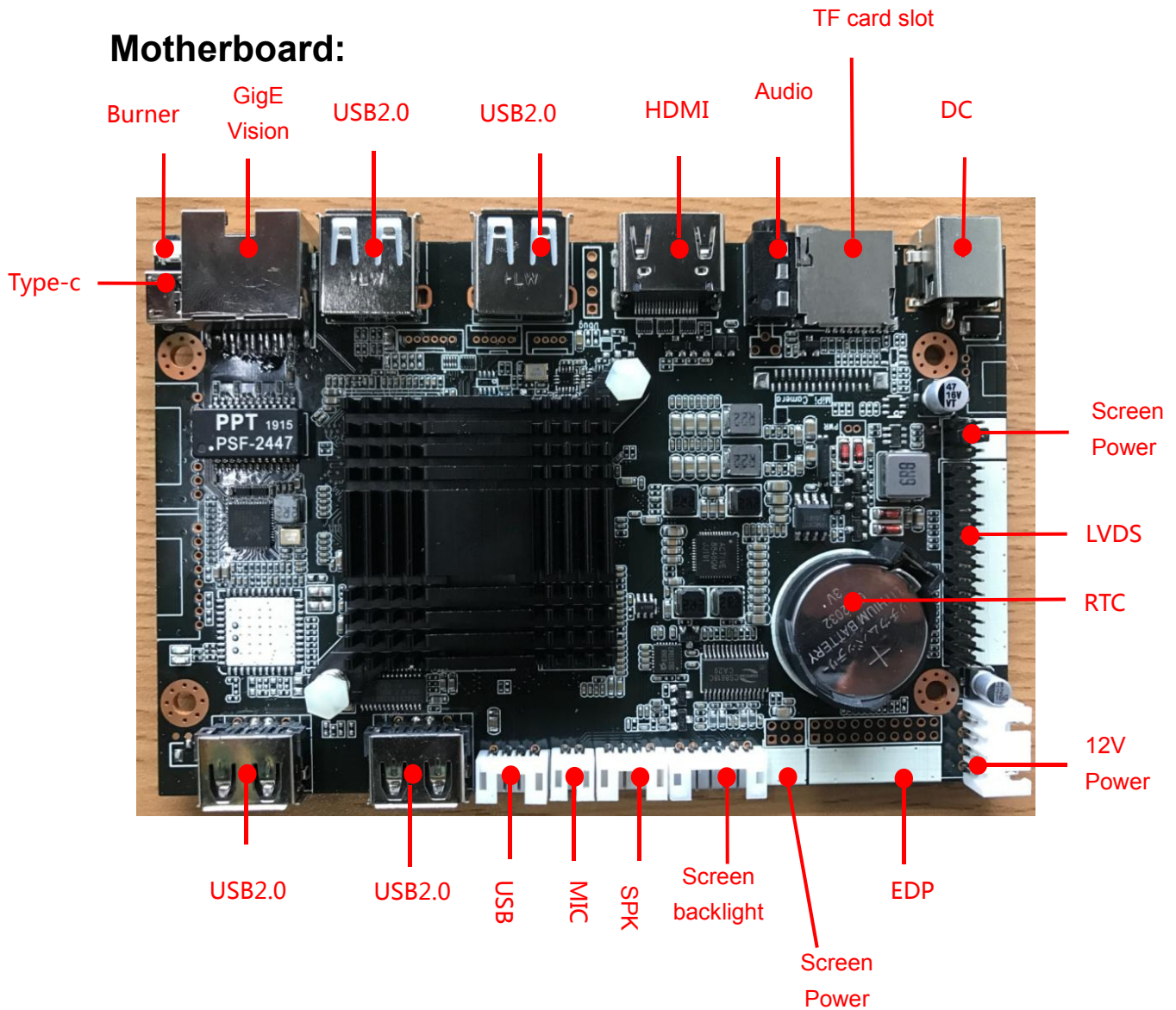


328HIS Industrial Embedded Motherboard Specification

Motherboard:



