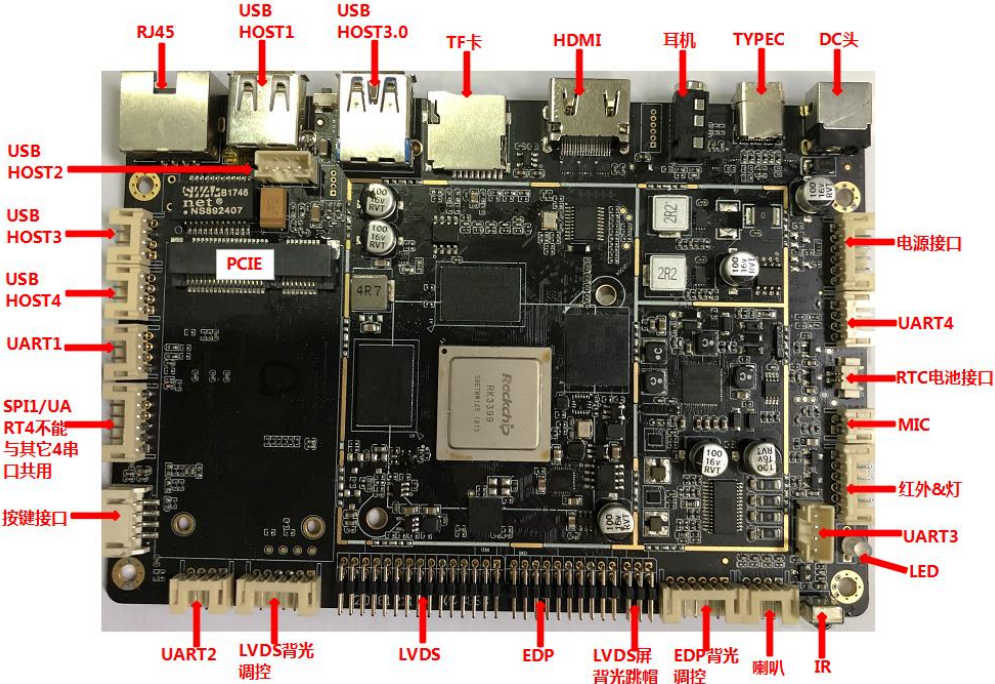


X99-i Specifications

Product Overview



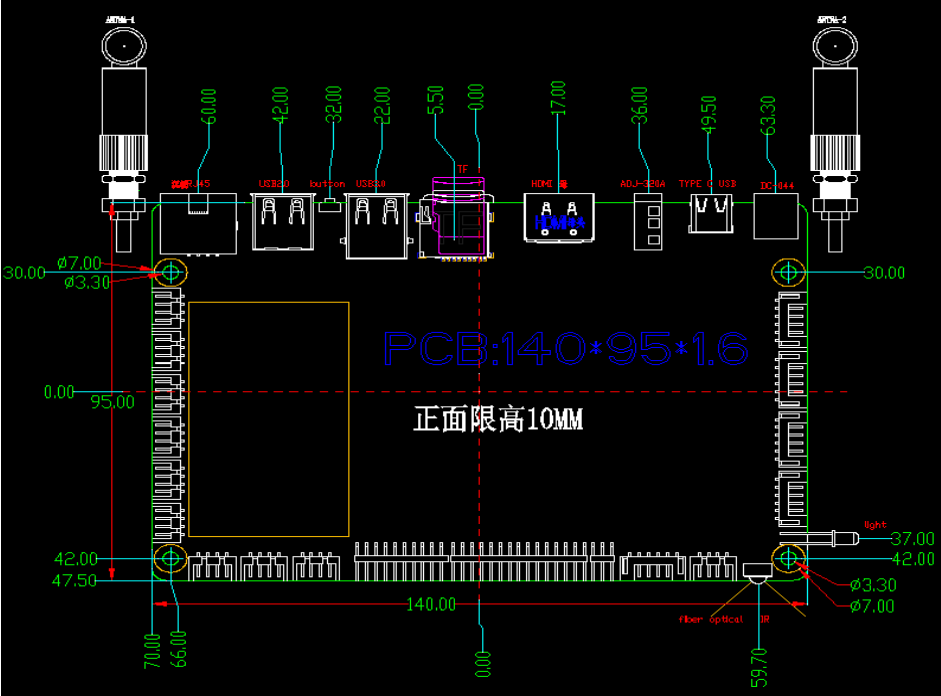
Board specifications:

