

RK7003A-模块规格

V1.3

1、简介

采用 ARM Cortex A8、CPU 主频 1.2GHz、核心板设计方式，同时支持双核处理器，采用完全管脚兼容做法；信号处理及功能模块分布在显示主板；模块体积小，功能接口完备、很适用于工业智能显示产品应用；整体设计采用功能模块化、稳定、灵活、简便。

·型号：RK7003A - A10 、 A20



·特点：

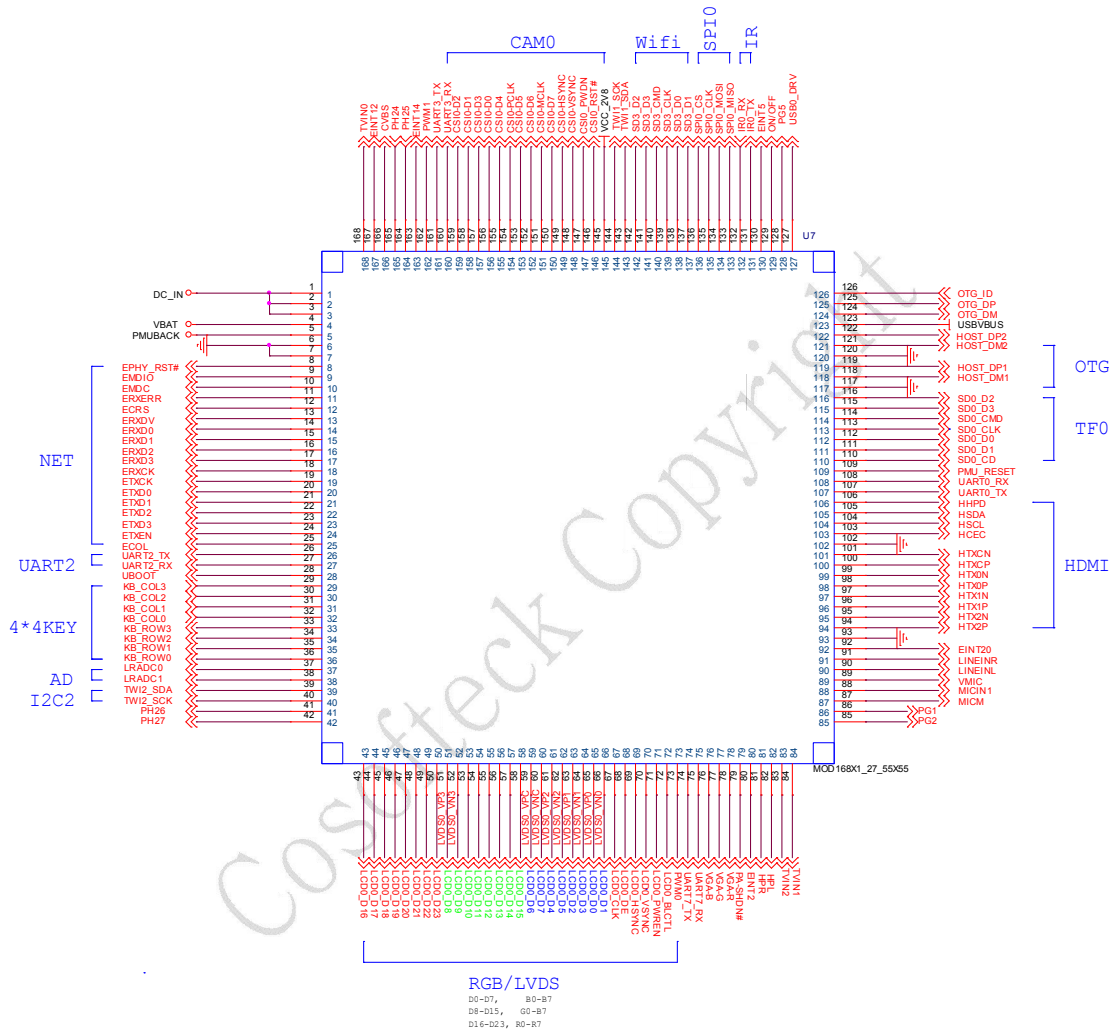
- 尺寸：55x55mm、小型化
- CPU 采用 ARM Cortex A8 1.2GHz 554MHz DDR3；Dual Core ARM Cortex A7
- DDR3 ：512M-2GB、双片 16bits DDR3
- 存储：4GB-8GB Flash
- 内置 PMU、LDO
- 采用邮票孔 4 边设计、每边 42pins、共计 168pins
- 批量化生产、批量化全检
- 支持硬加密、独立 ID 号编辑(定制 ROM 支持)

