz, Support HDCP2.3 and HDCP1.4;	
Video Output interface	1 * HDMI2.1 up to 8K@60fps;
	1 * HDMI2.0 up to 4K@60fps;
	2 * MIPI-DSI up to 4K@60fps;
	2 * DP1.4 up to 8K@30fps;
	2 * eDP1.3 up to 4K@60Hz(2*DP multiplexed with HDMI 2.1);
Image Signal Processor	1 * BT.1120 up to 1080@60fps;
	8064*6048@15 dual ISP;
	6528*4898@30 dual ISP;
Video Output Processor	4672*3504@30 single ISP;
	Video Port0 up to 7680*4320@60Hz;
Video Output Processor	Video Port1 up to 4096*4320@60Hz;

其他参数

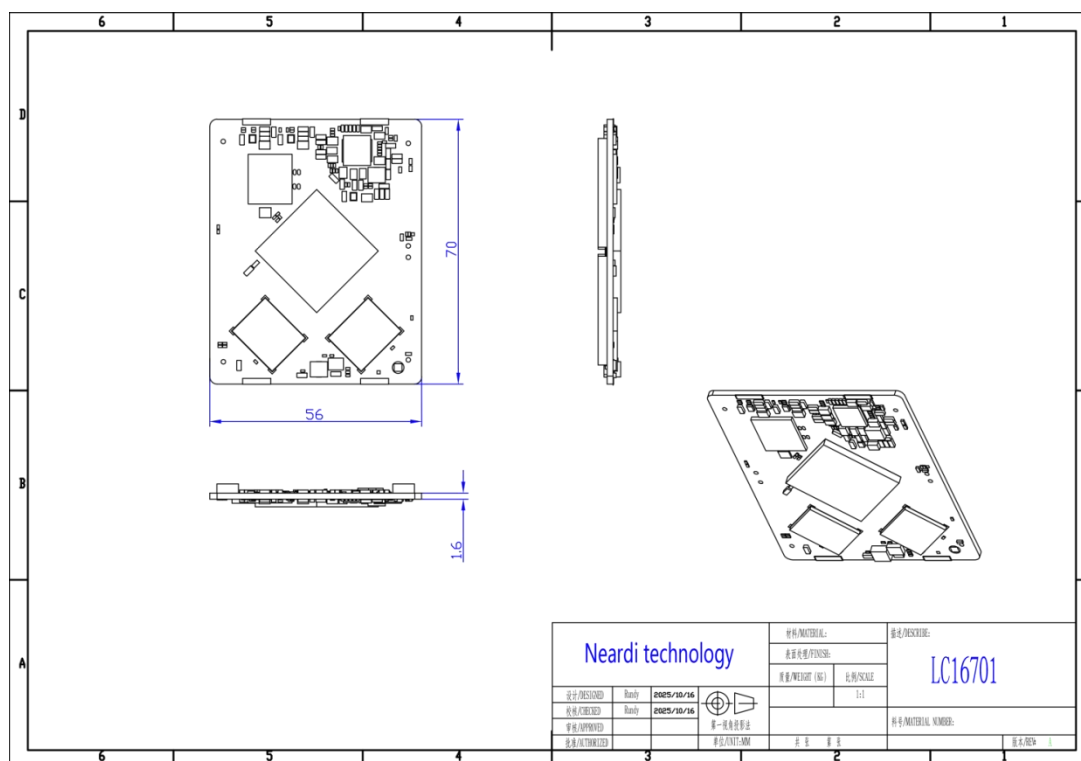
Operating temperature	企业级: -20°C ~ 70°C
	工业级: -40°C ~ 85°C
PCB interface	B2B(4*100 Pin 0.5mm Pitch), AXK600337YG,松下
PCB size	L* W *H(mm): 70*56*4