CPU	Rockchip RK3399 dual core Cortex-A72+ quad core Cortex-A53 CPU
GPU	ARM Mali-T860MP4 GPU
RAM	LPDDR4 4G
Storage	eMMC 32GB/ 64GB (optional)
Display interface	LVDS interface (single, 6-bit dual, 8-bit dual). Supports a maximum resolution of 1920x1080, support 7"-84" display
	EDP screen interface, support resolution 1920x1080
Screen voltage	Support 3.3V/5V/12V optional
Network	With RJ45 interface, support 10/100/1000 Ethernet
	Support 4G PCIE interface
	Wireless module, support Wi-Fi 802.11b/g/n/ac protocol. Support BT4.0
Image rotation	Support 0 degree, 90 degrees, 180 degrees, 270 degrees manual / automatic rotation, support gravity sensing function
Real Time Clock	Built-in real-time clock, powered by battery
Interface device	Support USB camera
	5 USB HOST
	SD card, maximum support 256GB
	Class D amplifier: 5W*2 8 ohms, support microphone
	HDMI 2.0 output
Audio	MP3, WMA, WAV, APE, FLAC, AAC, OGG, M4A, 3GPP format
Video	Supports 2160P@24FPS decoding of H.264, MPEG2, VP6, VP8, MVC and other video formats. Online videos such as YouTube, up to 4K, HTML5 video playback, Flash 10.1 playback
Picture	Support JPG, BMP, PNG, GIF and other image formats to browse and support rotation / image enlargement
Power Adapter	Input: AC100-240V 50-60Hz, Output: DC12V/3A

Software specifications:

Operating system	Android 7.1.2
Basic software function	Web browsing, email, e-book, resource manager
Sound mode	Clock, alarm clock, calculator, recording
Voice support	Multinational voice
Recording	Support MP3, WMA format recording
Tool	Calendar
	Alarm Clock
	Calculator
	Note
	Weather + clock
	Recording
File processing	EPUB, WORD, EXCEL, POWERPOINT, PDF, TXT
E-book	PDF/TXT/CHM/DOC/EXCEL/EPUB/RTF/FB2
Schedule	Calendar
Input	Standard Android keyboard, optional third-party input method (Chinese, Korean, Japanese, etc.)
Internet	Browser - Chrome
	Email
	Gmail
System Management	APK installer
	Original Android system, open root permissions, product customization development
	Real-time remote monitoring, system crash self-recovery, 7*24 hours unattended
	Support OTA remote upgrade
	System setting
	Google Maps
	Global time

PCBA structure



Electrical specifications

- Power interface (12V IN)

No.	Definition	Attributes	Description
1	12V_IN	Input	12V power input
2	12V_IN	Input	12V power input
3	GND	ground line	ground line
4	GND	ground line	ground line
5	VSB	Control foot	Control foot
6	PS_ON	Control foot	Control foot

- USB-HOST interface (USB-HOST JACK)

No.	Definition	Attributes	Description
1	VCC_5V	Output	5V voltage output
2	HOST_DM	Output	Data
3	HOST_DP	Input	Data
4	GND	ground line	ground line

- Serial interface (UART1 JACK)

No.	Definition	Attributes	Description
1	VCC_IO	Output	3.3V voltage output
2	UART1_RX	Input	receive
3	UART1_TX	Output	send
4	GND	ground line	ground line

- Serial interface (UART2 JACK)

No.	Definition	Attributes	Description
1	VCC_IO	Output	3.3V voltage output
2	UART2_RX	Input	receive
3	UART2_TX	Output	send
4	GND	ground line	ground line

- Serial interface (UART3 JACK)

No.	Definition	Attributes	Description
1	VCC_IO	Output	3.3V voltage output
2	UART3_RX	Input	receive
3	UART3_TX	Output	send
4	GND	ground line	ground line

- Serial interface (UART4 JACK)

