深圳大经技术有限公司
Shenzhen Dajtech Co.,Ltd

CES-5260-CORE

Product Manual

ARM SOC Module

Rev. V1.0

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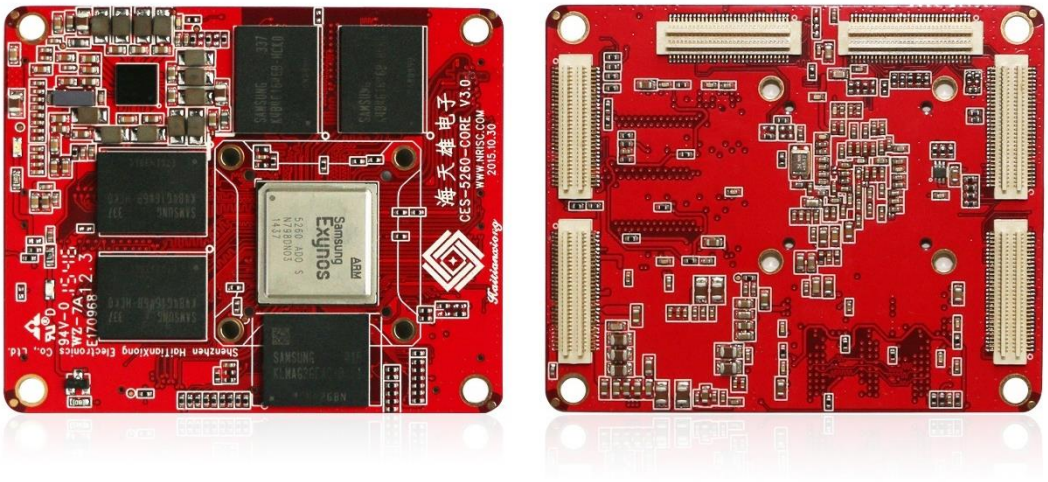

Introduction

CES-5260-CORE is a high performance, low power consumption embedded ARM motherboard. Based on Samsung high-end mainstream processor: six-core architecture, dual core Cortex-A15+ quad core Cortex- A7, frequency up to 1.7GHz. Using 28nm HKMG process, configured with Mali - T628 MP3 GPU. Exynos5260 support 32k/32 L1 cache, 1MB L2 cache, Enhanced VFP (floating point architecture), Neon coprocessor, DMIPS / MHz increased about 40% compared with the previous generation Cortex-A9 1.5GHz processor.

CES-5260-CORE provides rich I/O Interfaces, such as HDMI 1.4, eDP, LCD (MIPI). Provide 1*USB 3.0 HOST, 4* USB HOST 2.0, 4* UART Serial, multiple storage interface, 2*MIPI-CSI camera interface and extendable GPIO and other Interfaces.

CES-5260-CORE suitable for different product applications, including medical equipment, automotive electronic, POS machine, touch control machine, industrial control equipment, self-service refueling equipment, handheld PDA and other industry products.

Features

- Samsung Cortex-A15 Exynos5260 Six-Core 1.7GHz processor
- Onboard 2GB DDR3, 16GB eMMC，12.8GB/s memory bandwidth
- Support 1080p 60fps full HD video decoding and encoding hardware, 3D graphics hardware
- Support OpenGL ES1.1/2.0/3.0, openVG1.0.1 hardware accelerators
- Support eMMC5.0, USB3.0, SDIO3.0 high-speed interfaces
- Support WQXGA eDP, WUXGA MIPI，HDMI display
- Support Android4.4.2, Embedded Linux3.4.39

Specification

Processor	
CPU	Samsung ARM Cortex™-A15 Exynos5260 Six-Core, 1.7GHz processor
Cache	32KB（Instruction）/32KB（Data）Cache and 1MB L2 Cache
Storage	
Process	2-ports 32-bit DDR3/LPDDR3 800MHz
Memory	2GB DDR3
FLASH	16GB eMMC, optional 4GB、8GB、16GB、32GB eMMC
Power Management Unit	
Chipset	Samsung S2MPA01
B2B Connector	
Connector Type	6* Precision hirose 0.5mm, double row 2 * 30 Pin connector
PIN Number	360PIN
PIN Function	GPIO、ADC、MIPI DSI/CSI、HDMI、eDP、I2C、Audio I2S/PCM/SPDIF、UART、SPI、JTAG、USB HOST/OTG、HSIC、PWM、RESET、XEINT、MMC
B2B Fixing Hole	
Fixing hole	4
Operating System	
Operating System	Optional Android 4.4.2、Embedded Linux 3.4.39
Environment	
Working Environment	Temperature：-10~60℃，Humidity：5%~95%RH@31℃ no condensation
Storage Environment	Temperature：-40~85℃，Humidity：5%~95%RH@39℃ no condensation
Size	
Size(mm)	51*62mm

