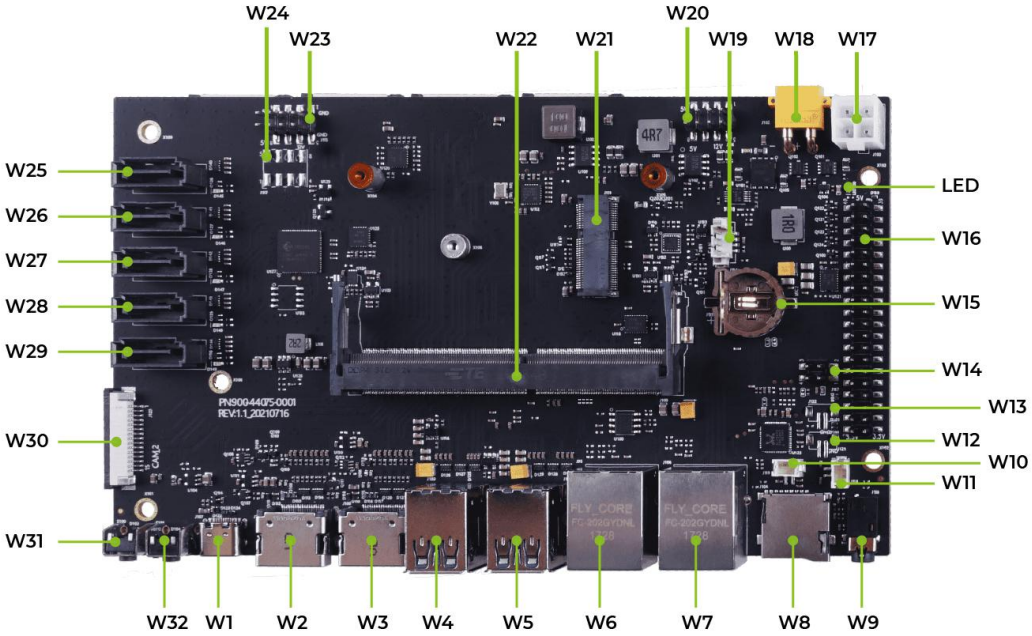
W24
W23
W22
W21
W20
W19
W18
W17
W25
W26
W27
W28
W29
W30
W31
LED
W16
W15
W14
W13
W12
W10
W11
W32
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W2
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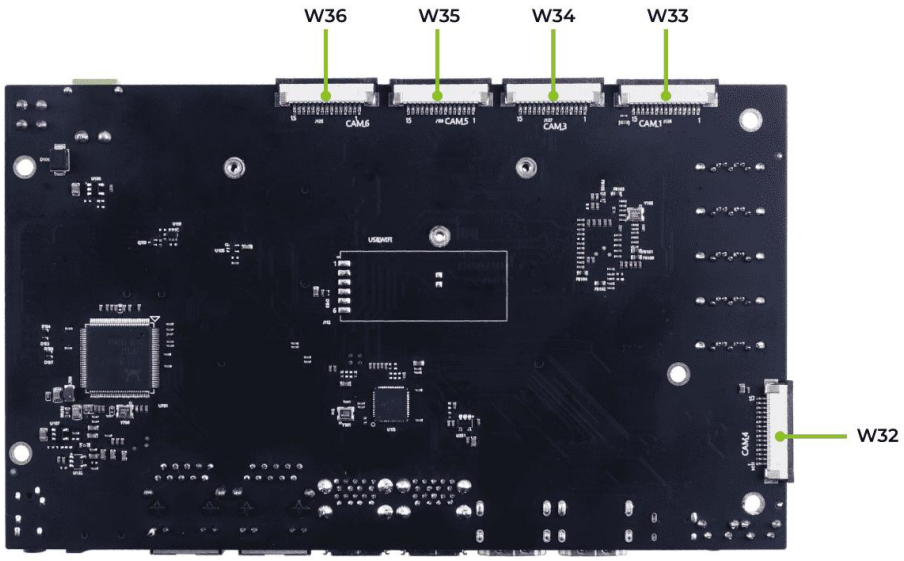
W6
W7
W8
W9


W36
W35
W34
W33
W32

USB - OTG:

Designator	Connector	Description
W1	USB 2.0 OTG	USB 2.0 Link 0 OTG TYPE C Connector

Pin	Pin Descriptions	Pin	Pin Descriptions
A1, A12, B1, B12	GND	A4, A9, B4, B9	VBUS
A5, B5	USB ID	A6, B6	USB D+
A7, B7	USB D -		

Note

When USB-OTG is in host mode, the USB ID pin needs to float.

