

## Product Details

### Model: MY-RK3288-CB314

RK3288 is the world's first ARM architecture core chip, or the world's first Mali-T76x series of GPU chips, And the world's first 4Kx2K hardware H.265 video chip. The RK3288 core board is a powerful core board based on the RK3288 chip.

### Main Features:

- 1, Quad core Cortex-A17, up to 1.8GHz;
- 2, Mali-T764 GPU, support AFBC (Frame buffer compression);
- 3, Support OpenGL ES1.1/2.0/3.1, OpenCL, DirectX9.3;
- 4, Support 4K 10bit VP9/H265/H264 Video decoding, up to 60fps;
- 5, 1080P Multi-format video decoding (VC-1, MPEG-1/2/4, VP8);
- 6, Video post-processor: Inverse interleaving, denoising, edge / detail / color optimization;
- 7, Support RGB, Dual LVDS, Dual MIPI-DSI, EDP display interface, the highest resolution 3840\*2160;
- 8, HDMI 2.0 support 4K 60Hz display, support HDCP 1.4/2.2;
- 9, ARM TrustZone (TEE), Secure Video Path, Cipher Engine, Secure boot;
- 10, Dual-channel 64bit DDR3-1333/DDR3L-1333;
- 11, Support MLC NAND Flash, EMMC 4.51;
- 12, 13M ISP, support MIPI CSI-2 and DVP interface;
- 13, Dual SDIO 3.0 interface;
- 14, TS in/CSA2.0, support DTV;

### Hardware configuration:

Cord board model	CPU	Memory	Storage	Boot mode	Burning mode	Others
MY-RK3288_CB314	RK3288	1G/2G	eMMC:4G~32G	eMMC	Key enter	standard configuration: memory 1G, storage 4G

### Operating Temperature:

Commercial grade: 0 ~ 90 °C

Storage Temperature: -40 ~ 125 °C

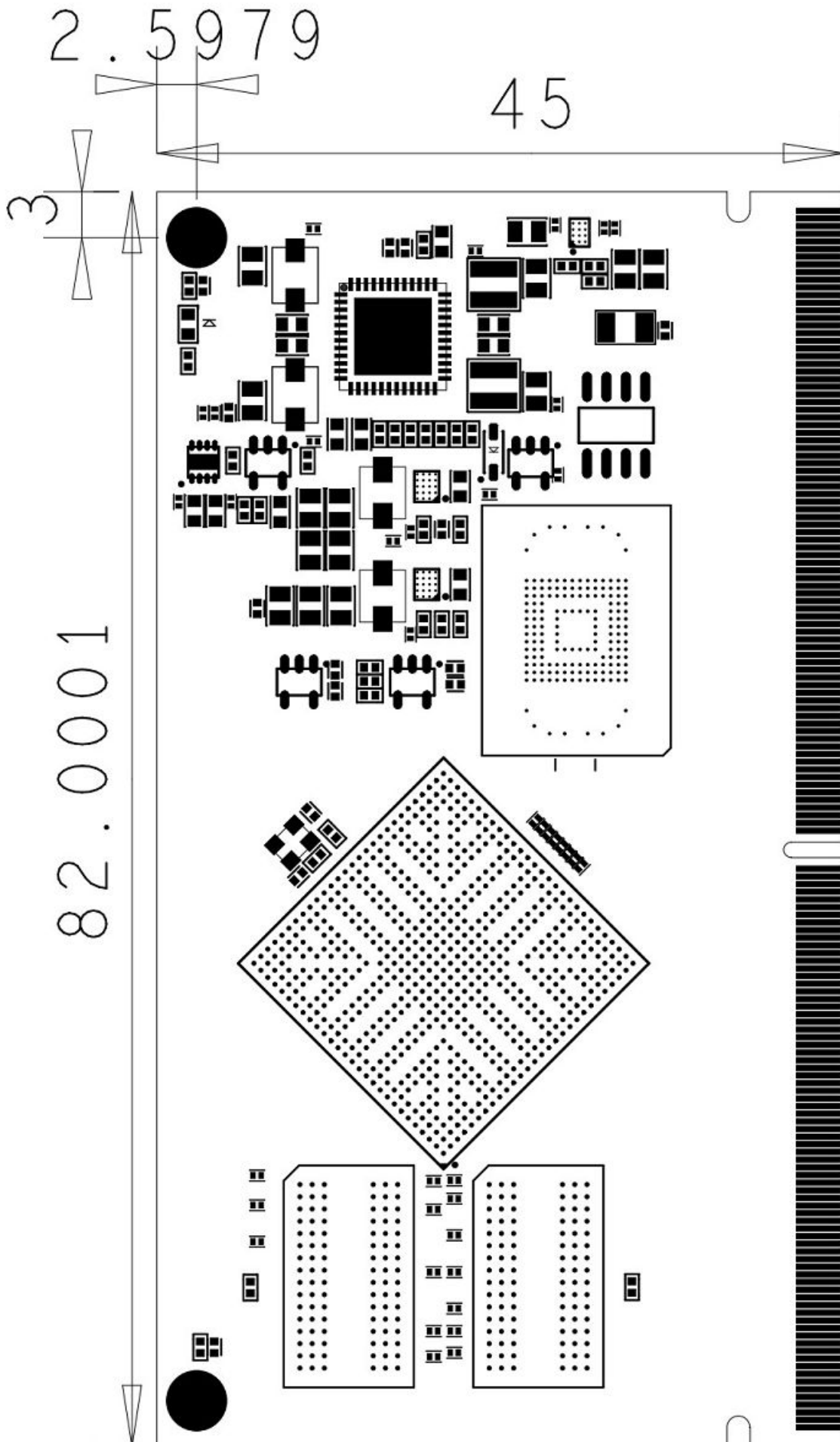
OS Support: Linux-3.10.79, Android 5.1, ubuntu14.04