Pin Definition

J1				
PIN NO.	Signal Name	CPU Ball Number	CPU Ball Name	Remark
1	HD_TX2+	B24	XHDMITX2P	HDMI
2	HD_TX1+	B25	XHDMITX1P	HDMI
3	HD_TX2-	A24	XHDMITX2N	HDMI
4	HD_TX1-	A25	XHDMITX1N	HDMI
5	HD_TX0+	B26	XHDMITX0P	HDMI
6	HD_TXC+	B27	XHDMITXCP	HDMI
7	HD_TX0-	A26	XHDMITX0N	HDMI
8	HD_TXC-	A27	XHDMITXCN	HDMI
9	GND			Power Ground
10	GND			Power Ground
11	DP_TX3P	C28	XDPTX3P	eDP
12	DP_TX2P	D28	XDPTX2P	eDP
13	DP_TX3N	C29	XDPTX3N	eDP
14	DP_TX2N	D29	XDPTX2N	eDP
15	DP_TX1P	E28	XDPTX1P	eDP
16	DP_TX0P	F28	XDPTX0P	eDP
17	DP_TX1N	E29	XDPTX1N	eDP
18	DP_TX0N	F29	XDPTX0N	eDP
19	DP_AUXP	G28	XDPAUXP	eDP
20	GND			Power Ground
21	DP_AUXN	G29	XDPAUXN	eDP
22	XMIPI0MDN0	J28	XMIPI0MDN0	MIPI DSI
23	GND			Power Ground
24	XMIPI0MDP0	J29	XMIPI0MDP0	MIPI DSI
25	XMIPI0MDN1	K28	XMIPI0MDN1	MIPI DSI
26	XMIPI0MDNCLK	L28	XMIPI0MDNCLK	MIPI DSI
27	XMIPI0MDP1	K29	XMIPI0MDP1	MIPI DSI
28	XMIPI0MDPCLK	L29	XMIPI0MDPCLK	MIPI DSI
29	XMIPI0MDN2	M28	XMIPI0MDN2	MIPI DSI
30	XMIPI0MDN3	N28	XMIPI0MDN3	MIPI DSI
31	XMIPI0MDP2	M29	XMIPI0MDP2	MIPI DSI
32	XMIPI0MDP3	N29	XMIPI0MDP3	MIPI DSI
33	GND			Power Ground
34	GND			Power Ground
35	XMIPI0SDN0	R28	XMIPI0SDN0	MIPI CSI

36	XMIPI0SDN1	T28	XMIPI0SDN1	MIPI CSI
37	XMIPI0SDP0	R29	XMIPI0SDP0	MIPI CSI
38	XMIPI0SDP1	T29	XMIPI0SDP1	MIPI CSI
39	XMIPI0SDNCLK	U28	XMIPI0SDNCLK	MIPI CSI
40	XMIPI0SDN2	V28	XMIPI0SDN2	MIPI CSI
41	XMIPI0SDPCLK	U29	XMIPI0SDPCLK	MIPI CSI
42	XMIPI0SDP2	V29	XMIPI0SDP2	MIPI CSI
43	XMIPI0SDN3	W28	XMIPI0SDN3	MIPI CSI
44	GND			Power Ground
45	XMIPI0SDP3	W29	XMIPI0SDP3	MIPI CSI
46	CAM0_AF_EN/GPE1_0	R24	XISPGP8/NCTS_UART_ISP/SROM_DATA11/ DISP_VD15/GPE1_0	GPIO/CAMERA
47	GND			Power Ground
48	CAM1_PD/GPE0_6	Y25	XISPGP6/NRTS_UART_ISP/SROM_DATA9/D ISP_VD13/GPE0_6	GPIO/CAMERA
49	CAM0_FLASH/GPE0_7	T24	XISPGP7/TXD_UART_ISP/SROM_DATA10/D ISP_VD14/GPE0_7	GPIO/CAMERA
50	LVDS_PD/GPK0_0	R26	XV_FRM/GPK0_0	GPIO/LCD
51	CAM1_AF_EN/GPE1_1	AA26	XISPGP9/RXD_UART_ISP/SROM_DATA12/D ISP_VD16/GPE1_1	GPIO/CAMERA
52	LCD33_EN/GPK0_1	T26	XV_TES/GPK0_1	GPIO/LCD
53	GND			Power Ground
54	GND			Power Ground
55	CAM1_RST/GPE0_4	R25	XISPGP4/MPWM5_OUT_ISP/DP1_CH2_TXD _CLK_DIV08/SROM_DATA7/DISP_VD11/GP E0_4	GPIO/CAMERA
56	GPF1_2	V24	XISPSPI0MISO/CAM_GPIO16/DISP_VCLK/ GPF1_2	GPIO
57	GPF1_1	T25	XISPSPI0CSN/CAM_GPIO15/TRACECTL/DI SP_HSYNC/GPF1_1	GPIO
58	GPF1_0	AD27	XISPSPI0CLK/CAM_GPIO14/DISP_VSYNC/ GPF1_0	GPIO
59	GPF1_3	AB26	XISPSPI0MOSI/CAM_GPIO17/DISP_VDEN/ GPF1_3	GPIO
60	GPF1_6	AA25	XISPSPI1MISO/DISP_VD5/GPF1_6	GPIO