2、管脚定义

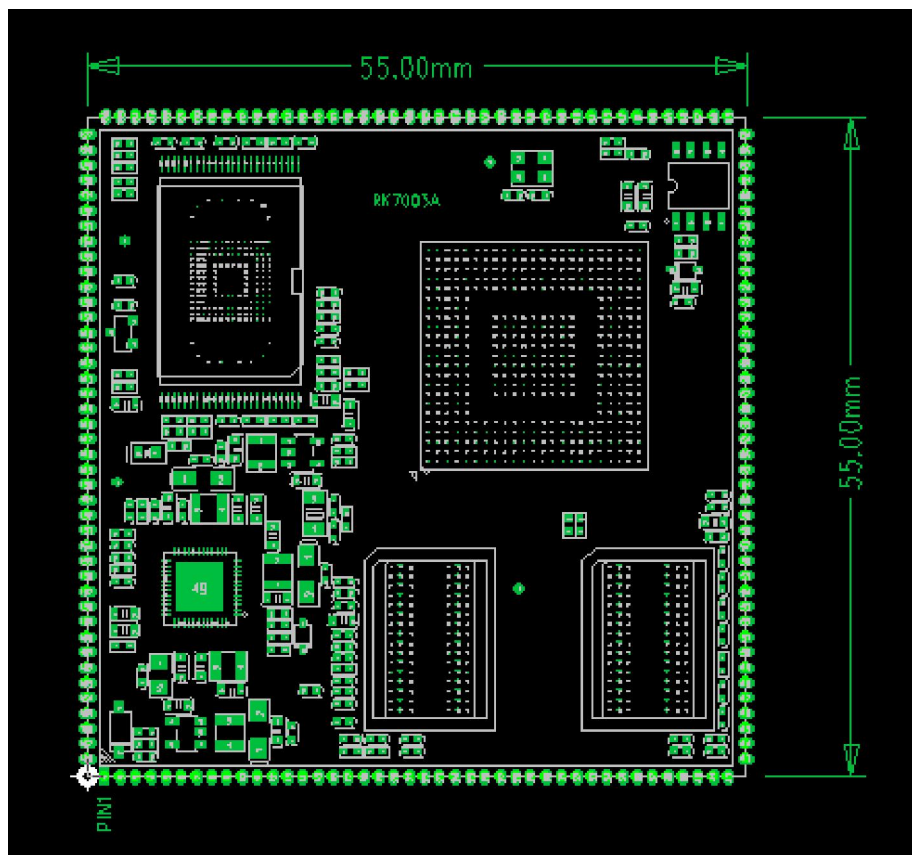
序号	名称	描述	序号	名称	描述
1	DC_IN	5V	2	DC_IN	5V
3	DC_IN	5V	4	VBAT	4.2V
5	PMUBACK	RTC 3V0 (或 GND)	6	GND	Ground
7	GND	Ground	8	EPHY_RST#	Ethernet
9	EMDIO	Ethernet	10	EMDC	Ethernet
11	ERXERR	Ethernet	12	ECRS	Ethernet
13	ERXD0	Ethernet	14	ERXD0	Ethernet
15	ERXD1	Ethernet	16	ERXD2	Ethernet
17	ERXD3	Ethernet	18	ERXCK	Ethernet
19	ETXCK	Ethernet	20	ETXD0	Ethernet
21	ETXD1	Ethernet	22	ETXD2	Ethernet
23	ETXD3	Ethernet	24	ETXEN	Ethernet
25	ECOL	Ethernet	26	UART2_TX	UART2
27	UART2_RX	UART2	28	UBOOT	UBOOT
29	KB_COL3	4*4 KEY	30	KB_COL2	4*4 KEY
31	KB_COL1	4*4 KEY	32	KB_COL0	4*4 KEY
33	KB_ROW3	4*4 KEY	34	KB_ROW2	4*4 KEY
35	KB_ROW1	4*4 KEY	36	KB_ROW0	4*4 KEY
37	LRADC0	ADC	38	LRADC1	ADC
39	TWI2_SDA	IIC2	40	TWI2_SCK	IIC2
41	PH26	GPIO/VGA_HSYNC	42	PH27	GPIO/VGA_VSYNC
43	LCD0_D16	RGB/LVDS	44	LCD0_D17	RGB/LVDS
45	LCD0_D18	RGB/LVDS	46	LCD0_D19	RGB/LVDS
47	LCD0_D20	RGB/LVDS	48	LCD0_D21	RGB/LVDS
49	LCD0_D22	RGB/LVDS	50	LCD0_D23	RGB/LVDS0_VP3
51	LCD0_D8	RGB/LVDS0_VN3	52	LCD0_D9	RGB/LVDS
53	LCD0_D10	RGB/LVDS	54	LCD0_D11	RGB/LVDS
55	LCD0_D12	RGB/LVDS	56	LCD0_D13	RGB/LVDS
57	LCD0_D14	RGB/LVDS	58	LCD0_D15	RGB/LVDS
59	LCD0_D6	RGB/LVDS0_VPC	60	LCD0_D7	RGB/LVDS0_VNC
61	LCD0_D4	RGB/LVDS0_VP2	62	LCD0_D5	RGB/LVDS0_VN2
63	LCD0_D2	RGB/LVDS0_VP1	64	LCD0_D3	RGB/LVDS0_VN1
65	LCD0_D0	RGB/LVDS0_VP0	66	LCD0_D1	RGB/LVDS0_VN0
67	LCD0_CLK	RGB/LVDS	68	LCD0_DE	RGB/LVDS
69	LCD0_HSYNC	RGB/LVDS	70	LCD0_VSYNC	RGB/LVDS
71	LCD0_PWREN	RGB/LVDS	72	LCD0_BLCTL	RGB/LVDS
73	PWM0	RGB/LVDS	74	UART7_TX	UART
75	UART7_RX	UART	76	VGA_B	VGA
77	VGA_G	VGA	78	VGA_R	VGA
79	PA_SHDN#	GPIO	80	EINT2	EINT
81	HPR	HP	82	HPL	HP