4. 外观和尺寸结构

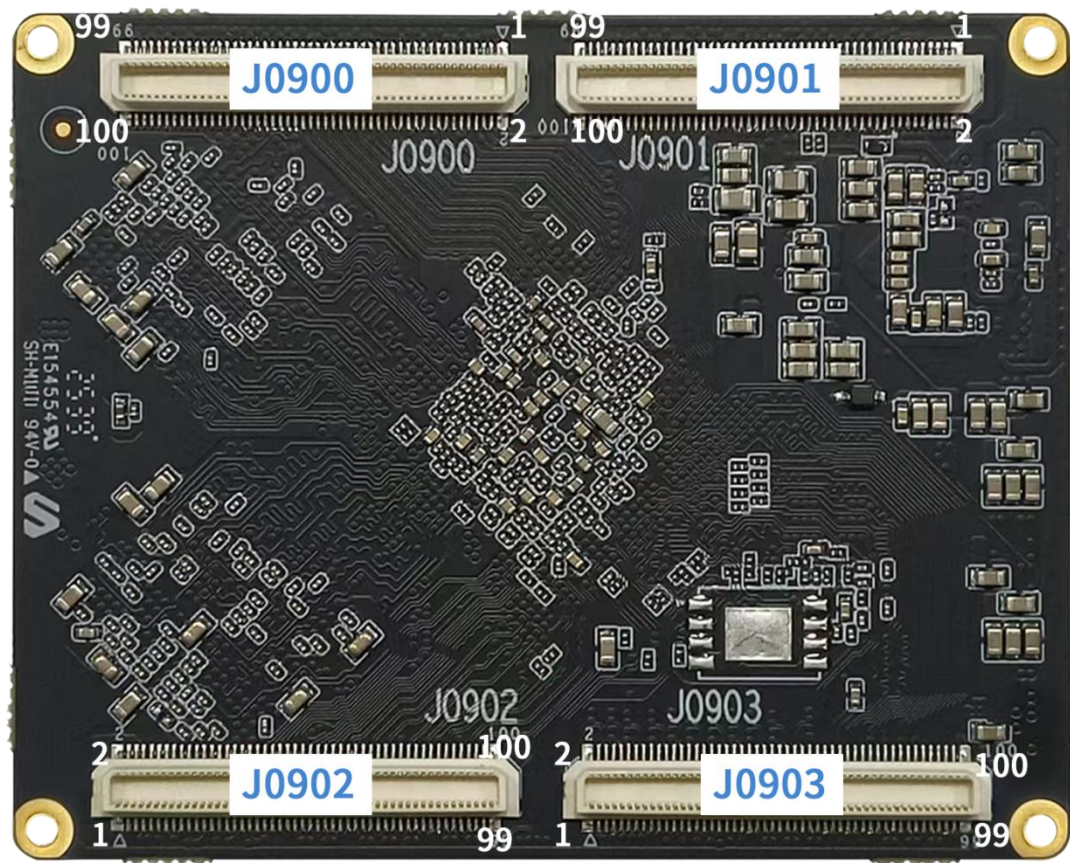
4.1 外观



4.2 尺寸



5.接口定义



J0900

Pin Number	Pin Name	Voltage level	CPU Pin	GPIO Number
J0900.1	GND A1	GND	N/A	N/A
J0900.2	GND A2	GND	N/A	N/A
J0900.3	HDMI1_TX2N_PORT/eDP 1_TX_D2N	N/A	AP6	N/A
J0900.4	TYPE C1_SSTX1N	N/A	AN9	N/A

J0900.5	HDMI1_TX2P_PORT/eDP 1_TX_D2P	N/A	AN6	N/A
J0900.6	TYPEC1_SSTX1P	N/A	AP9	N/A
J0900.7	HDMI1_TX1N_PORT/eDP 1_TX_D1N	N/A	AN5	N/A
J0900.8	GND A8	GND	N/A	N/A
J0900.9	HDMI1_TX1P_PORT/eDP 1_TX_D1P	N/A	AM5	N/A
J0900.10	TYPEC0_OTG_DM	N/A	AM12	N/A
J0900.11	GND A11	GND	N/A	N/A
J0900.12	TYPEC0_OTG_DP	N/A	AL12	N/A
J0900.13	HDMI1_TX0N_PORT/eDP 1_TX_D0N	N/A	AP4	N/A
J0900.14	GND A14	GND	N/A	N/A
J0900.15	HDMI1_TX0P_PORT/eDP 1_TX_D0P	N/A	AN14	N/A
J0900.16	TYPEC1_OTG_DP	N/A	AK9	N/A
J0900.17	HDMI1_TX3N_PORT/eDP 1_TX_D3N	N/A	AN3	N/A
J0900.18	TYPEC1_OTG_DM	N/A	AL9	N/A
J0900.19	HDMI1_TX3P_PORT/eDP 1_TX_D3P	N/A	AM3	N/A

J0900.20	GND A20	GND	N/A	N/A
J0900.21	GND A21	GND	N/A	N/A
J0900.22	TYPE C1_SSRX1N	N/A	AP8	N/A
J0900.23	HDMI1_TX_SBDN/eDP1_TX_AUXN	N/A	AP2	N/A
J0900.24	TYPE C1_SSRX1P	N/A	AN8	N/A
J0900.25	HDMI1_TX_SBDP/eDP1_TX_AUXP	N/A	AN2	N/A
J0900.26	GND A26	GND	N/A	N/A
J0900.27	GND A27	GND	N/A	N/A
J0900.28	USB20_HOST1_DM	N/A	AM7	N/A
J0900.29	HDMI0_TX2P_PORT/eDP0_TX_D2P	N/A	AL2	N/A
J0900.30	USB20_HOST1_DP	N/A	AL7	N/A
J0900.31	HDMI0_TX2N_PORT/eDP0_TX_D2N	N/A	AL1	N/A
J0900.32	USB20_HOST0_DM	N/A	AL6	N/A
J0900.33	GND A33	GND	N/A	N/A
J0900.34	USB20_HOST0_DP	N/A	AK6	N/A
J0900.35	HDMI0_TX1P_PORT/eDP0_TX_D1P	N/A	AK3	N/A
J0900.36	GND A36	GND	N/A	N/A

J0900.37	HDMI0_TX1N_PORT/eDP 0_TX_D1N	N/A	AK2	N/A
J0900.38	HDMI_RX_D2P	N/A	AJ5	N/A
J0900.39	GND A39	GND	N/A	N/A
J0900.40	HDMI_RX_D2N	N/A	AJ4	N/A
J0900.41	HDMI0_TX0P_PORT/eDP 0_TX_D0P	N/A	AJ2	N/A
J0900.42	HDMI_RX_D1P	N/A	AH6	N/A
J0900.43	HDMI0_TX0N_PORT/eDP 0_TX_D0N	N/A	AJ1	N/A
J0900.44	HDMI_RX_D1N	N/A	AH5	N/A
J0900.45	HDMI0_TX3P_PORT/eDP 0_TX_D3P	N/A	AH3	N/A
J0900.46	HDMI_RX_D0P	N/A	AG5	N/A
J0900.47	HDMI0_TX3N_PORT/eDP 0_TX_D3N	N/A	AH2	N/A
J0900.48	HDMI_RX_D0N	N/A	AG4	N/A
J0900.49	HDMI0_TX_SBDP/eDP0_T X_AUXP	N/A	AG2	N/A
J0900.50	HDMI_RX_CLKP	N/A	AF6	N/A
J0900.51	HDMI0_TX_SBDN/eDP0_ TX_AUXN	N/A	AG1	N/A