J2				
PIN NO.	Signal Name	CPU Ball Number	CPU Ball Name	Remark
1	GPF1_5	U24	XISPSPI1CSN/TRACECLK/DISP_VD4/GPF1_5	GPIO
2	GPF1_4	AC25	XISPSPI1CLK/DISP_VD3/GPF1_4	GPIO
3	GPF1_7	AB25	XISPSPI1MOSI/DISP_VD6/GPF1_7	GPIO
4	XISPI2C1SDA	U26	XISPI2C1SDA/CAM_GPIO12/DISP_VD22/GPF0_2	I2C
5	CAM_SDA/XISPI2C0SDA	U25	XISPI2C0SDA/CAM_GPIO10/DISP_VD20/GPF0_0	I2C
6	XISPI2C1SCL	W26	XISPI2C1SCL/CAM_GPIO13/DISP_VD23/GPF0_3	I2C
7	CAM_SCL/XISPI2C0SCL	V25	XISPI2C0SCL/CAM_GPIO11/DISP_VD21/GPF0_1	I2C
8	CAM0_RST/GPE0_1	W25	XISPGP1/MPWM2_OUT_ISP/SROM_DATA4/DISP_VD8/GPE0_1	GPIO/CAMERA
9	CAM1_IND/GPE0_0	V26	XISPGP0/MPWM1_OUT_ISP/SROM_DATA3/DISP_VD7/GPE0_0	GPIO/CAMERA
10	CAM0_PD/GPE0_2	Y24	XISPGP2/MPWM3_OUT_ISP/DP1_CH0_TXD_CLK_DIV08/SROM_DATA5/DISP_VD9/GPE0_2	GPIO/CAMERA
11	CAM1_INT/GPE0_3	Y27	XISPGP3/MPWM4_OUT_ISP/DP1_CH1_TXD_CLK_DIV08/SROM_DATA6/DISP_VD10/GPE0_3	INT/CAMERA
12	CAM1_FLASH/GPE0_5	Y26	XISPGP5/MPWM6_OUT_ISP/DP1_CH3_TXD_CLK_DIV08/SROM_DATA8/DISP_VD12/GPE0_5	GPIO/CAMERA
13	GND			Power Ground
14	GND			Power Ground
15	GND			Power Ground
16	XMIPI1SDN0	AA28	XMIPI1SDN0	MIPI CSI
17	XMIPI1SDNCLK	AB28	XMIPI1SDNCLK	MIPI CSI
18	XMIPI1SDP0	AA29	XMIPI1SDP0	MIPI CSI
19	XMIPI1SDPCLK	AB29	XMIPI1SDPCLK	MIPI CSI
20	XMIPI1SDN1	AC28	XMIPI1SDN1	MIPI CSI
21	GND			Power Ground
22	XMIPI1SDP1	AC29	XMIPI1SDP1	MIPI CSI
23	XURXD2	AD25	XURXD2/GPA1_4	UART
24	GND			Power Ground
25	XUTXD2	AD26	XUTXD2/GPA1_5	UART
26	XURXD1	AG27	XURXD1/GPA1_0	UART
27	XURXD0	AH28	XURXD0/GPA0_0	