### Hardware interface:

Display module	HDMI	1 way
	Dual LVDS	1 way
	RGB	1 way
	Dual MIPI-DSI	1 way
	EDP	1 way
Camera	CIF	1 way
	MIPI-CSI	1 way
	DVP	1 way
Ethernet	RGMII	1 way
Audio	I2S	1 way
PCI Express	PCIe	1 way
Storage	SD/MMC card	1 way
USB	USB OTG	1 way
	USB HOST	2 way
SPI	SPI	2 way
UART	UART	4 way
ADC	ADC	2 way
I2C	I2C	5 way
Debug	JTAG	1 way

Supply Power: 5V input

Core board size:



**Pin definition:**

No.	Pin name	voltage	No.	Pin name	voltage
P1	GND	0V	S1	GND	0V
P2	GND	0V	S2	RGMII_INT	1.8V
P3	GND	0V	S3	NFC_WAKE	1.8V
P4	RGMII_RXD2	3.3V	S4	NFC_REG_ON	3.3V
P5	RGMII_TXD1	3.3V	S5	SPI0_CS <sub>n</sub> 0	3.3V
P6	RGMII_RXD3	3.3V	S6	SPI0_CLK	3.3V
P7	RGMII_RXDV	3.3V	S7	NFC_HOST_WAKE	3.3V
P8	RGMII_TXD0	3.3V	S8	SDMMC_D3	3.3V
P9	RGMII_TXEN	3.3V	S9	SDMMC_CMD	3.3V
P10	RGMII_RXER	3.3V	S10	SDMMC_D2	3.3V
P11	GND	0V	S11	SDMMC_DET	3.3V
P12	RGMII_CLK	3.3V	S12	SDMMC_D1	3.3V
P13	GND	0V	S13	SDMMC_CLK	3.3V
P14	RGMII_RXD0	3.3V	S14	SDMMC_D0	3.3V
P15	RGMII_RXD1	3.3V	S15	SDMMC_WP	3.3V
P16	RGMII_TXD2	3.3V	S16	FLASH0_ALE	1.8V
P17	RGMII_TXD3	3.3V	S17	FLASH0_CLE	1.8V
P18	RGMII_TXCLK	3.3V	S18	FLASH0_RDY	1.8V

P19	RGMII_RXCLK	3.3V	S19	FLASH0_CS0	1.8V
P20	RGMII_MDC	3.3V	S20	MIPI_RST	1.8V
P21	RGMII_MDIO	3.3V	S21	UART1_CTS	3.3V
P22	RGMII_RST	3.3V	S22	UART1_RX	3.3V
P23	RGMII_CRS	3.3V	S23	UART1_TX	3.3V
P24	GND	0V	S24	UART1_RTS	3.3V
P25	SDIO0_D3	2.2V	S25	GPIO5_C2	3.3V
P26	SDIO0_CMD	2.2V	S26	SPI0_TXD	3.3V
P27	SDIO0_D0	2.2V	S27	SPI0_RXD	3.3V
P28	SDIO0_D2	2.2V	S28	SPI0_CS <sub>n1</sub>	3.3V
P29	SDIO0_D1	2.2V	S29	WIFI_REG_ON	2.2V
P30	SDIO0_CLK	2.2V	S30	BT_HOST_WAKE	2.2V
P31	GND	0V	S31	GPIO4_D3	2.2V
P32	GND	0V	S32	WIFI_HOST_WAKE	2.2V
P33	GND	0V	S33	BT_RST	2.2V
P34	GND	0V	S34	BT_WAKE	2.2V
P35	GND	0V	S35	GND	0V
P36	GND	0V	S36	GND	0V
P37	UART0_CTS	2.2V	S37	I2S0_CLK	3.3V