Hardware Specification

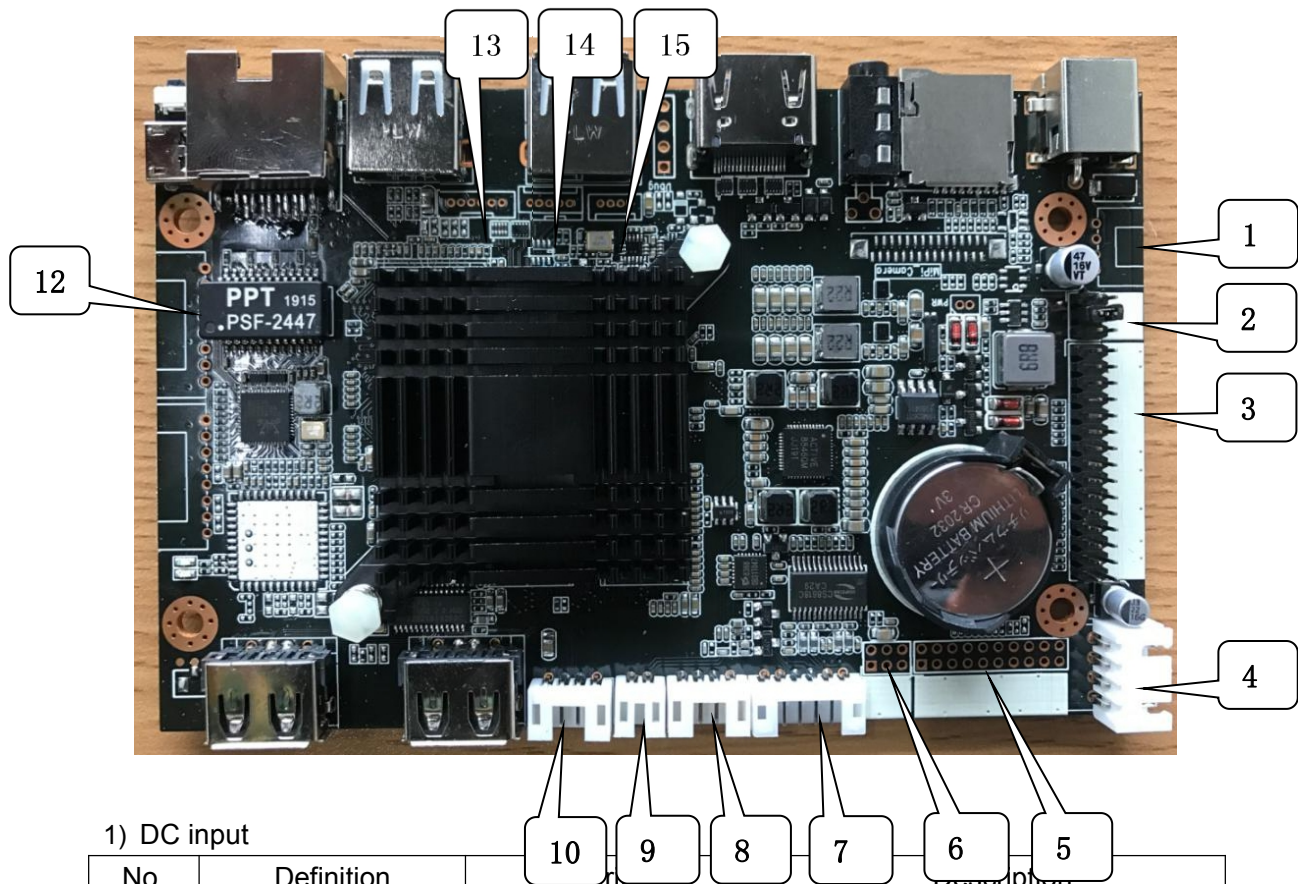
CPU	RK3288, Quad-core Cortex-A17, main frequency 1.8GHZ*4
Memory	DDR3 2GB(up to 4GB)
Storage	Onboard 16GB EMMC(32GB optional) TF Card extendable
OS	Android7.1/Ubuntu18.04
Display	1*eDP.Support 3.3V/5V/12V Power Supply 1*LVDS(single output,dual 6bit,8bit,dual 10bit),Support 7" screen and above,support 1080P 60Hz output,support 3.3V/5V/12V power supply 1*HDMI output,support 1080P/4K 60Hz output

Onboard Backlight	Optional 3.3V/5V/12V
Network	RJ45 Gigabit Ethernet
	Optional wifi module,support 2.4G &5G dual-band wifi
	Optional bluetooth
Audio	1*MIC
Power Supply	Input: AC100-240V.50-60HZ Output: DC12V 2A~5A (Depends on screen)
Button	1*burner
RTC	COMS for RTC Support Automatic Power Up
USB	4* USB(one of USB is OTG)
Dimension	125mm *80mm

Software Specification

OS	Android7.1OS/Ubuntu18.04/Debian9
Video	Support video format: H.265/H.264/VP9/MAV/ WMV/AVS/H.263/MPEG4 1080P/2160P Support multi-view video decoding
Picture	Support JPG/PNG
Default Application Software	Calculator, Browser, Calendar, Settings, Clock, Video Player, Search, Explorer

Interface Definition



1) DC input

No.	Definition	Attribute	Description
1	GND	Grounding	Grounding
2	GND	Grounding	Grounding
3	12V	Power	12V
4	12V	Power	12V

2) LVDS Jumper(Attention to the working voltage of the screen)

No.	Definition	Attribute	Description
1	3.3V	Output	3.3VOutput
2	5V	Output	5VOutput
3	12V	Output	12VOutput

3) LVDS interface

No.	Definition	Attribute	Description
1	VCC	Output	3V/5V/12V Power Output
2	VCC		
3	VCC		
4	NC		
5	GND	Grounding Wire	Grounding Wire
6	GND	Grounding Wire	Grounding Wire
7	D0N	Output	Pixel 0 Negative Data (odd)