83	TVIN2	TV IN	84	TVIN1	TV IN
85	PG2	GPIO	86	PG1	GPIO
87	MICM	MIC	88	MICIN1	MIC
89	VMIC	MIC	90	LINEINL	LINE IN
91	LINEINR	LINE IN	92	EINT20	EINT
93	GND	Ground	94	HTX2P	HDMI
95	HTX2N	HDMI	96	HTX1P	HDMI
97	HTX1N	HDMI	98	HTX0P	HDMI
99	HTX0N	HDMI	100	HTXCP	HDMI
101	HTXCN	HDMI	102	GND	HDMI
103	HCEC	HDMI	104	HSCL	HDMI
105	HSDA	HDMI	106	HHPD	HDMI
107	UART0_TX	UART0	108	UART0_RX	UART0
109	PMU_RESET	RESET SIGNAL	110	SD0_CD	TF0
111	SD0_D1	TF0	112	SD0_D0	TF0
113	SD0_CLK	TF0	114	SD0_CMD	TF0
115	SD0_D3	TF0	116	SD0_D2	TF0
117	GND	Ground	118	HOST_DM1	USB HOST 1
119	HOST_DP1	USB HOST 1	120	GND	Ground
121	HOST_DM2	USB HOST 2	122	HOST_DP2	USB HOST 2
123	USBVBUS	USB OTG	124	OTG_DM	USB OTG
125	OTG_DP	USB OTG	126	OTG_ID	USB OTG
127	USB0_DRV	USB OTG	128	PG5	GPIO
129	ON/OFF	POWER KEY	130	EINT6	EINT
131	IRQ_TX	IR	132	IRQ_RX	IR
133	SPI0_MISO	SPI 0	134	SPI0_MOSI	SPI 0
135	SPI0_CLK	SPI 0	136	SPI0_CS	SPI 0
137	SD3_D1	SDIO	138	SD3_D0	SDIO
139	SD3_CLK	SDIO	140	SD3_CMD	SDIO
141	SD3_D3	SDIO	142	SD3_D2	SDIO
143	TWI1_SDA	IIC 1	144	TWI1_SCK	IIC 1
145	VCC_2V8	OUTPUT	146	CSI0_RST#	CAMERA 0
147	CSI0_PWDN	CAMERA 0	148	CSI0_VSYNC	CAMERA 0
149	CSI0_HSYNC	CAMERA 0	150	CSI0_D7	CAMERA 0
151	CSI0_MCLK	CAMERA 0	152	CSI0_D6	CAMERA 0
153	CSI0_D5	CAMERA 0	154	CSI0_PCLK	CAMERA 0
155	CSI0_D4	CAMERA 0	156	CSI0_D0	CAMERA 0
157	CSI0_D3	CAMERA 0	158	CSI0_D1	CAMERA 0
159	CSI0_D2	CAMERA 0	160	UART3_RX	UART 3
161	UART3_TX	UART 3	162	PWM1	PWM
163	EINT14	EINT	154	PH25	GPIO
165	PH24	GPIO	166	CVBS	CVBS OUT
167	EINT12	EINT	168	TVIN0	TV IN