J0900.52	HDMI_RX_CLKN	N/A	AF5	N/A
J0900.53	GND A53	GND	N/A	N/A
J0900.54	GND A54	GND	N/A	N/A
J0900.55	SDMMC0_D2	VCCIO_SD_S0(3.3V Default)	AF2	GPIO4_D2u
J0900.56	USB_HOST_PWREN_H	VIO6(1.8V Or 3.3V)	AK26	GPIO4_B0d
J0900.57	GND A57	GND	N/A	N/A
J0900.58	PHONE_CTL	VIO6(1.8V Or 3.3V)	AL28	GPIO4_A4d
J0900.59	SDMMC0_CMD	VCCIO_SD_S0(3.3V Default)	AE2	GPIO4_D4u
J0900.60	PCIEX1_1_PERSTn_M1_L	VIO6(1.8V Or 3.3V)	AM29	GPIO4_A2d
J0900.61	SDMMC0_CLK	VCCIO_SD_S0(3.3V Default)	AE1	GPIO4_D5d
J0900.62	PCIEX1_1_CLKREQn_M1_L	VIO6(1.8V Or 3.3V)	AK30	GPIO4_A0d
J0900.63	SDMMC0_D0	VCCIO_SD_S0(3.3V Default)	AD2	GPIO4_D0u
J0900.64	SPK_CTL_H	VIO6(1.8V Or 3.3V)	AL29	GPIO4_A3d

J0900.65	SDMMC0_D1	VCCIO_SD_S0(3.3V Default)	AD21	GPIO4_D1u
J0900.66	TYPEC5V_PWREN_H	VIO6(1.8V Or 3.3V)	AL30	GPIO4_A1d
J0900.67	GND67	GND	N/A	N/A
J0900.68	SDMMC_PWREN	VIO6(1.8V Or 3.3V)	AK27	GPIO4_A5d
J0900.69	TYPEC0_SBU2	N/A	AM15	N/A
J0900.70	TYPEC0_SBU2_DC	VIO6(1.8V Or 3.3V)	AM27	GPIO4_A7
J0900.71	TYPEC0_SBU1	N/A	AL15	N/A
J0900.72	TYPEC0_SBU1_DC	VIO6(1.8V Or 3.3V)	AL27	GPIO4_A6d
J0900.73	GND73	GND	N/A	N/A
J0900.74	TP_RST_L	VIO5(1.8V Or 3.3V)	Y27	GPIO3_C1d
J0900.75	DP1_TX3P/TYPEC1_SSTX 2P	N/A	AP11	N/A
J0900.76	DP1_HPDIIN_M0	VIO5(1.8V Or 3.3V)	AB38	GPIO3_D5d
J0900.77	DP1_TX3N/TYPEC1_SSTX 2N	N/A	AN11	N/A

J0900.78	HDMI_RX_D0N	VIO5(1.8V Or 3.3V)	AA27	GPIO3_D4d
J0900.79	DP1_TX2P/TYPEC1_SSRX 2P	N/A	AN10	N/A
J0900.80	GPIO4_B5	VIO6(1.8V Or 3.3V)	AJ26	GPIO4_B5d
J0900.81	DP1_TX2N/TYPEC1_SSRX 2N	N/A	AP10	N/A
J0900.82	HOST_WAKE_BT_H	PMUIO2(1.8V)	P30	GPIO0_C5u
J0900.83	GND83	GND	N/A	N/A
J0900.84	I2C5_SCL_M0_TP	VIO5(1.8V Or 3.3V)	AJ24	GPIO3_C7u (Internal pull-up resistor)
J0900.85	DP1_AUXN/TYPEC1_SBU 2	N/A	AM10	N/A
J0900.86	I2C5_SDA_M0_TP	VIO5(1.8V Or 3.3V)	AH24	GPIO3_D0u (Internal pull-up resistor)
J0900.87	TYPEC1_SBU1/DP1_AUXP	N/A	AL10	N/A
J0900.88	HDMI_RX_CEC	VIO5(1.8V Or 3.3V)	AG23	GPIO3_D1d
J0900.89	GND89	GND	N/A	N/A
J0900.90	HDMI_RX_SCL_M1	VIO5(1.8V Or 3.3V)	AG25	GPIO3_D2d

J0900.91	GSENSOR_INT_L	VIO3(1.8V)	AE31	GPIO4_C2d
J0900.92	HDMI_RX_SDA_M1	VIO5(1.8V Or 3.3V)	AG24	GPIO3_D3d
J0900.93	ALPS_INT_L	VIO3(1.8V)	AF33	GPIO4_C6d
J0900.94	TYPE1_USB20_VBUSDET	3.3V	AL18	N/A
J0900.95	PCIE_PWREN_H	VIO3(1.8V)	AE30	GPIO2_C5d
J0900.96	TYPE1_USB20_OTG_ID	1.8V	AK8	N/A
J0900.97	USB_HUB_RESET	VIO5(1.8V Or 3.3V)	AE28	GPIO3_B2d
J0900.98	PCIE30X4_PERSTn_M1_L	VIO6(1.8V Or 3.3V)	AJ27	GPIO4_B6d
J0900.99	GNDA99	GND	N/A	N/A
J0900.100	VCC_IO5_1833_IN	1.8V or 3.3V Input	N/A	N/A

J0901

Pin Number	Pin Name	Voltage level	CPU Pin	GPIO Number
J0901.1	VCC4V0_SYS_IN1	4.0V Input	N/A	N/A
J0901.2	VCC4V0_SYS_IN2	4.0V Input	N/A	N/A
J0901.3	VCC4V0_SYS_IN3	4.0V Input	N/A	N/A
J0901.4	VCC4V0_SYS_IN4	4.0V Input	N/A	N/A
J0901.5	VCC4V0_SYS_IN5	4.0V Input	N/A	N/A