When the USB-OTG is in slave mode, the USB ID pin needs to be grounded.

HDMI Interface:

Designator	Connector	Description
W2	HDMI Port	HDMI Right Angle Vertical Connector
W3	HDMI Port	HDMI Right Angle Vertical Connector

Pin	Pin Descriptions	Pin	Pin Descriptions
1	TMDS Data2+	2	TMDS Data2 GND
3	TMDS Data2 -	4	TMDS Data1+
5	TMDS Data1 GND	6	TMDS Data1 -
7	TMDS Data0+	8	TMDS Data0 GND
9	TMDS Data0 -	10	TMDS Clock+
11	TMDS Clock GND	12	TMDS Clock -
13	CEC	14	NC
15	DDC clock	16	DDC data
17	DDC GND	18	+5V
19	Hot Plug Detect		

USB3.0 Interface:

Designator	Connector	Description
W4	USB 3.0 Type A	USB 3.0 Link 1 Type A Connector
W5	USB 3.0 Type A	USB 3.0 Link 1 Type A Connector

Pin	Pin Descriptions	Pin	Pin Descriptions
1	VBUS	2	USB 2.0 D -
3	USB 2.0 D+	4	GND
5	SSRX -	6	SSRX+
7	GND	8	SSTX -
9	SSTX+	10	VBUS
11	USB 2.0 D -	12	USB 2.0 D+
13	GND	14	SSRX -
15	SSRX+	16	GND
17	SSTX -	18	SSTX+

Network port Interface:

Designator	Connector	Description
W6	Gigabit Ethernet	RJ45 Gigabit Ethernet Connector(10/100/1000)
W7	Gigabit Ethernet	RJ45 Gigabit Ethernet Connector(10/100/1000)

Pin	Pin Descriptions	Pin	Pin Descriptions
1	TP0+	2	TP0-
3	TP1+	4	TP2+
5	TP2 -	6	TP-
7	TP3+	8	TP3-

TF CARD Interface:

Designator	Connector	Description
W8	TF Card Slot	TF Card Slot

Pin	Pin Descriptions	Pin	Pin Descriptions
1	Data2	2	Data3
3	CMD	4	3.3V
5	CLK	6	GND
7	Data0	8	Data1

Audio Jack Interface:

Designator	Connector	Description
W9	3.5mm Audio Jack	Audio Jack(CTIA)

Pin	Pin Descriptions	Pin	Pin Descriptions
1	Microphone P	2	GND
3	HP_L	4	HP_R

Speaker interface:

Designator	Connector	Description
W10	Speaker connector	1.5mm pitch Speaker connector
W11	Speaker connector	1.5mm pitch Speaker connector

Pin	Pin Descriptions	Pin	Pin Descriptions
1	SPK -	2	SPK+

MIC Interface:

Designator	Connector	Description
W12	Microphone connector	1.5mm pitch Microphone connector
W13	Microphone connector	1.5mm pitch Microphone connector

Pin	Pin Descriptions	Pin	Pin Descriptions
1	GND	2	Microphone P

Download firmware Interface:

Designator	Connector	Description
W14	Download firmware connector	2.54mm pitch 4 pins Test connector

Pin	Pin Descriptions	Pin	Pin Descriptions
1	C2D	2	C2K
3	GND	4	3V3_AO

3V Lithium Battery:

Designator	Connector	Description
W15	RTC BATTARY	1220 3V Rechargeable lithium battery connector

Note

RTC Spare battery, After power failure of the system,It can keep the clock of the storage system working normally for 100 days.