8	D0P	Output	Pixel 0 positive Data (odd)
9	D1N	Output	Pixel 1 Negative Data (odd)
1 0	D1P	Output	Pixel 1 positive Data (odd)
1 1	D2N	Output	Pixel 2 Negative Data (odd)
1 2	D2P	Output	Pixel 2 positive Data (odd)
1 3	GND	Grounding Wire	Grounding Wire
1 4	GND	Grounding Wire	Grounding Wire
1 5	CLKN	Output	Clock
1 6	CLKP	Output	Clock
1 7	D3N	Output	Pixel 3 Negative Data (odd)
1 8	D3P	Output	Pixel 3 positive Data (odd)
1 9	D0N	Output	Pixel 0 Negative Data (Even)
2 0	D0P	Output	Pixel 0 positive Data (Even)
2 1	D1N	Output	Pixel 1 positive Data (Even)
2 2	D1P	Output	Pixel 1 positive Data (Even)
2 3	D2N	Output	Pixel 2 positive Data (Even)
2 4	D2P	Output	Pixel 2 positive Data (Even)
2 5	GND	Grounding Wire	Grounding Wire
2 6	GND	Grounding Wire	Grounding Wire
2 7	CLKN	Output	Clock
2 8	CLKP	Output	Clock
2 9	D3N	Output	Pixel 3 positive Data (Even)
3 0	D3P	Output	Pixel 3 positive Data (Even)

4)DC

No.	Definition	Attribute	Description
1	GND	Grounding Wire	Grounding Wire
2	GND	Grounding Wire	Grounding Wire
3	12V	Power	12V
4	12V	Power	12V

5)EDPOutput

No.	Definition	Attribute	Description
1	VCC	Power	3V.5V.12V optional
2	VCC	Power	3V.5V.12V optional
3	GND	Grounding Wire	Grounding Wire
4	GND	Grounding Wire	Grounding Wire
5	0N	Input/output	Edp DATA Channel 0 Negative
6	0P	Input/output	EdpDATA Channel0Positive
7	1N	Input/output	EdpDATA Channel1Negative
8	1P	Input/output	EdpDATA Channel0Positive
9	2N	Input/output	EdpDATA Channel2Negative
10	2P	Input/output	EdpDATA Channel2Positive

11	3N	Input/output	EdpDATA Channel3Negative
12	3P	Input/output	EdpDATA Channel3Positive
13	GND	Grounding	Grounding
14	GND	Grounding	Grounding
15	AUXN	Input/出	Edp Clock Channel Negative
16	AUXP	Input/出	Edp Clock Channel Positive
17	GND	Grounding	Grounding Wire
18	GND	Grounding	Grounding Wire
19	VDD	Output	Grounding
20	HPD	Output	Screen Hot Swap,Output

6) EDP Screen Voltage jumper(Attention to the working voltage of the screen)

No.	Definition	Attribute	Description
1	3.3V	Output	3.3VOutput
2	5V	Output	5VOutput
3	12V	Output	12VOutput

7)Screen Backlight Interface

No.	Definition	Attribute	Description
1	12V	Output	12VOutput
2	12V	Output	12VOutput
3	EDP-BLON	Output	Backlight Control
4	EDP-ADJ	Output	Backlight Adjustment
5	GND	Grounding Wire	Grounding Wire
6	GND	Grounding Wire	Grounding Wire

8)SPKER

No.	Definition	Attribute	Description
1	SP1+	Output	Audio Output Left+
2	SP1-	Output	Audio Output Left-
3	SP2+	Output	Audio Output Right+
4	SP2-	Output	Audio Output Right-

9) MIC

No.	Definition	Attribute	Description
1	MIC+	Input	MIC Input Positive
2	MIC-	Input	MIC Input Negative

10) USB PIN

No.	Definition	Attribute	Description
1	GND	Grounding Wire	Grounding Wire
2	DP	DATA	Data Positive
3	DM	DATA	DATA Negative
4	5V	POWER	5V

12) IO

No.	Definition	Attribute	Description
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1	GND	Grounding Wire	Grounding Wire
2	IO6	Input/Output	General-purpose input/output 6
3	IO5	Input/Output	General-purpose input/output 5
4	IO4	Input/Output	General-purpose input/output 4
5	IO3	Input/Output	General-purpose input/output 3
6	IO2	Input/Output	General-purpose input/output 2
7	IO1	Input/Output	General-purpose input/output 1
8	3.3V	POWER	3.3V

13) Touch Screen Interface

No.	Definition	Attribute	Description
1	GND	Grounding	Grounding
2	SDA	Input/Output	I2C DATA
3	SCL	Input/Output	I2C CLOCK
4	RST	Input/Output	RESET
5	INT	Input/Output	PAUSE
6	3.3V	POWER	3.3V

14) USB

No.	Definition	Attribute	Description
1	ID		A MODE: Grounding B MODE: Hanger
2	GND	Grounding	Grounding
3	DP	DATA	Data Positive
4	DM	DATA	DATA Negative
5	VBS	POWER	POWER 5V

15) Wiegand

No.	Definition	Attribute	Description
1	VCC	Output	5V Voltage Output
2	DAT0	DATA Output	DATA 0
3	DAT1	DATA Output	DATA 1
4	GND	Grounding Wire	Grounding Wire