J0901.6	VCC4V0_SYS_IN6	4.0V Input	N/A	N/A
J0901.7	VCC4V0_SYS_IN7	4.0V Input	N/A	N/A
J0901.8	VCC4V0_SYS_IN8	4.0V Input	N/A	N/A
J0901.9	GND9	GND	N/A	N/A
J0901.10	GND10	GND	N/A	N/A
J0901.11	GND11	GND	N/A	N/A
J0901.12	GND12	GND	N/A	N/A
J0901.13	GND13	GND	N/A	N/A
J0901.14	GND14	GND	N/A	N/A
J0901.15	GND15	GND	N/A	N/A
J0901.16	VCC_1V1_NLDO_S3_IN_2 A_16	1.8V Input (2A)	RK806.9/1 3	N/A
J0901.17	VCC_1V8_S3_OUT_BUCK1 0_2A5	1.8V Output (2A)	N/A	N/A
J0901.18	VCC_1V1_NLDO_S3_IN_2 A_18	1.8V Input (2A)	RK806.9/1 3	N/A
J0901.19	VCCA_PMU_IN	4.0V Input (0.1A)	RK806.21	N/A
J0901.20	VCC_1V8_S0_OUT_PLDO2 _0A3	1.8V Output (0.3A)	RK806.58	N/A
J0901.21	UART2_TX_M0_DEBUG	PMUIO2 (1.8V)	P29	GPIO0_B5d
J0901.22	RESET_L_PMU	1.8V	RK806.40	N/A

J0901.23	UART2_RX_M0_DEBUG	PMUIO2 (1.8V)	R29	GPIO0_B6d
J0901.24	VCC_3V3_S3_OUT_BUCK8 _2A5	3.3V Output (2A)	RK806.5	N/A
J0901.25	PMIC_EXT_EN_OUT	4.0V	RK806.39	N/A
J0901.26	GNDB26	GND	N/A	N/A
J0901.27	PMIC_PWR_CTRL3	PMUIO2(1.8V)	T32	GPIO0_C2d
J0901.28	PWRON_L_PMU	4.0V	RK806.4	N/A
J0901.29	CC_INT_L	PMUIO2(1.8V)	U33	GPIO0_D3u
J0901.30	PMU_VDC_IN_1/2_ATTN	4.0V	RK806.32	N/A
J0901.31	WIFI_REG_ON_H	PMUIO2(1.8V)	R30	GPIO0_C4d
J0901.32	GMAC1_RSTn_L	VIO5(1.8V Or 3.3V)	AA28	GPIO3_B7d
J0901.33	BT_REG_ON_H	PMUIO2(1.8V)	T29	GPIO0_C6u
J0901.34	TP_INT_L	VIO5(1.8V Or 3.3V)	Y29	GPIO3_C0d
J0901.35	SARADC_VIN3_HP_HOOK	1.8V Max	AN17	N/A
J0901.36	MIPI_CAM3/4_RESET_L	VIO3(1.8V)	AD33	GPIO2_B6d
J0901.37	SARADC_VIN2	1.8V Max	AK16	N/A
J0901.38	I2C4_SCL_M1_SENSOR	VIO3(1.8V)	AB30	GPIO2_B5U (2.2K Internal pull-up resistor)
J0901.39	SARADC_VIN4	1.8V Max	AM17	N/A
J0901.40	I2C4_SDA_M1_SENSOR	VIO3(1.8V)	AB31	GPIO2_B4u (2.2K Internal pull-up)

resistor)				
J0901.41	SARADC_VIN6	1.8V Max	AL17	N/A
J0901.42	GND42	GND	N/A	N/A
J0901.43	SARADC_VIN7	1.8V Max	AK17	N/A
J0901.44	MIPI_DPHY1_RX_D3P	N/A	AK22	N/A
J0901.45	GND45	GND	N/A	N/A
J0901.46	MIPI_DPHY1_RX_D3N	N/A	AL22	N/A
J0901.47	MIPI_DPHY1_TX_D3P	N/A	AN22	N/A
J0901.48	MIPI_DPHY1_RX_D1P	N/A	AK19	N/A
J0901.49	MIPI_DPHY1_TX_D3N	N/A	AP22	N/A
J0901.50	MIPI_DPHY1_RX_D1N	N/A	AL19	N/A
J0901.51	GND51	GND	N/A	N/A
J0901.52	GND52	GND	N/A	N/A
J0901.53	MIPI_DPHY1_TX_D2P	N/A	AN21	N/A
J0901.54	MIPI_DPHY1_RX_CLKN	N/A	AL20	N/A
J0901.55	MIPI_DPHY1_TX_D2N	N/A	AP21	N/A
J0901.56	MIPI_DPHY1_RX_CLKP	N/A	AK20	N/A
J0901.57	GND57	GND	N/A	N/A
J0901.58	GND58	GND	N/A	N/A
J0901.59	MIPI_DPHY1_TX_CLKP	N/A	AN20	N/A
J0901.60	MIPI_DPHY1_RX_D0P	N/A	AK18	N/A
J0901.61	MIPI_DPHY1_TX_CLKN	N/A	AP20	N/A

J0901.62	MIPI_DPHY1_RX_D0N	N/A	AL18	N/A
J0901.63	MIPI_DPHY1_TX_D1P	N/A	AN19	N/A
J0901.64	MIPI_DPHY1_RX_D2P	N/A	AK21	N/A
J0901.65	MIPI_DPHY1_RX_D0N	N/A	AP19	N/A
J0901.66	MIPI_DPHY1_RX_D2N	N/A	AL21	N/A
J0901.67	GND67	GND	N/A	N/A
J0901.68	GND68	GND	N/A	N/A
J0901.69	MIPI_DPHY1_TX_D0P	N/A	AN18	N/A
J0901.70	LCD_BL_EN_H	VIO3(1.8V)	AD32	GPIO2_C1d
J0901.71	MIPI_DPHY1_TX_D3N	N/A	AP18	N/A
J0901.72	ETH1_REFCLKO_25M	VIO5(1.8V Or 3.3V)	AH27	GPIO3_A6d
J0901.73	DP0_TX3N/TYPEC0_SSTX 2N	N/A	AN16	N/A
J0901.74	PCIE30X4_CLKREQn_M1_ L	VIO6(1.8V Or 3.3V)	AL26	GPIO4_B4u
J0901.75	DP0_TX3P/TYPEC0_SSTX 2P	N/A	AP16	N/A
J0901.76	HDMI1_TX1_CEC_M2	VIO5(1.8V Or 3.3V)	AH26	GPIO3_C4u
J0901.77	GND77	GND	N/A	N/A
J0901.78	4G_DISABLE	VIO6(1.8V Or	AM25	GPIO4_B3u