Power LED:

After power on，Power LED Light up (Red)

40 PIN Interface:

Designator	Connector	Description
W16	Multifunctional port	2.54mm pitch 40 pins Multifunctional port

Pin	Pin Descriptions	Pin	Pin Descriptions
1	+3.3V	2	+3.3V
3	CAN_L	4	CAN_H
5	GND	6	GND
7	FORCE_RECOVERY	8	SYS_RST_IN
9	ACOK	10	GND
11	UART2_RXD_3V3	12	UART2_TXD_3V3
13	I2C1_DAT_3V3	14	I2C1_CLK_3V3
15	ID_I2C_DAT_3V3	14	ID_I2C _CLK_3V3
17	UART1_CTS_3V3	18	UART1_TXD_3V3
19	UART1_RTS_3V3	20	UART1_RXD_3V3
21	SPI0_MOSI_3V3	22	SPI0_CS0_3V3
23	SPI0_SCK_3V3	24	SPI1_CS1_3V3
25	SPI0_MISO_3V3	26	I2S1_SDOUT_3V3
27	GIPO11_3V3	28	I2S1_LRCK_3V3
29	BBAT(3V RTC)	30	I2S1_SDIN_3V3
31	GND	32	I2S1_SCLK_3V3
33	GND	34	GND
35	POWER_LED	36	STAND_LED
37	GPU_LED	38	FAN_LED
39	PWR_BTN	40	5V

Note

Uart1 & UART2 are converted to 3.3V logic level by carrier level conversion circuit;

I2s1 is converted to 3.3V logic level through the board level conversion circuit;

Spi0 is converted to 3.3V logic level through the board level conversion circuit;

GPIO11_ 3V3, SPI1_ CS1_ 3v32 pins are all 3.3V logic levels

Note:

The following interfaces are mainly used to provide external switch, system reset button and system status LED indication for 1U chassis in industrial control field.

GPU_ Led: negative pole of system temperature indicator;

FNA_ Led --- negative pole of fan running indicator light;

STAND_ Led --- negative pole of system normal working indicator;

POWER_ Led --- system power supply normal working indicator negative;

PWR_ BTN --- system startup positive pole;

Acok is short circuited to the ground --- the system turns off the power on automatic start-up function;

SYS_ RST_ In --- system reset;

force_ Recovery is the positive pole of the brush key;

DC Power Interface:

Designator	Connector	Description
W17	DC power input	4.2mm pitch 4pins DC connector

Pin	Pin Descriptions	Pin	Pin Descriptions
1	GND	2	GND
3	VCC	4	VCC

Note

Power input range: DC + 13V (8A) ~ + 20V (5A)

DC Power Interface:

Designator	Connector	Description
W18	DC power connector	5.08mm pitch 2pins DC connector

Pin	Pin Descriptions	Pin	Pin Descriptions
1	GND	2	VCC

Note

Power input range: DC + 13V (8a) ~ + 20V (5a)

12V/5V fan Interface:

Designator	Connector	Description
W19	12V/5V FAN connector	2.54mm pitch 8 pins 12V/5V FAN connector
W23	12V/5V FAN connector	2.54mm pitch 8 pins 12V/5V FAN connector
W24	12V/5V FAN connector	2.54mm pitch 8 pins 12V/5V FAN (Reserve)connector

Pin	Pin Descriptions	Pin	Pin Descriptions
1	GND	2	+12V
3	FAN_TACH	4	+5V
5	GND	6	+12V
7	FAN_TACH	8	+5V

Note

This interface supports 12V power supply (1a) for SATA

Fan Interface:

Designator	Connector	Description
W20	5V FAN connector	Standard 4 Pin fan interface

Pin	Pin Descriptions	Pin	Pin Descriptions
1	GND	2	+5V
3	FAN_TACH	4	FAN_PWM

Note

This is a 1.25mm spacing connector.

SATA Interface:

W25	SATA connector	7 pins SATA connector
W26	SATA connector	7 pins SATA connector
W27	SATA connector	7 pins SATA connector
W28	SATA connector	7 pins SATA connector
W29	SATA connector	7 pins SATA connector

Pin	Pin Descriptions	Pin	Pin Descriptions
1	GND	2	TXP
3	TXN	4	GND
5	RXN	6	RXP
7	GND		

Button:

Designator	Connector	Description
W31	RESET Button	RESET Button
W32	Recovery Button	Recovery Button

A205_ S provides 2 buttons, which are:

(1) W32 -- - (reset) reset switch; (recovery) program download

(2) W33 -- (recovery) program download