No.	Definition	Attributes	Description
1	VCC_IO	Output	3.3V voltage output
2	UART4_RX	Input	receive
3	UART4_TX	Output	send
4	GND	ground line	ground line

- SPI1/UART4 interface (SPI1/UART4 JACK)

No.	Definition	Attributes	Description
1	VCC3V3_S3	Output	3.3V voltage output
2	SPI1_RXD/UART4_RXD	Input	receive
3	SPI1_TXD/UART4_TXD	Output	send
4	SPI1_CK	Output	clock
5	SPI1_CS0	Output	Data
6	GND	ground line	ground line

- Button interface (KEY)

No.	Definition	Attributes	Description
1	VOL+/RECOVER	Input	Volume + key / upgrade key Default high level (ADKEY_IN)
2	VOL-	Input	Volume down key default high level (ADKEY_IN)
3	POWERKEY_IN	Input	Power button
4	GND	ground line	ground line

- Microphone interface (MIC JACK)

No.	Definition	Attributes	Description
1	MIC1N1P	Input	MIC Positive input
2	MIC1N1N	Input	MIC Negative input

- IR & LED (JACK)

No.	Definition	Attributes	Description
1	5.0V	Output	5.0 V output
2	LED_B+	Output	Blue light positive
3	LED_R+	Output	Red light positive
4	VCC_IR	Output	5 V Output
5	GND	Ground line	Ground line
6	IR_OUT	Input	Infrared signal input

- Speaker output interface (SPEAKER OUT JACK)

No.	Definition	Attributes	Description
1	SPL+	Output	Left channel output positive
2	SPL-	Output	Left channel output negative
3	SPR-	Output	Right channel output negative
4	SPR+	Output	Right channel output positive

- EDP Screen backlight interface (EDP LCD BL JACK)

No.	Definition	Attributes	Description
1	12V	Output	12V output
2	12V	Output	12V output
3	E_BL_EN	Output	Backlight control
4	BL1_ADJ	Output	Backlight adjustment
5	GND	Ground line	Ground line
6	GND	Ground line	Ground line

- LVDS Screen backlight interface (LVDS LCD BL JACK)

No.	Definition	Attributes	Description
1	12V	Output	12V output
2	12V	Output	12V output
3	EN/ON/OFF	Output	Backlight control
4	BL_ADJ	Output	Backlight adjustment
5	GND	Ground line	Ground line
6	GND	Ground line	Ground line

- Screen voltage jumper interface (LCD JP JACK)

No.	Definition	Attributes	Description
1	3.3V	Output	3.3V output
2	VCC_LCD	Input	LCD Voltage input
3	5.0V	Output	5.0 V output
4	VCC_LCD	Input	LCD Voltage input
5	12V	Output	12V output
6	VCC_LCD	Input	LCD Voltage input

- LVDS interface (LVDS JACK)

No.	Definition	Attributes	Description
1	POWER	Output	3.3V/5V/12V Power Output
2	POWER		
3	POWER		
4	GND	Ground line	Ground line
5	GND		
6	GND		
7	TX0-	Output	Data
8	TX0+	Output	Data
9	TX1-	Output	Data
10	TX1+	Output	Data
11	TX2-	Output	Data
12	TX2+	Output	Data
13	GND	Ground line	Ground line
14	GND		
15	TCLK3-	Output	clock
16	TCLK3+	Output	clock
17	TX3-	Output	Data
18	TX3+	Output	Data
19	TB0-	Output	Data
20	TB0+	Output	Data
21	TB1-	Output	Data
22	TB1+	Output	Data
23	TB2-	Output	Data
24	TB2+	Output	Data
25	GND	Ground line	Ground line
26	GND		
27	TCLK2-	Output	clock
28	TCLK2+	Output	clock
29	TB3-	Output	Data
30	TB3+	Output	Data

- EDP Screen interface (EDP JACK)