		3.3V)		
J0901.79	DP0_TX2P/TYPECO_SSRX 2P	N/A	AN15	N/A
J0901.80	HDMITX1_SCL_M1	VIO5(1.8V Or 3.3V)	AG26	GPIO3_C6u (No internal pull-up resistor)
J0901.81	DP0_TX2N/TYPECO_SSRX 2N	N/A	AP15	N/A
J0901.82	HDMITX1_SDA_M1	VIO5(1.8V Or 3.3V)	AH25	GPIO3_C5u (No internal pull-up resistor)
J0901.83	GND83	GND	N/A	N/A
J0901.84	HDMI0_TX_ON_H	VIO6(1.8V Or 3.3V)	AL24	GPIO4_B1u
J0901.85	DP0_TX1N/TYPECO_SSTX 1N	N/A	AN14	N/A
J0901.86	HDMI1_TX_ON_H	VIO6(1.8V Or 3.3V)	AK25	GPIO4_B2u
J0901.87	DP0_TX1P/TYPECO_SSTX 1P	N/A	AP14	N/A
J0901.88	HDMITX0_CEC_M0	VIO6(1.8V Or 3.3V)	AK24	GPIO4_C1d
J0901.89	DP0_TX0P/TYPECO_SSRX 1P	N/A	AN13	N/A

J0901.90	HDMITX0_SDA_M0	VIO6(1.8V Or 3.3V)	AJ25	GPIO4_C0u (No internal pull-up resistor)
J0901.91	TYPECO_SSRX1N/DP0_TX 0N	N/A	AP13	N/A
J0901.92	HDMITX0_SCL_M0	VIO6(1.8V Or 3.3V)	AJ28	GPIO4_B7u (No internal pull-up resistor)
J0901.93	GND93	GND	N/A	N/A
J0901.94	SARADC_VIN1_KEY/RECO VERY	1.8V Max	AL16	N/A
J0901.95	TYPECO_USB20_OTG_ID	1.8V	AL14	N/A
J0901.96	SARADC_VIN5	N/A	AK15	N/A
J0901.97	BOOT_SARADC_IN0	N/A	AM16	N/A
J0901.98	GND98	GND	N/A	N/A
J0901.99	TYPECO_USB20_VBUSDET	3.3V	AM14	N/A
J0901.100	VCC_IO6_1833_IN	1.8V or 3.3V Input	N/A	N/A

J0902

Pin Number	Pin Name	Voltage level	CPU Pin	GPIO Number
J0902.1	VCC4V0_SYS_CPUB_IN1	4.0V Input	N/A	N/A
J0902.2	VCC4V0_SYS_CPUB_IN2	4.0V Input	N/A	N/A
J0902.3	VCC4V0_SYS_CPUB_IN3	4.0V Input	N/A	N/A

J0902.4	VCC4V0_SYS_CPUB_IN4	4.0V Input	N/A	N/A
J0902.5	VCC4V0_SYS_CPUB_IN5	4.0V Input	N/A	N/A
J0902.6	VCC4V0_SYS_CPUB_IN6	4.0V Input	N/A	N/A
J0902.7	GND7	GND	N/A	N/A
J0902.8	VCC4V0_SYS_CPUB_IN8	4.0V Input	N/A	N/A
J0902.9	GND9	GND	N/A	N/A
J0902.10	GNDC10	GND	N/A	N/A
J0902.11	HDMIIRX_DET_L	VIO1(1.8V)	G26	GPIO1_D5d
J0902.12	GNDC12	GND	N/A	N/A
J0902.13	I2C7_SDA_M0_CODEC	VIO1(1.8V)	F27	GPIO1_D1d (2.2K Internal pull-up resistor)
J0902.14	GNDC14	GND	N/A	N/A
J0902.15	I2C7_SCL_M0_CODEC	VIO1(1.8V)	F26	GPIO1_D0d (2.2K Internal pull-up resistor)
J0902.16	GNDC16	GND	N/A	N/A
J0902.17	PCIEx1_0_CLKREQn_M2_L	VIO4(1.8V)	E25	GPIO1_B5u
J0902.18	MIPI_CAM1/2_RESET_L	VIO4(1.8V)	A27	GPIO1_A3d
J0902.19	MIPI_CAM2_PWREN_H	VIO1(1.8V)	E28	GPIO1_D3d
J0902.20	MIPI_CAM4_PDN_L	VIO4(1.8V)	C27	GPIO1_B0u
J0902.21	PWM15_M2	VIO1(1.8V)	D29	GPIO1_C6d
J0902.22	MIPI_CAM1_PDN_L	VIO4(1.8V)	A26	GPIO1_A2d
J0902.23	LCD_PWREN_H	VIO4(1.8V)	D27	GPIO1_B3d