28	XUTXD1	AG28	XUTXD1/GPA1_1	
29	XUTXD0	AF25	XUTXD0/GPA0_1	
30	XUCTSN1	AE25	XUCTSN1/GPA1_2	
31	XUCTSN0	AG26	XUCTSN0/GPA0_2	
32	XURTSN1	AE24	XURTSN1/GPA1_3	
33	XURTSN0	AH27	XURTSN0/GPA0_3	
34	GND			Power Ground
35	GND			Power Ground
36	GPA2_5	AE27	XSPICSN1/GPA2_5	GPIO/SPI
37	GPA2_4	AE29	XSPICLK1/GPA2_4	GPIO/SPI
38	GPA2_6	AE28	XSPIMISO1/GPA2_6	GPIO/SPI
39	GPA2_3	AF26	XSPIMOSI0/GPA2_3	GPIO/SPI
40	TOUCH_RESET/GPA2_2	AF27	XSPIMISO0/GPA2_2	GPIO/TOUCH/SPI
41	GPA2_1	AF28	XSPICSN0/GPA2_1	GPIO/SPI
42	GND			Power Ground
43	GND			Power Ground
44	CAM0_CLKOUT/XCI0_MCLK	AH29	XCI0_MCLK/SROM_DATA13/DISP_VD17/GPE1_2	CAMERA
45	CAM1_CLKOUT/XCI1_MCLK	AJ28	XCI1_MCLK/SROM_DATA14/DISP_VD18/GPE1_3	CAMERA
46	XCI2_MCLK	AK27	XCI2_MCLK/SROM_DATA15/DISP_VD19/GPE1_4	XCI2_MCLK
47	GND			Power Ground
48	GND			Power Ground
49	GPB0_1	AJ27	XI2SCDCLK/PCM_EXTCLK/SPDIF_EXTCLK/GPB0_1	I2S/PCM/SPDIF/GPIO
50	GPB0_2	AH26	XI2SLRCK/PCM_FSYNC/SPDIF_OUT/GPB0_2	I2S/PCM/SPDIF/GPIO
51	GPB0_4	AJ26	XI2SSDO/PCM_SOUT/GPB0_4	I2S/PCM/GPIO
52	GPB0_0	AK25	XI2SSCLK/PCM_SCLK/GPB0_0	I2S/PCM/GPIO
53	GPB0_3	AG25	XI2SSDI/PCM_SIN/GPB0_3	I2S/PCM/GPIO
54	GND			Power Ground
55	GND			Power Ground
56	XSPICLK2/GPB1_0	AJ25	XSPICLK2/GPB1_0	SPI/GPIO
57	XSPIMOSI2/GPB1_3	AH25	XSPIMOSI2/GPB1_3	SPI/GPIO
58	XSPIMISO2/GPB1_2	AF24	XSPIMISO2/GPB1_2	SPI/GPIO
59	XSPICSN2/GPB1_1	AG24	XSPICSN2/GPB1_1	SPI/GPIO
60	LCD_PWM/XPWMTOUT0	AH24	XPWMTOUT0/GPB2_0	PWM/LCD

J3				
PIN NO.	Signal Name	CPU Ball Number	CPU Ball Name	Remark
1	XPWMTOUT1/GPB2_1	AK24	XPWMTOUT1/GPB2_1	PWM
2	AP_USB3_BUSCTRL	AE23	XUSB3VBUSCTRL/ETC7_3	USB3.0
3	GND			Power Ground
4	AP_USB3_OVRCUR	AF23	XUSB3OVERCUR/ETC7_2	USB3.0
5	XUHOSTOVERCUR	AJ23	XUHOSTOVERCUR/ETC7_1	USB
6	GND			Power Ground
7	XUHOSTPWREN	AK23	XUHOSTPWREN/ETC7_0	USB
8	SENSOR_SDA3_1_8V	AE22	XI2C3SDA/NB_DATA6/GPB3_6	I2C
9	GND			Power Ground
10	SENSOR_SCL3_1_8V	AF22	XI2C3SCL/NB_DATA7/GPB3_7	I2C
11	HDMI_SDA2_1_8V	AG21	XI2C2SDA/NB_DATA4/GPB3_4	I2C
12	XI2C4_SDA_1_8V	AK22	XI2C4SDA/NB_DATA8/GPB4_0	I2C
13	HDMI_SCL2_1_8V	AH22	XI2C2SCL/NB_DATA5/GPB3_5	I2C
14	XI2C4_SCL_1_8V	AJ22	XI2C4SCL/NB_DATA9/GPB4_1	I2C
15	XI2C6_SDA_1_8V	AF21	XI2C6SDA/NB_DATA12/GPB4_4	I2C
16	XI2C5_SDA_1_8V	AG20	XI2C5SDA/NB_DATA10/GPB4_2	I2C
17	XI2C6_SCL_1_8V	AE21	XI2C6SCL/NB_DATA13/GPB4_5	I2C
18	XI2C5_SCL_1_8V	AH21	XI2C5SCL/NB_DATA11/GPB4_3	I2C
19	XI2C7_SDA_1_8V	AJ21	XI2C7SDA/MIPI_BYTE_CLK/NB_DATA14/GPB4_6	I2C
20	TOUCH_SDA8_1_8V	AF20	XI2C8SDA/TRACEDATA24/SROM_ADDR8/NB_nWAIT/GPB5_0	I2C
21	XI2C7_SCL_1_8V	AK21	XI2C7SCL/MIPI_ESC_CLK/NB_DATA15/GPB4_7	I2C
22	TOUCH_SCL8_1_8V	AE20	XI2C8SCL/TRACEDATA25/SROM_ADDR9/NB_ADDR1/GPB5_1	I2C
23	CODEC_SDA1_1_8V	AG19	XI2C1SDA/NB_DATA2/GPB3_2	I2C
24	XI2C9_SDA_1_8V	AJ20	XI2C9SDA/TRACEDATA26/SROM_ADDR10/NB_ADDR2/GPB5_2	I2C
25	CODEC_SCL1_1_8V	AH20	XI2C1SCL/NB_DATA3/GPB3_3	I2C
26	XI2C9_SCL_1_8V	AK20	XI2C9SCL/TRACEDATA27/SROM_ADDR11/NB_ADDR3/GPB5_3	I2C
27	XI2C10_SDA_1_8V	AE19	XI2C10SDA/TRACEDATA28/SROM_ADDR12/NB_ADDR4/GPB5_4	I2C
28	XI2C11_SDA_1_8V	AH19	XI2C11SDA/TRACEDATA30/SROM_ADDR14/NB_ADDR6/GPB5_6	I2C
29	XI2C10_SCL_1_8V	AF19	XI2C10SCL/TRACEDATA29/SROM_ADDR13/NB_ADDR5/GPB5_5	I2C
30	XI2C11_SCL_1_8V	AJ19	XI2C11SCL/TRACEDATA31/SROM_ADDR15	I2C