P38	UART0_RTS	2.2V	S38	GND	0V
P39	UART0_TXD	2.2V	S39	I2S0_SCLK	3.3V
P40	UART0_RXD	2.2V	S40	I2S0_SDI	3.3V
P41	I2C2_SCL	3.3V	S41	I2S0_LRCK_TX	3.3V
P42	I2C2_SDA	3.3V	S42	I2S0_LRCK_RX	3.3V
P43	SPDIF_TX	3.3V	S43	I2S0_SDO0	3.3V
P44	GND	0V	S44	I2S0_SDO3	3.3V
P45	EDP_TX0P	1.8V	S45	I2S0_SDO2	3.3V
P46	EDP_TX0N	1.8V	S46	I2S0_SDO1	3.3V
P47	GND	0V	S47	HDMI_HPD	1.8V
P48	EDP_TX1P	1.8V	S48	GND	0V
P49	EDP_TX1N	1.8V	S49	HDMI_TXCP	1.8V
P50	GND	0V	S50	HDMI_TXCN	1.8V
P51	EDP_TX2P	1.8V	S51	GND	0V
P52	EDP_TX2N	1.8V	S52	HDMI_TX0P	1.8V
P53	GND	0V	S53	HDMI_TX0N	1.8V
P54	EDP_TX3P	1.8V	S54	GND	0V
P55	EDP_TX3N	1.8V	S55	HDMI_TX1N	1.8V
P56	GND	0V	S56	HDMI_TX1P	1.8V

P57	EDPAUXP	1.8V	S57	GND	0V
P58	EDPAUXN	1.8V	S58	HDMI_TX2N	1.8V
P59	GND	0V	S59	HDMI_TX2P	1.8V
P60	MIPI_RX_D0N	1.8V	S60	GND	0V
P61	MIPI_RX_D0P	1.8V	S61	MIPI_TX/RX_D0P	1.8V
P62	GND	0V	S62	MIPI_TX/RX_D0N	1.8V
P63	MIPI_RX_D1N	1.8V	S63	GND	0V
P64	MIPI_RX_D1P	1.8V	S64	MIPI_TX/RX_D1P	1.8V
P65	GND	0V	S65	MIPI_TX/RX_D1N	1.8V
P66	MIPI_RX_CLKN	1.8V	S66	GND	0V
P67	MIPI_RX_CLKP	1.8V	S67	MIPI_TX/RX_CLKP	1.8V
P68	GND	0V	S68	MIPI_TX/RX_CLKN	1.8V
P69	MIPI_RX_D2N	1.8V	S69	GND	0V
P70	MIPI_RX_D2P	1.8V	S70	MIPI_TX/RX_D2P	1.8V
P71	GND	0V	S71	MIPI_TX/RX_D2N	1.8V
P72	MIPI_RX_D3N	1.8V	S72	GND	0V
P73	MIPI_RX_D3P	1.8V	S73	MIPI_TX/RX_D3P	1.8V
P74	GND	0V	S74	MIPI_TX/RX_D3N	1.8V
P75	GND	0V	S75	GND	0V

P76	LVDS_D4P	3.3V	S76	GND	0V
P77	LVDS_D4N	3.3V	S77	GND	0V
P78	LVDS_D3P	3.3V	S78	MIPI_TX_D1P	1.8V
P79	LVDS_D3N	3.3V	S79	MIPI_TX_D1N	1.8V
P80	LVDS_D2P	3.3V	S80	GND	0V
P81	LVDS_D2N	3.3V	S81	MIPI_TX_D0P	1.8V
P82	LVDS_CLK0P	3.3V	S82	MIPI_TX_D0N	1.8V
P83	LVDS_CLK0N	3.3V	S83	GND	0V
P84	LVDS_D1P	3.3V	S84	MIPI_TX_CLKP	1.8V
P85	LVDS_D1N	3.3V	S85	MIPI_TX_CLKN	1.8V
P86	LVDS_D0P	3.3V	S86	GND	0V
P87	LVDS_D0N	3.3V	S87	MIPI_TX_D2P	1.8V
P88	LVDS_D8P	3.3V	S88	MIPI_TX_D2N	1.8V
P89	LVDS_D8N	3.3V	S89	GND	0V
P90	LVDS_D9N	3.3V	S90	MIPI_TX_D3P	1.8V
P91	LVDS_D9P	3.3V	S91	MIPI_TX_D3N	1.8V
P92	LVDS_D7N	3.3V	S92	GND	0V
P93	LVDS_D7P	3.3V	S93	CIF_D5	1.8V
P94	LVDS_CLK1N	3.3V	S94	CIF_D1	1.8V