J0902.24	HDMITX0_HPDI_N_M0	VIO4(1.8V)	B26	GPIO1_A5d
J0902.25	MIPI_CAM1_PWREN_H	VIO1(1.8V)	F28	GPIO1_D2d
J0902.26	I2C2_SCL_M4_MIPI	VIO4(1.8V)	A25	GPIO1_A1d (2.2K Internal pull-up resistor)
J0902.27	I2S0_SCLK_TX	VIO1(1.8V)	E31	GPIO1_C3d
J0902.28	MIPI_CAM2_PDN_L	VIO4(1.8V)	B25	GPIO1_A4d
J0902.29	I2C3_SCL_M0_MIPI	VIO1(1.8V)	G27	GPIO1_C1z (2.2K Internal pull-up resistor)
J0902.30	I2C2_SDA_M4_MIPI	VIO4(1.8V)	A24	GPIO1_A0d (2.2K Internal pull-up resistor)
J0902.31	I2C3_SDA_M0_MIPI	VIO1(1.8V)	G29	GPIO1_C0z (2.2K Internal pull-up resistor)
J0902.32	I2S0_SDI0	VIO1(1.8V)	D28	GPIO1_D4d
J0902.33	I2S0_MCLK	VIO1(1.8V)	F30	GPIO1_C2d
J0902.34	I2S0_SDO0	VIO1(1.8V)	E29	GPIO1_C7d
J0902.35	WIFI_WAKE_HOST_H	PMUIO1(1.8V)	K29	GPIO0_B2u
J0902.36	I2S0_LRCK_TX	VIO1(1.8V)	D30	GPIO1_C5d
J0902.37	RTC_INT_L	PMUIO1(1.8V)	L30	GPIO0_B0z
J0902.38	HP_DET_L	VIO1(1.8V)	E30	GPIO1_C4d
J0902.39	SDMMC_DET_L	PMUIO1(1.8V)	P31	GPIO0_A4u
J0902.40	PCIEx1_0_PERSTn_M2_L	VIO4(1.8V)	E24	GPIO1_B4u
J0902.41	VGA_HPDI_N_L	PMUIO2(1.8V)	T28	GPIO0_B7d

J0902.42	MIPI_CAM4_PWREN_H	VIO4(1.8V)	D25	GPIO1_B1d
J0902.43	GNDC43	GND	N/A	N/A
J0902.44	HDMITX1_HPDIN_M0	VIO4(1.8V)	C24	GPIO1_A6d
J0902.45	PCIE30_PORT0_TX1N	N/A	C34	N/A
J0902.46	MIPI_CAM3_PDN_L	VIO4(1.8V)	C25	GPIO1_A7u
J0902.47	PCIE30_PORT0_TX1P	N/A	C33	N/A
J0902.48	MIPI_CAM3_PWREN_H	VIO4(1.8V)	D26	GPIO1_B2d
J0902.49	PCIE30_PORT0_TX0N	N/A	D33	N/A
J0902.50	GND50	GND	N/A	N/A
J0902.51	PCIE30_PORT0_TX0P	N/A	D32	N/A
J0902.52	MIPI_CAM3_CLKOUT	VIO4(1.8V)	F24	GPIO1_D6u
J0902.53	GNDC53	GND	N/A	N/A
J0902.54	MIPI_CAM1_CLKOUT	VIO4(1.8V)	E26	GPIO1_B6u
J0902.55	PCIE30_PORT0_REFCLKN_IN	N/A	E34	N/A
J0902.56	MIPI_CAM4_CLKOUT	VIO4(1.8V)	F25	GPIO1_D7u
J0902.57	PCIE30_PORT0_REFCLKP_IN	N/A	E33	N/A
J0902.58	MIPI_CAM2_CLKOUT	VIO4(1.8V)	E27	GPIO1_B7u
J0902.59	GND59	GND	N/A	N/A
J0902.60	GND60	GND	N/A	N/A
J0902.61	PCIE30_PORT0_RX1N	N/A	F33	N/A

J0902.62	PCIE30_PORT1_REFCLKN _IN	N/A	B28	N/A
J0902.63	PCIE30_PORT0_RX1P	N/A	F32	N/A
J0902.64	PCIE30_PORT1_REFCLKP_ IN	N/A	A28	N/A
J0902.65	PCIE30_PORT0_RX0N	N/A	G34	N/A
J0902.66	GNDC66	GND	N/A	N/A
J0902.67	PCIE30_PORT0_RX0P	N/A	G33	N/A
J0902.68	PCIE30_PORT1_TX3N	N/A	B29	N/A
J0902.69	GND69	GND	N/A	N/A
J0902.70	PCIE30_PORT1_TX3P	N/A	C29	N/A
J0902.71	PCIE20_1_REFCLKN	N/A	H33	N/A
J0902.72	PCIE30_PORT1_TX2N	N/A	A30	N/A
J0902.73	PCIE20_1_REFCLKP	N/A	H32	N/A
J0902.74	PCIE30_PORT1_TX2P	N/A	B30	N/A
J0902.75	GNDC75	GND	N/A	N/A
J0902.76	GNDC76	GND	N/A	N/A
J0902.77	PCIE20_1_RXN/SATA30_1 _RXN	N/A	J34	N/A
J0902.78	PCIE30_PORT1_RX3N	N/A	B31	N/A
J0902.79	PCIE20_1_RXP/SATA30_1 _RXP	N/A	J33	N/A

J0902.80	PCIE30_PORT1_RX3P	N/A	C31	N/A
J0902.81	GNDC81	GND	N/A	N/A
J0902.82	PCIE30_PORT1_RX2N	N/A	A32	N/A
J0902.83	PCIE20_1_TXN/SATA30_1 _TXN	N/A	K34	N/A
J0902.84	PCIE30_PORT1_RX2P	N/A	B32	N/A
J0902.85	PCIE20_1_TXP/SATA30_1 _TXP	N/A	K33	N/A
J0902.86	GNDC86	GND	N/A	N/A
J0902.87	PCIE20_0_REFCLKN	N/A	L33	N/A
J0902.88	PCIE20_2_REFCLKN	N/A	G30	N/A
J0902.89	PCIE20_0_REFCLKP	N/A	L32	N/A
J0902.90	PCIE20_2_REFCLKP	N/A	G31	N/A
J0902.91	GND91	GND	N/A	N/A
J0902.92	GND92	GND	N/A	N/A
J0902.93	PCIE20_0_TXP/SATA30_0 _TXP	N/A	M34	N/A
J0902.94	PCIE20_2_TXN/SATA30_2 _TXN	N/A	H29	N/A
J0902.95	PCIE20_0_TXN/SATA30_0 _TXN	N/A	M33	N/A
J0902.96	PCIE20_2_TXP/SATA30_2	N/A	H30	N/A