No.	Definition	Attributes	Description
1	POWER	Output	3.3V Power Output
2	POWER	Output	3.3V Power Output
3	GND	Ground line	Ground line
4	GND	Ground line	Ground line
5	EDP_TX0N	Output	Data
6	EDP_TX0P	Output	Data
7	EDP_TX1N	Output	Data
8	EDP_TX1P	Output	Data
9	EDP_TX2N	Output	Data
10	EDP_TX2P	Output	Data
11	EDP_TX3N	Output	Data
12	EDP_TX3P	Output	Data
13	GND	Ground line	Ground line
14	GND	Ground line	Ground line
15	EDP_AUXN	Output	Data
16	EDP_AUXP	Output	Data
17	GND	Ground line	Ground line
18	GND	Ground line	Ground line
19	EDP_HPD	Input	Data
20	GND	Ground line	Ground line

- TP interface (TOUCH SCREEN JACK)

No.	Definition	Attributes	Description
1	GND	Ground line	Ground line
2	GND	Ground line	Ground line
3	VCC_TP	Input	TP power input (3.3V)
4	SDA	Output	Data (I2C4)
5	CLK	Output	clock (I2C4)
6	GND	Ground line	Ground line
7	TP_INT	Input	discontinue (7-A6)
8	TP_RESET	Input	diaplasis (7-A5)
9	GND	Ground line	Ground line
10	GND	Ground line	Ground line

- Camera interface 1 (CAMERA1 JACK)

No.	Definition	Attributes	Description
1	GND	Ground line	Ground line
2	MIPI_MCLK	clock	Clock signal interface
3	GND	Ground line	Ground line
4	CIF_PDN1	Output	Front camera control interface
5	MIPI_RST	Output	Reset signal interface
6	SDA	Data	Data signal interface
7	SCL	clock	Clock signal interface
8	GND	Ground line	Ground line
9	VCC_DVP	Power	2.8V power supply interface
10	GND	Ground line	Ground line
11	AVDD_DVP	Power	2.8V power supply interface
12	GND	Ground line	Ground line
13	VCC_DVP	Power	1.8V power supply interface
14	VCC_DVP	Power	1.5V power supply interface
15	GND	Ground line	Ground line
16	GND	Ground line	Ground line
17	MIPI_D0N	Data	Data signal interface
18	MIPI_D0P	Data	Data signal interface
19	GND	Ground line	Ground line
20	MIPI_D1N	Data	Data signal interface
21	MIPI_D1P	Data	Data signal interface
22	GND	Ground line	Ground line
23	MIPI_CLKN	clock	Clock signal interface
24	MIPI_CLKP	clock	Clock signal interface
25	GND	Ground line	Ground line
26	MIPI_D2N	Data	Data signal interface
27	MIPI_D2P	Data	Data signal interface
28	GND	Ground line	Ground line
29	MIPI_D3N	Data	Data signal interface
30	MIPI_D3P	Data	Data signal interface

- Camera interface 2 (CAMERA2 JACK)

No.	Definition	Attributes	Description
1	GND	Ground line	Ground line
2	MIPI_MCLK	clock	Clock signal interface
3	GND	Ground line	Ground line
4	CIF_PDN1	Output	Front camera control interface
5	MIPI_RST	Output	Reset signal interface
6	SDA	Data	Data signal interface
7	SCL	clock	Clock signal interface
8	GND	Ground line	Ground line
9	VCC_DVP	Power	2.8V power supply interface
10	GND	Ground line	Ground line
11	AVDD_DVP	Power	2.8V power supply interface
12	GND	Ground line	Ground line
13	VCC_DVP	Power	1.8V power supply interface
14	VCC_DVP	Power	1.5V power supply interface
15	GND	Ground line	Ground line
16	GND	Ground line	Ground line
17	MIPI_D0N	Data	Data signal interface
18	MIPI_D0P	Data	Data signal interface
19	GND	Ground line	Ground line
20	MIPI_D1N	Data	Data signal interface
21	MIPI_D1P	Data	Data signal interface
22	GND	Ground line	Ground line
23	MIPI_CLKN	clock	Clock signal interface
24	MIPI_CLKP	clock	Clock signal interface
25	GND	Ground line	Ground line
26	MIPI_D2N	Data	Data signal interface
27	MIPI_D2P	Data	Data signal interface
28	GND	Ground line	Ground line
29	MIPI_D3N	Data	Data signal interface
30	MIPI_D3P	Data	Data signal interface