			/NB_ADDR7/GPB5_7	
31	GND			Power Ground
32	GND			Power Ground
33	BT_RST/GPD0_1	AK19	XGP1/SROM_ADDR1/NB_ADDR9/GPD0_1	GPIO/BT
34	WIFI_PWDN/GPD0_0	AE18	XGP0/SROM_ADDR0/NB_ADDR8/GPD0_0	GPIO/WIFI
35	GND			Power Ground
36	GPD0_2	AK18	XGP2/SROM_ADDR2/NB_ADDR10/GPD0_2	GPIO
37	GPD0_5	AH18	XGP5/SROM_ADDR5/NB_ADDR13/GPD0_5	GPIO
38	GPD0_4	AG18	XGP4/SROM_ADDR4/NB_ADDR12/GPD0_4	GPIO
39	GPD0_6	AJ18	XGP6/SROM_ADDR6/NB_ADDR14/GPD0_6	GPIO
40	GPD0_7	AE17	XGP7/SROM_ADDR7/NB_ADDR15/GPD0_7	GPIO
41	GPD0_3	AF18	XGP3/SROM_ADDR3/NB_ADDR11/GPD0_3	GPIO
42	GPD1_1	AH17	XGP9/SROM_NWE/NB_GNCS1/GPD1_1	GPIO
43	AXI_ACE_SEL	AE16	XGP11/SROM_GNCS0/NB_GNCS3/GPD1_3	AXI_ACE_SEL
44	GPD1_4	AJ17	XGP12/SROM_GNCS1/NB_nOE/GPD1_4	GPIO
45	GPD1_5	AK17	XGP13/SROM_GNCS2/NB_nWE/GPD1_5	GPIO
46	GPD2_4	AG16	XTS_ERROR/SROM_DATA2/DISP_VD2/GPD2_4	GPIO
47	GPD2_2	AJ16	XTS_VAL/SROM_DATA0/DISP_VD0/GPD2_2	GPIO
48	GPD2_1	AK16	XTS_SYNC/SROM_NWBE1/NB_nWBE1/GPD2_1	GPIO
49	GPD2_3	AE14	XTS_DATA/SROM_DATA1/DISP_VD1/GPD2_3	GPIO
50	GPD2_0	AK15	XTS_CLK/SROM_NWBE0/NB_nWBE0/GPD2_0	GPIO
51	XJTCK	AH16	XJTCK/ETC0_2	JTAG
52	XJTMS	AF15	XJTMS/ETC0_1	JTAG
53	XJTDO	AG15	XJTDO/ETC0_4	JTAG
54	XJTDI	AH15	XJTDI/ETC0_3	JTAG
55	XJTRSTN	AJ15	XJTRSTN/ETC0_0	JTAG
56	GND			Power Ground
57	GND			Power Ground
58	XADCAIN_9	AC12	XADCAIN_9	ADC
59	XADCAIN_8	AH14	XADCAIN_8	ADC
60	XADCAIN_7	AG14	XADCAIN_7	ADC