	_TXP			
J0902.97	PCIE20_0_RXN/SATA30_0 _RXN	N/A	N34	N/A
J0902.98	PCIE20_2_RXN/SATA30_2 _RXN	N/A	J30	N/A
J0902.99	PCIE20_0_RXP/SATA30_0 _RXP	N/A	N33	N/A
J0902.100	PCIE20_2_RXP/SATA30_2 _RXP	N/A	J31	N/A

J0903

Pin Number	Pin Name	Voltage level	CPU Pin	GPIO Number
J0903.1	BT_WAKE_HOST_H	PMUIO1(1.8V)	P33	GPIO0_A0d
J0903.2	GPIO0_C0D_LCD_BL_PW M1_1V8	PMUIO2(1.8V)	T31	GPIO0_C0d
J0903.3	I2C6_SDA_M0	PMUIO2(1.8V)	V31	GPIO0_C7d (2.2K Internal pull-up resistor)
J0903.4	MIPI_CSI0_RX_D3P	N/A	AL33	N/A
J0903.5	I2C6_SCL_M0	PMUIO2(1.8V)	W31	GPIO0_D0d (2.2K Internal pull-up resistor)
J0903.6	MIPI_CSI0_RX_D3N	N/A	AL34	N/A
J0903.7	I2C1_SDA_M2	PMUIO2(1.8V)	V28	GPIO0_D5u (2.2K Internal

pull-up resistor)				
J0903.8	MIPI_CSI0_RX_D2N	N/A	AK34	N/A
J0903.9	I2C1_SCL_M2	PMUIO2(1.8V)	V29	GPIO0_D4u
J0903.10	MIPI_CSI0_RX_D2P	N/A	AK33	N/A
J0903.11	UART9_RX_M0_BT	VIO3(1.8V)	AC30	GPIO2_C4d
J0903.12	GND12	GND	N/A	N/A
J0903.13	I2S2_SDI_M0_BT	VIO3(1.8V)	AD30	GPIO2_C3d
J0903.14	MIPI_CSI0_RX_CLK1P	N/A	AM33	N/A
J0903.15	UART9_TX_M0_BT	VIO3(1.8V)	AD31	GPIO2_C2d
J0903.16	MIPI_CSI0_RX_CLK1N	N/A	AM34	N/A
J0903.17	UART9_CTSn_M0_BT	VIO3(1.8V)	AB33	GPIO4_C5d
J0903.18	GND18	GND	N/A	N/A
J0903.19	UART9_RTSn_M0_BT	VIO3(1.8V)	AB34	GPIO4_C4d
J0903.20	MIPI_CSI0_RX_D1N	N/A	AH34	N/A
J0903.21	I2S2_SCLK_M0_BT	VIO3(1.8V)	AD34	GPIO2_B7d
J0903.22	MIPI_CSI0_RX_D1P	N/A	AH33	N/A
J0903.23	I2S2_LRCK_M0_BT	VIO3(1.8V)	AE34	GPIO2_C0d
J0903.24	MIPI_CSI0_RX_D0N	N/A	AG34	N/A
J0903.25	I2S2_SDO_M0_BT	VIO3(1.8V)	AF34	GPIO4_C3d
J0903.26	MIPI_CSI0_RX_D0P	N/A	AG33	N/A
J0903.27	GND27	GND	N/A	N/A
J0903.28	GND28	GND	N/A	N/A

J0903.29	SDIO_CMD_M0_WIFI	VIO3(1.8V)	AC34	GPIO2_B2u
J0903.30	MIPI_CSI0_RX_CLK0N	N/A	AJ34	N/A
J0903.31	SDIO_D3_M0_WIFI	VIO3(1.8V)	AC33	GPIO2_B1u
J0903.32	MIPI_CSI0_RX_CLK0P	N/A	AJ33	N/A
J0903.33	SDIO_D0_M0_WIFI	VIO3(1.8V)	AC32	GPIO2_A6u
J0903.34	GND34	GND	N/A	N/A
J0903.35	SDIO_CLK_M0_WIFI	VIO3(1.8V)	AE33	GPIO2_B3d
J0903.36	MIPI_DPHY0_TX_D0N	N/A	AP24	N/A
J0903.37	SDIO_D1_M0_WIFI	VIO3(1.8V)	AC31	GPIO2_A7u
J0903.38	MIPI_DPHY0_TX_D0P	N/A	AN24	N/A
J0903.39	SDIO_D2_M0_WIFI	VIO3(1.8V)	AE32	GPIO2_B0u
J0903.40	MIPI_DPHY0_TX_D1P	N/A	AN25	N/A
J0903.41	GND41	GND	N/A	N/A
J0903.42	MIPI_DPHY0_TX_D1N	N/A	AP25	N/A
J0903.43	MIPI_CSI1_RX_D0N	N/A	AG32	N/A
J0903.44	GND44	GND	N/A	N/A
J0903.45	MIPI_CSI1_RX_D0P	N/A	AG31	N/A
J0903.46	MIPI_DPHY0_TX_CLKP	N/A	AN26	N/A
J0903.47	MIPI_CSI1_RX_D1N	N/A	AH32	N/A
J0903.48	MIPI_DPHY0_TX_CLKN	N/A	AP26	N/A
J0903.49	MIPI_CSI1_RX_D1P	N/A	AH31	N/A
J0903.50	GND50	GND	N/A	N/A

