

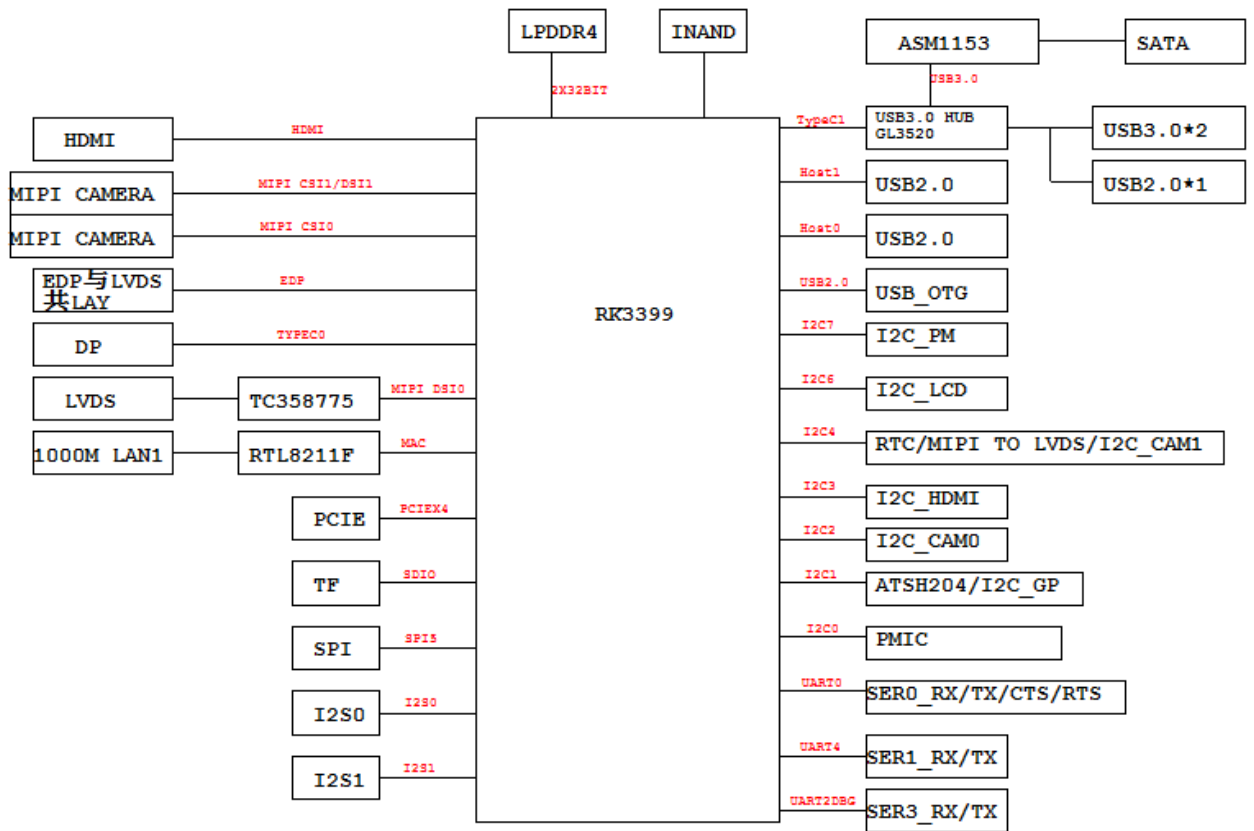
SOM-6533 核心板 产品介绍

硬件规格

- 基于 Rockchip RK3399 双核 Cortex-A72+四核 Cortex-A53 处理器
- 板载 4GB LPDDR 内存, 板载 16GB EMMC FLASH
- 集成 Mali-T860MP4 GPU,支持 1x HDMI, 1x LVDS,1x MIPI DSI, 1x EDP, 1x DP, 2x MIPI CSI
- 支持 1x 千兆网口,1x PCIE 输出,2x I2S 输出, 2xUSB3.0,4x USB2.0,1x SATA,12x GPIO
- 支持 TF,SPI,I2C 接口
- 标准 SAMRC2.0 接口