J4				
PIN NO.	Signal Name	CPU Ball Number	CPU Ball Name	Remark
1	XADCAIN_6	AF14	XADCAIN_6	ADC
2	XADCAIN_5	AG13	XADCAIN_5	ADC
3	XADCAIN_4	AJ14	XADCAIN_4	ADC
4	XADCAIN_3	AF13	XADCAIN_3	ADC
5	XADCAIN_2	AE13	XADCAIN_2	ADC
6	KEY_ADC/XADCAIN_1	AH13	XADCAIN_1	ADC
7	XADCAIN_0	AJ13	XADCAIN_0	ADC
8	GND			Power Ground
9	GND			Power Ground
10	XMMC1CLK	AK11	XMMC1CLK/GPC1_0	SD/MMC
11	XMMC1CMD	AF10	XMMC1CMD/GPC1_1	SD/MMC
12	XMMC1DATA0	AC10	XMMC1DATA0/GPC1_2	SD/MMC
13	XMMC1DATA1	AH10	XMMC1DATA1/GPC1_3	SD/MMC
14	XMMC1DATA2	AJ10	XMMC1DATA2/GPC1_4	SD/MMC
15	XMMC1DATA3	AG10	XMMC1DATA3/GPC1_5	SD/MMC
16	XMMC1DATA4	AE10	XMMC1DATA4/GPC4_0	SD/MMC
17	XMMC1DATA5	AH9	XMMC1DATA5/GPC4_1	SD/MMC
18	XMMC1DATA6	AG9	XMMC1DATA6/GPC4_2	SD/MMC
19	XMMC1DATA7	AF9	XMMC1DATA7/GPC4_3	SD/MMC
20	GND			Power Ground
21	GND			Power Ground
22	XMMC2CLK	AK9	XMMC2CLK/GPC2_0	SD/MMC
23	XMMC2CMD	AG8	XMMC2CMD/GPC2_1	SD/MMC
24	XMMC2CDN	AE9	XMMC2CDN/GPC2_2	SD/MMC
25	XMMC2DATA0	AH8	XMMC2DATA0/GPC2_3	SD/MMC
26	XMMC2DATA1	AF8	XMMC2DATA1/GPC2_4	SD/MMC
27	XMMC2DATA2	AC9	XMMC2DATA2/GPC2_5	SD/MMC
28	XMMC2DATA3	AJ9	XMMC2DATA3/GPC2_6	SD/MMC
29	GND			Power Ground
30	GND			Power Ground
31	AP_USB3_VBUS	AG7	XUSB30VBUS0	USB3.0
32	XUSB30TX0P	AK4	XUSB30TX0P	USB3.0
33	XUSB30RX0P	AK7	XUSB30RX0P	USB3.0
34	XUSB30TX0M	AK3	XUSB30TX0M	USB3.0
35	XUSB30RX0M	AK6	XUSB30RX0M	USB3.0
36	GND			Power Ground
37	GND			Power Ground

38	AP_USB_DRD_D+	AH4	XUSB30DP0	USB3.0
39	USB3_ID	AJ5	XUSB30ID0	USB3.0
40	AP_USB_DRD_D-	AH3	XUSB30DM0	USB3.0
41	GND			Power Ground
42	GND			Power Ground
43	XUHOSTDM	AH1	XUHOSTDM	USB
44	XUHOSTVBUS	AJ2	XUHOSTVBUS	USB
45	XUHOSTDP	AG1	XUHOSTDP	USB
46	XOM5	AE3	XOM_5	Boot Mode
47	XOM4	AF4	XOM_4	Boot Mode
48	XOM3	AF3	XOM_3	Boot Mode
49	XOM2	AE6	XOM_2	Boot Mode
50	XOM1	AE7	XOM_1	Boot Mode
51	XOM0	AF2	XOM_0	Boot Mode
52	DP_HPD/XEINT7	AG6	XEINT7/DP_HPD/ALV_DBG3/GPX0_7	XEINT/eDP
53	UHOST_ID/XEINT3	AG5	XEINT3/ALV_TDO/MFC_TDO/GPX0_3	XEINT/USB
54	SPK_EN/GPX0_5/XEINT5	AG3	XEINT5/ALV_DBG1/MFC_RTCK/GPX0_5	GPIO/AUDIO
55	XEINT6/GPX0_6	AG2	XEINT6/ALV_DBG2/GPX0_6	XEINT/GPIO
56	PHONE_DET/XEINT1	AF7	XEINT1/ALV_TMS/MFC_TMS/GPX0_1	XEINT/AUDIO
57	XEINT4/GPX0_4	AF6	XEINT4/ALV_DBG0/MFC_TRSTN/GPX0_4	XEINT/GPIO
58	LED1/XEINT0/GPX0_0	AF5	XEINT0/ALV_TCK/MFC_TCK/GPX0_0	GPIO/LED
59	USB3_DET/XEINT8/GPX1_0	AD3	XEINT8/TRACEDATA0/ALV_DBG4/GPX1_0	XEINT/USB3.0
60	USB3_ID1/XEINT9/GPX1_1	AD2	XEINT9/TRACEDATA1/ALV_DBG5/GPX1_1	XEINT/USB3.0

J5

PIN NO.	Signal Name	CPU Ball Number	CPU Ball Name	Remark
1	VCC_1.8V_AP			PMU Power VLDO3 (Output)
2	VCC_1.8V_AP			PMU Power VLDO3 (Output)
3	VCC_1.8V_AP			PMU Power VLDO3 (Output)
4	VCC_1.8V_AP			PMU Power VLDO3 (Output)
5	GND			Power Ground
6	GND			Power Ground
7	VDD_33ON			PMU Power