P95	LVDS_CLK1P	3.3V	S95	CIF_D2	1.8V
P96	LVDS_D6P	3.3V	S96	CIF_D3	1.8V
P97	LVDS_D6N	3.3V	S97	CIF_D0	1.8V
P98	LVDS_D5P	3.3V	S98	CIF_CLKI	1.8V
P99	LVDS_D5N	3.3V	S99	CIF_D7	1.8V
P100	LCDC0_VSYNC	3.3V	S100	CIF_D4	1.8V
P101	GND	0V	S101	CIF_D6	1.8V
P102	LCDC0_DCLK	3.3V	S102	CIF_PDN1	1.8V
P103	GND	0V	S103	CIF_CLKO	1.8V
P104	LCDC0_HSYNC	3.3V	S104	CIF_VSYNC	1.8V
P105	LCDC0_DEN	3.3V	S105	CIF_PDN0	1.8V
P106	I2C3_SCL	1.8V	S106	CIF_HREF	1.8V
P107	I2C3_SDA	1.8V	S107	GND	0V
P108	GPIO2_B6	1.8V	S108	UART3_TX	3.3V
P109	GPIO2_B5	1.8V	S109	5V_DRV	3.3V
P110	GND	0V	S110	GYR_INT	3.3V
P111	ADC_IN0	1.8V	S111	EDP_BL	3.3V
P112	ADC_IN2	1.8V	S112	UART3_CTS	3.3V
P113	RECOVER	1.8V	S113	FLASH_TRIGOUT	3.3V

P114	GND	0V	S114	LCDC_BL	3.3V
P115	EFUSE_PWR	3.3V	S115	TOUCH_RST	3.3V
P116	PMUGPIO0_B5	3.3V	S116	LCD_EN	3.3V
P117	OTG_VBUS_DRV	3.3V	S117	LCD_RST	3.3V
P118	PHONE_CTL	3.3V	S118	TOUCH_INT	3.3V
P119	UART2_RXD	3.3V	S119	I2C1_SCL	3.3V
P120	UART2_TXD	3.3V	S120	I2C1_SDA	3.3V
P121	HDMI_CEC	3.3V	S121	GSEN_INT	3.3V
P122	SPK_CTL	3.3V	S122	SPI2_MISO	3.3V
P123	FLASH_EN	3.3V	S123	SPI2_CLK	3.3V
P124	UART3_RTS	3.3V	S124	SPI2_nCS0	3.3V
P125	EDP_HPD	3.3V	S125	SPI2_MOSI	3.3V
P126	UART3_RX	3.3V	S126	JTAG_TCK	3.3V
P127	BL_EN	3.3V	S127	JTAG_TDO	3.3V
P128	LED4	3.3V	S128	JTAG_TDI	3.3V
P129	LED3	3.3V	S129	JTAG_TMS	3.3V
P130	LED2	3.3V	S130	nJTAG_TRST	3.3V
P131	LED1	3.3V	S131	USB2UART_nRST	3.3V
P132	KEY_VOL_N	3.3V	S132	OTG_ID	3.3V

P133	KEY_VOL_P	3.3V	S133	OTG_DET	3.3V
P134	I2C5_SDA	3.3V	S134	GND	0V
P135	I2C5_SCL	3.3V	S135	HOST1_DP	5V
P136	I2C4_SDA	3.3V	S136	HOST1_DM	5V
P137	I2C4_SCL	3.3V	S137	GND	0V
P138	PWR_KEY	5V	S138	HOST2_DP	5V
P139	RESET_KEY	5V	S139	HOST2_DM	5V
P140	PMIC_PWRON	5V	S140	GND	0V
P141	OTP_RESET	3.3V	S141	OTG_DP	5V
P142	HSIC_STROBE	1.0V	S142	OTG_DM	5V
P143	HSIC_DATA	1.0V	S143		
P144	RTC_CLKOUT2	32.768KHz	S144	VCC_EFUSE	3.0V
P145	GND	0V	S145	VCCA_33	3.3V
P146	GND	0V	S146	VCC18_DVP	1.8V
P147	GND	0V	S147	VCC28_DVP	2.8V
P148	GND	0V	S148	RTC_PWRIN	3.4V
P149	GND	0V	S149	VCC_18	1.8V
P150	GND	0V	S150	VCC_IO	3.3V
P151	GND	0V	S151	VCC_IO	3.3V

P152	GND	0V	S152	5VIN	5V
P153	GND	0V	S153	5VIN	5V
P154	GND	0V	S154	5VIN	5V
P155	GND	0V	S155	5VIN	5V
P156	GND	0V	S156	5VIN	5V
			S157	5VIN	5V
			S158	5VIN	5V

Hot Tags: rk3288 som, manufacturers, suppliers, factory, wholesale, customized, Imx6 Som, I.mx28, Imx6 Core Board, Arm Cortex A9, Imx6 Solo, Core Module