SOM-6533	
CPU	RK3399
Memory	板载 2GB/4GB,标配 4GB LPDDR4
FLASH+	标配 16GB EMMC,可选 8GB/16GB/32GB/64GB/128GB
HDMI	支持 1xHDMI 信号输出, 支持最大分辨率 4K@60HZ
LVDS	支持 1x 双通道 LVDS 信号输出, 支持最大分辨率 1920x1080@60HZ
MIPI	支持 1xMIPI DSI 信号输出, 支持最大分辨率 1920x1080@60HZ
EDP	支持 1xLVDS 信号输出, 支持最大分辨率 1920x1080@60HZ
DP	支持 1xDP 信号输出, 支持最大分辨率 1920x1080@60HZ; 也可复用为 Type C 接口信号
MIPI CSI	支持 2xMIPI CSI 信号输入
LAN	支持 1x 10/100/1000M LAN
PCIE	支持 1x PCIE
Audio-	支持 2xI2S 输出
USB	支持 2xUSB3.0, 4x USB2.0
COM	支持 2x UART+1x Debug 口
SATA	支持 1x SATA
GPIO	支持 12x GPIO
TF	支持
SPI	支持
I2C-	支持
Supply Voltage-	5V

产品框图:



引脚定义:

PIN.	Primary (Top) Side	PIN.	Secondary(Bottom) Side
P1	SMB_ALERT_1V8#	S1	I2C4_CAM1_CK
P2	GND	S2	I2C4_CAM1_DAT
P3	MIPI_TX1/RX1_CLKP	S3	GND
P4	MIPI_TX1/RX1_CLKN	S4	NC
P5	NC	S5	I2C2_CAM0_CK
P6	NC	S6	CAM_MCK
P7	MIPI_TX1/RX1_D0P	S7	I2C2_CAM0_DAT
P8	MIPI_TX1/RX1_D0N	S8	MIPI_RX0_CLKP
P9	GND	S9	MIPI_RX0_CLKN
P10	MIPI_TX1/RX1_D1P	S10	GND
P11	MIPI_TX1/RX1_D1N	S11	MIPI_RX0_D0P
P12	GND	S12	MIPI_RX0_D0N
P13	MIPI_TX1/RX1_D2P	S13	GND
P14	MIPI_TX1/RX1_D2N	S14	MIPI_RX0_D1P
P15	GND	S15	MIPI_RX0_D1N
P16	MIPI_TX1/RX1_D3P	S16	GND
P17	MIPI_TX1/RX1_D3N	S17	NC
P18	GND	S18	NC
P19	MDI3-	S19	NC
P20	MDI3+	S20	NC
P21	GBE0_LINK100#	S21	NC
P22	GBE0_LINK1000#	S22	NC
P23	MDI2-	S23	NC
P24	MDI2+	S24	NC
P25	GBE0_LINK_ACT#	S25	GND
P26	MDI1-	S26	NC
P27	MDI1+	S27	NC
P28	NC	S28	NC
P29	MDI0-	S29	PCIE_TX3_P
P30	MDI0+	S30	PCIE_TX3_N
P31	NC	S31	NC
P32	GND	S32	PCIE_RX3_P
P33	SDMMC0_WP	S33	PCIE_RX3_N
P34	SDMMC0_CMD	S34	GND
P35	SDMMC0_DET_L	S35	USB3_DP4
P36	SDMMC0_CLK	S36	USB3_DM4
P37	SDMMC0_PWR_H	S37	NC
P38	GND	S38	I2S0_MCLK
P39	SDMMC0_D0	S39	I2S0_LRCK
P40	SDMMC0_D1	S40	I2S0_SDO0
P41	SDMMC0_D2	S41	I2S0_SDI0

P42	SDMMC0_D3	S42	I2S0_SCLK
P43	SPI5_CS0#	S43	NC
P44	SPI5_CK	S44	NC
P45	SPI5_DIN	S45	NC
P46	SPI5_DO	S46	NC
P47	GND	S47	GND
P48	SATA_TX+	S48	I2C1_GP_CK
P49	SATA_TX-	S49	I2C1_GP_DAT
P50	GND	S50	I2S1_LRCK
P51	SATA_RX+	S51	I2S1_SDO0
P52	SATA_RX-	S52	I2S1_SDI0
P53	GND	S53	I2S1_SCLK
P54	NC	S54	SATA_ACT#
P55	NC	S55	USB5_EN_OC#
P56	NC	S56	NC
P57	NC	S57	NC
P58	NC	S58	NC
P59	GND	S59	USB3_DP2
P60	OTG_DP	S60	USB3_DM2
P61	OTG_DM	S61	GND
P62	OTG_EN_OC#	S62	USB3_TX2P
P63	OTG_U2VBUSET	S63	USB3_TX2N
P64	OTG_ID	S64	GND
P65	HOST0_DP	S65	USB3_RX2P
P66	HOST0_DM	S66	USB3_RX2N
P67	HOST0_EN_OC#	S67	GND
P68	GND	S68	USB3_DP1
P69	HOST1_DP	S69	USB3_DM1
P70	HOST1_DM	S70	GND
P71	HOST1_EN_OC#	S71	USB3_TX1P
P72	NC	S72	USB3_TX1N
P73	NC	S73	GND
P74	USB3_EN_OC#	S74	USB3_RX1P
P75	PCIE_A_RST#	S75	USB3_RX1N
P76	USB4_EN_OC#	S76	NC
P77	NC	S77	NC
P78	NC	S78	PCIE_RX2_P
P79	GND	S79	PCIE_RX2_N
P80	NC	S80	GND
P81	NC	S81	PCIE_TX2_P
P82	GND	S82	PCIE_TX2_N
P83	PCIE_CLK_P	S83	GND
P84	PCIE_CLK_N	S84	NC