				VLDO11 (Output)
8	VDD_33ON			PMU Power VLDO11 (Output)
9	VDD_TFLASH_2.8V			PMU Power VLDO13(Output)
10	VDD_TFLASH_2.8V			PMU Power VLDO13(Output)
11	VDD_MAINCAM_D1.8V			PMU Power VLDO14(Output)
12	VDD_MAINCAM_D1.8V			PMU Power VLDO14(Output)
13	VDD_CAMSENSOR_A2.8V			PMU Power VLDO15(Output)
14	VDD_CAMSENSOR_A2.8V			PMU Power VLDO15(Output)
15	VDD_MAINCAMAF_2.8V			PMU Power VLDO16(Output)
16	VDD_MAINCAMAF_2.8V			PMU Power VLDO16(Output)
17	VDD_VTCAM_1.8V			PMU Power VLDO17(Output)
18	VDD_VTCAM_1.8V			PMU Power VLDO17(Output)
19	VCC_1.8V_AP_OFF			PMU Power VLDO18(Output)
20	VCC_1.8V_AP_OFF			PMU Power VLDO18(Output)
21	VCC_3.3V			PMU Power VLDO19(Output)
22	VCC_3.3V			PMU Power VLDO19(Output)
23	VLDO20			PMU Power VLDO20(Output)
24	VLDO20			PMU Power VLDO20(Output)
25	VCC_3.0V_MOTOR			PMU Power VLDO21(Output)
26	VCC_3.0V_MOTOR			PMU Power VLDO21(Output)
27	VLDO22			PMU Power VLDO22(Output)
28	VLDO22			PMUPowerVLDO22(Output)
29	VCC_2.8V_PERI			PMUPowerVLDO24(Output)

30	VCC_2.8V_PERI			PMUPowerVLDO24(Output)
31	VCC_1.8V_PERI			PMUPowerVLDO25(Output)
32	VCC_1.8V_PERI			PMUPowerVLDO25(Output)
33	VDD_MAINCAM_D1.2V			PMUPowerVLDO26(Output)
34	VDD_MAINCAM_D1.2V			PMUPowerVLDO26(Output)
35	GND			Power Ground
36	GND			Power Ground
37	GND			Power Ground
38	GND			Power Ground
39	PVDD_BUCK9			PMUPowerPVDD_BUCK9 (Output)
40	PVDD_BUCK9			PMUPowerPVDD_BUCK9 (Output)
41	GND			Power Ground
42	GND			Power Ground
43	VDDQ_MMC2_2.8V_AP			PMUPowerVLDO2(Output)
44	VDDQ_MMC2_2.8V_AP			PMUPowerVLDO2(Output)
45	GND			Power Ground
46	GND			Power Ground
47	VBAT			DC power supply 2.7-5V (input)
48	VBAT			DC power supply 2.7-5V (input)
49	VBAT			DC power supply 2.7-5V (input)
50	VBAT			DC power supply 2.7-5V (input)
51	VBAT			DC power supply 2.7-5V (input)
52	VBAT			DC power supply 2.7-5V (input)
53	VBAT			DC power supply 2.7-5V (input)
54	VBAT			DC power supply 2.7-5V (input)
55	VBAT			DC power supply 2.7-5V (input)

56	VBAT			DC power supply 2.7-5V (input)
57	VBAT			DC power supply 2.7-5V (input)
58	VBAT			DC power supply 2.7-5V (input)
59	VBAT			DC power supply 2.7-5V (input)
60	VBAT			DC power supply 2.7-5V (input)

J6				
PIN NO.	Signal Name	CPU Ball Number	CPU Ball Name	Remark
1	XEINT10/GPX1_2	AC5	XEINT10/TRACEDATA2/ALV_DBG6/GPX1_2	XEINT/GPIO
2	GSENSOR_INT1/XEINT13	AC4	XEINT13/TRACEDATA5/ALV_DBG9/GPX1_5	
3	BT_WAKE_AP/XEINT15/GPX1_7	AC3	XEINT15/TRACEDATA7/ALV_DBG11/GPX1_7	
4	WIFI_WOW/XEINT12/GPX1_4	AC2	XEINT12/TRACEDATA4/ALV_DBG8/GPX1_4	
5	TOUCH_INT/XEINT14	AB5	XEINT14/TRACEDATA6/ALV_DBG10/GPX1_6	
6	VOL_UP/XEINT16	AB4	XEINT16/TRACEDATA8/ALV_DBG12/GPX2_0	
7	RS485_EN1/GPX2_2/XEINT18	AB3	XEINT18/TRACEDATA10/ALV_DBG14/GPX2_2	
8	RS485_EN2/GPX2_3/XEINT19	AB2	XEINT19/TRACEDATA11/ALV_DBG15/GPX2_3	
9	LED2/XEINT11/GPX1_3	AA5	XEINT11/TRACEDATA3/ALV_DBG7/GPX1_3	
10	GPS_EN/GPX2_6/XEINT22	AA3	XEINT22/TRACEDATA14/ALV_DBG18/GPX2_6	
11	3G_RST/GPX3_2/XEINT26	AA2	XEINT26/TRACEDATA18/ALV_DBG22/GPX3_2	
12	VOL_DOWN/XEINT17	Y5	XEINT17/TRACEDATA9/ALV_DBG13/GPX2_1	
13	XEINT20/GPX2_4	Y4	XEINT20/TRACEDATA12/ALV_DBG16/GPX2_4	
14	XEINT25/GPX3_1	Y3	XEINT25/TRACEDATA17/ALV_DBG21/GPX3_1	