J0903.51	GND51	GND	N/A	N/A
J0903.52	MIPI_DPHY0_TX_D2P	N/A	AN27	N/A
J0903.53	MIPI_CSI1_RX_CLK0N	N/A	AJ32	N/A
J0903.54	MIPI_DPHY0_TX_D2N	N/A	AP27	N/A
J0903.55	MIPI_CSI1_RX_CLK0P	N/A	AJ31	N/A
J0903.56	MIPI_DPHY0_TX_D3P	N/A	AN28	N/A
J0903.57	GND57	GND	N/A	N/A
J0903.58	MIPI_DPHY0_TX_D3N	N/A	AP28	N/A
J0903.59	MIPI_CSI1_RX_D2N	N/A	AK32	N/A
J0903.60	GND60	GND	N/A	N/A
J0903.61	MIPI_CSI1_RX_D2P	N/A	AK31	N/A
J0903.62	GMAC1_MDC	VIO5(1.8V Or 3.3V)	Y31	GPIO3_C2d
J0903.63	MIPI_CSI1_RX_D3N	N/A	AL32	N/A
J0903.64	GMAC1_MDIO	VIO5(1.8V Or 3.3V)	Y30	GPIO3_C3d
J0903.65	MIPI_CSI1_RX_D3P	N/A	AL31	N/A
J0903.66	GMAC1_TXD3	VIO5(1.8V Or 3.3V)	AA30	GPIO3_A1u
J0903.67	GND67	GND	N/A	N/A
J0903.68	GMAC1_TXD2	VIO5(1.8V Or 3.3V)	AA29	GPIO3_A0u

J0903.69	MIPI_CSI1_RX_CLK1N	N/A	AM32	N/A
J0903.70	GMAC1_TXD0	VIO5(1.8V Or 3.3V)	AC28	GPIO3_B3u
J0903.71	MIPI_CSI1_RX_CLK1P	N/A	AM31	N/A
J0903.72	GMAC1_TXD1	VIO5(1.8V Or 3.3V)	AC29	GPIO3_B4u
J0903.73	GND73	GND	N/A	N/A
J0903.74	GMAC1_TXEN	VIO5(1.8V Or 3.3V)	AD29	GPIO3_B5u
J0903.75	MIPI_DPHY0_RX_D3N	N/A	AP33	N/A
J0903.76	GND76	GND	N/A	N/A
J0903.77	MIPI_DPHY0_RX_D3P	N/A	AN34	N/A
J0903.78	GMAC1_MCLKINOUT	VIO5(1.8V Or 3.3V)	AE29	GPIO3_B6d
J0903.79	MIPI_DPHY0_RX_D2N	N/A	AP32	N/A
J0903.80	GND80	GND	N/A	N/A
J0903.81	MIPI_DPHY0_RX_D2P	N/A	AN33	N/A
J0903.82	GMAC1_TXCLK	VIO5(1.8V Or 3.3V)	AD28	GPIO3_A4d
J0903.83	GND83	GND	N/A	N/A
J0903.84	GND84	GND	N/A	N/A
J0903.85	MIPI_DPHY0_RX_CLKN	N/A	AP31	N/A

J0903.86	GMAC1_RXCLK	VIO5(1.8V Or 3.3V)	AH30	GPIO3_A5d
J0903.87	MIPI_DPHY0_RX_CLKP	N/A	AN32	N/A
J0903.88	GND88	GND	N/A	N/A
J0903.89	GND89	GND	N/A	N/A
J0903.90	GMAC1_RXD0	VIO5(1.8V Or 3.3V)	AG29	GPIO3_A7u
J0903.91	MIPI_DPHY0_RX_D1N	N/A	AP30	N/A
J0903.92	GMAC1_RXDV_CRS	VIO5(1.8V Or 3.3V)	AH29	GPIO3_B1d
J0903.93	MIPI_DPHY0_RX_D1P	N/A	AN30	N/A
J0903.94	GMAC1_RXD1	VIO5(1.8V Or 3.3V)	AG28	GPIO3_B0u
J0903.95	MIPI_DPHY0_RX_D0N	N/A	AP29	N/A
J0903.96	GMAC1_RXD2	VIO5(1.8V Or 3.3V)	AD27	GPIO3_A2u
J0903.97	MIPI_DPHY0_RX_D0P	N/A	AN29	N/A
J0903.98	GMAC1_RXD3	VIO5(1.8V Or 3.3V)	AE27	GPIO3_A3u
J0903.99	GND99	GND	N/A	N/A
J0903.100	GND100	GND	N/A	N/A

6.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



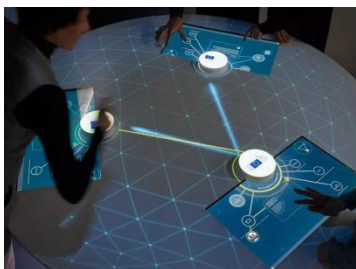
智慧物流



新零售



智慧商显



物体识别



车载终端



门禁监控

7.订购型号

产品型号	状 态	CPU 型号	DDR 容量	eMMC 容量	工作温度
LC16743201	量产	RK3588	4GB	32GB	-20°C - 70°C
LC16786401	量产	RK3588	8GB	64GB	-20°C - 70°C
LC1679A801	量产	RK3588	16GB	128GB	-20°C - 70°C
LC167432J1	量产	RK3588J	4GB	32GB	-40°C - 85°C
LC167864J1	量产	RK3588J	8GB	64GB	-40°C - 85°C
LC1679A8J1	量产	RK3588J	16GB	128GB	-40°C - 85°C

*非标定制请邮件咨询 sales@neardi.com

8.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。支持多种芯片平台 Rockchip 瑞芯微、HISI 海思、NVIDIA 英伟达、车控、WIFI 模块。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 瑞芯微-产品线

核心模块



LCB3588/J



LCH3576



LCH3562



LCH3506



LCB1126B

开发板



LKD3588/J



LKD3576



LKD3562



LKD3506



LKD1126B

智能计算机



LPB3588



LPM3588



LPC3588



LPB3568



LPM3568

HiSi 海思-产品线



LCB3403V100



LCB3519AV200



LKD3403V100



LBA3403V100



LPA3403V100

NVIDIA 英伟达-产品线



LKD Orin Nano



LKD Orin NX



LPD Orin NX



LPD Orin Nano

车控-产品线



LPA3588



LPS3576



LPA3568



LPA3399Pro



LPS3399Pro

WIFI6 模块-产品线



FD7352S



FD7352P



FD7352U



FD7155U



FD7256S