P85	GND	S85	NC
P86	PCIE_RX0_P	S86	GND
P87	PCIE_RX0_N	S87	PCIE_RX1_P
P88	GND	S88	PCIE_RX1_N
P89	PCIE_TX0_P	S89	GND
P90	PCIE_TX0_N	S90	PCIE_TX1_P
P91	GND	S91	PCIE_TX1_N
P92	HDMI_TX2P	S92	GND
P93	HDMI_TX2N	S93	DP0P
P94	GND	S94	DP0N
P95	HDMI_TX1P	S95	DP0_AUX_SEL
P96	HDMI_TX1N	S96	DP1P
P97	GND	S97	DP1N
P98	HDMI_TX0P	S98	DP_HPDP
P99	HDMI_TX0N	S99	DP2P
P100	GND	S100	DP2N
P101	HDMI_TXCP	S101	GND
P102	HDMI_TXCN	S102	DP3P
P103	GND	S103	DP3N
P104	HDMI_HPDP	S104	NC
P105	I2C3_SCL_HDMI	S105	DP_AUXP
P106	I2C3_SDA_HDMI	S106	DP_AUXN
P107	NC	S107	LCD1_BKLT_EN
P108	GPIO2_D4	S108	EDP_LVDS1_CKP
P109	GPIO3_D4	S109	EDP_LVDS1_CKN
P110	GPIO3_D5	S110	GND
P111	GPIO1_C1	S111	EDP_LVDS1_TX0P
P112	GPIO1_C6	S112	EDP_LVDS1_TX0N
P113	GPIO2_A2	S113	EDP_HPDP
P114	GPIO2_A3	S114	EDP_LVDS1_TX1P
P115	GPIO2_A4	S115	EDP_LVDS1_TX1N
P116	GPIO2_A5	S116	LCD1_VDD_EN
P117	GPIO2_A6	S117	EDP_LVDS1_TX2P
P118	GPIO2_B4	S118	EDP_LVDS1_TX2N
P119	GPIO0_A2	S119	GND
P120	GND	S120	EDP_LVDS1_TX3P
P121	I2C7_PM_CK	S121	EDP_LVDS1_TX3N
P122	I2C7_PM_DAT	S122	LCD1_BKLT_PWM
P123	NC	S123	NC
P124	NC	S124	GND
P125	NC	S125	LVDS0_TX0_P
P126	RESET_OUT#	S126	LVDS0_TX0_N
P127	RESET_IN#	S127	LCD0_BKLT_EN

P128	POWER_BTN#	S128	LVDS0_TX1_P
P129	UART0_TX	S129	LVDS0_TX1_N
P130	UART0_RX	S130	GND
P131	UART0_RTSn	S131	LVDS0_TX2_P
P132	UART0_CTSn	S132	LVDS0_TX2_N
P133	GND	S133	LCD0_VDD_EN
P134	UART4_TX	S134	LVDS0_CLK_P
P135	UART4_RX	S135	LVDS0_CLK_N
P136	NC	S136	GND
P137	NC	S137	LVDS0_TX3_P
P138	NC	S138	LVDS0_TX3_N
P139	NC	S139	I2C6_LCD_CK
P140	UART2DBG_TX	S140	I2C6_LCD_DAT
P141	UART2DBG_RX	S141	LCD0_BKLT_PWM
P142	GND	S142	NC
P143	NC	S143	GND
P144	NC	S144	NC
P145	NC	S145	WDT_TIME_OUT#
P146	NC	S146	PCIE_WAKE#
P147	5VSB	S147	VCC_RTC_3V
P148	5VSB	S148	NC
P149	5VSB	S149	SLEEP#
P150	5VSB	S150	NC
P151	5VSB	S151	NC
P152	5VSB	S152	NC
P153	5VSB	S153	CARRIER_STBY#
P154	5VSB	S154	CARRIER_PWR_ON
P155	5VSB	S155	FORCE_RECOV#
P156	5VSB	S156	NC
		S157	RECOVER
		S158	GND

结构尺寸