15	BUZZ_EN/GPX3_5/XEINT29	Y2	XEINT29/TRACEDATA21/ALV_DBG25/GPX3_5	
16	XEINT21/GPX2_5	W6	XEINT21/TRACEDATA13/ALV_DBG17/GPX2_5	
17	BT_EN/XEINT28/GPX3_4	W5	XEINT28/TRACEDATA20/ALV_DBG24/GPX3_4	
18	HDMI_CEC/XEINT30	W4	XEINT30/HDMI_CEC/TRACEDATA22/ALV_DBG26/GPX3_6	
19	GSENSOR_INT2/XEINT27	W3	XEINT27/TRACEDATA19/ALV_DBG23/GPX3_3	
20	3G_POWER/GPX3_0/XEINT24	V6	XEINT24/TRACEDATA16/ALV_DBG20/GPX3_0	
21	HDMI_HPD/XEINT31	U7	XEINT31/HDMI_HPD/TRACEDATA23/ALV_DBG27/GPX3_7	
22	GND			Power Ground
23	GND			Power Ground
24	AP_NRESET	AE4	XNRESET/ETC6_0	XNRESET
25	AP_WRESET	AD5	XNWRESET/ETC6_3	XNWRESET
26	AP_PMIC_EN	AE5	XPWRRGTON	XPWRRGTON
27	GND			Power Ground
28	XHSICSTROBE	AD1	XHSICSTROBE	USB HSIC
29	PM_RTC32K_AP	AB1	XRTCXTI	CLOCK
30	XHSICDATA	AC1	XHSICDATA	USB HSIC
31	GND			Power Ground
32	GND			Power Ground
33	CODEC_I2S_LRCK	V5	XAUDI2SLRCK/AUD_PCM_FSYNC/GPZ0_2	AUDIO
34	CODEC_I2S_DI	V4	XAUDI2SSDI/AUD_PCM_SIN/GPZ0_3	AUDIO
35	CODEC_I2S_CDCLK	V2	XAUDI2SCDCLK/AUD_PCM_EXTCLK/GPZ0_1	AUDIO
36	CODEC_I2S_DO0	U2	XAUDI2SSDO0/AUD_PCM_SOUT/GPZ0_4	AUDIO
37	CODEC_I2S_SCLK	U1	XAUDI2SSCLK/AUD_PCM_SCLK/GPZ0_0	AUDIO
38	CODEC_I2S_DO1	V3	XAUDI2SSDO1/ST_TICK/GPZ0_5	AUDIO
39	GND			Power Ground
40	CODEC_I2S_DO2	U6	XAUDI2SSDO2/ST_INT/GPZ0_6	AUDIO
41	APCLK_OUT	V1	XCLKOUT/ETC6_1	CLOCK
42	GND			Power Ground
43	GND			Power Ground
44	XAUD_UART_RXD	U4	XAUDRXD/GPZ1_0	UART
45	GND			Power Ground
46	XAUD_UART_TXD	U3	XAUDTXD/GPZ1_1	UART
47	GND			Power Ground
48	XAUD_UART_RTSN	U5	XAUDRTSN/GPZ1_3	UART

49	KEY_RST			Reset Button
50	XAUD_UART_CTSN	T6	XAUDCTSN/GPZ1_2	UART
51	GND			Power Ground
52	GND			Power Ground
53	PMIC_JIGONB			PMU JIGONB
54	GND			Power Ground
55	GND			Power Ground
56	GND			Power Ground
57	TA_NCONNECTED			PMU ACOKB
58	VDD_RTC			RTC Power
59	CLK_32K_BT			PMU 32.768KHz
60	ON_SW			PMU PWRON

Service Support

Technical Support Mailbox：

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Technical Support Service Hours：

Monday to Friday：9：00～12：00，13：30～18：00

Statement

The information in this manual is for reference only and is subject to change without notice.

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