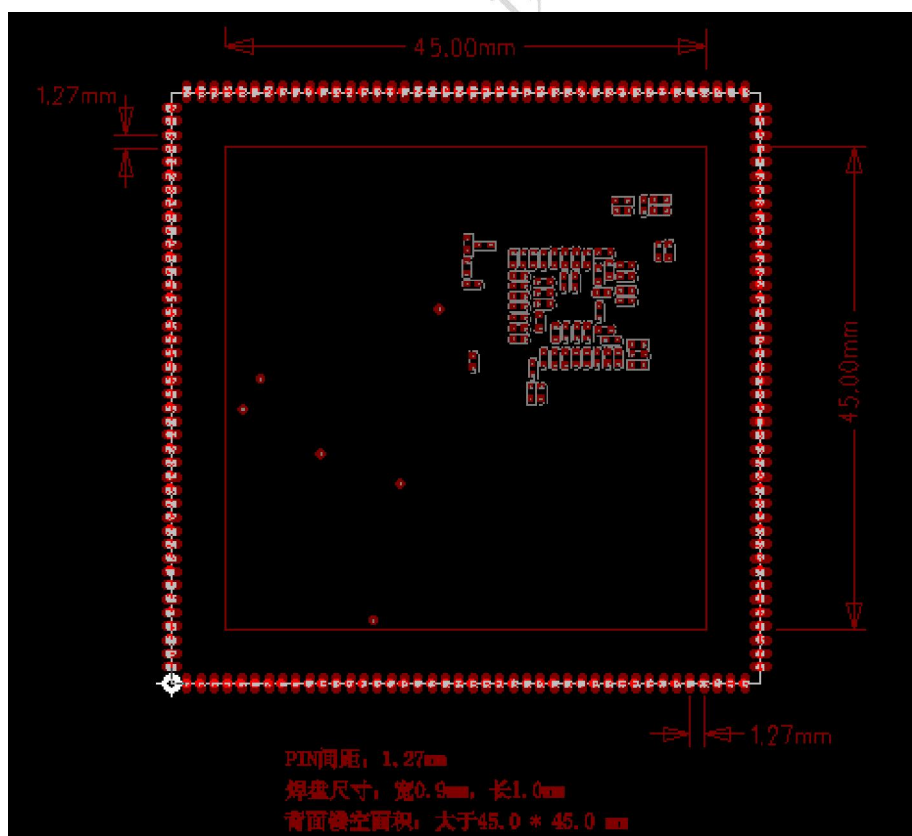
管脚图：



封装尺寸：



正面图



背面图

底板参考(新增)：

