

JH1					
	GND	53	54	GND	
	NC	55	56	NC	
	NC	57	58	NC	
	NC	59	60	NC	
	NC	61	62	NC	
	NC	63	64	NC	
	NC	65	66	NC	
	GND	67	68	GND	
	NC	69	70	NC	
	NC	71	72	NC	
	NC	73	74	NC	
	NC	75	76	NC	
	NC	77	78	NC	
	NC	79	80	NC	
	GND	81	82	GND	
/	RFU4	83	84	RFU3	/
/	RFU6	85	86	RFU5	/
/	RFU8	87	88	RFU7	/
/	RFU10	89	90	RFU9	/
/	RFU12	91	92	RFU11	/
/	RFU14	93	94	RFU13	/
	GND	95	96	GND	
/	RFU16	97	98	RFU15	/
/	RFU18	99	100	RFU17	/
	NC	101	102	NC	
	NC	103	104	NC	
	NC	105	106	NC	
	NC	107	108	NC	
	GND	109	110	GND	
	GND	111	112	GND	
	NC	113	114	NC	
	VCC	115	116	VCC	
	VCC	117	118	VCC	
	VCC	119	120	VCC	

JH2					
Chassis ground	Eth_Sheild	1	2	Eth_Sheild	Chassis ground
Chassis ground	Eth_Sheild	3	4	Eth_Sheild	Chassis ground
	NC	5	6	NC	
	NC	7	8	NC	
Gigabit Ethernet port	Port1_T0+	9	10	Port2_T0+	Gigabit Ethernet port
	Port1_T0-	11	12	Port2_T0-	
	NC	13	14	NC	
	Port1_T1+	15	16	Port2_T1+	
	Port1_T1-	17	18	Port2_T1-	
	NC	19	20	NC	
	Port1_T2+	21	22	Port2_T2+	
	Port1_T2-	23	24	Port2_T2-	
	NC	25	26	NC	
	Port1_T3+	27	28	Port2_T3+	
Port1_T3-	29	30	Port2_T3-		
	NC	31	32	NC	
	NC	33	34	NC	
Test button	TEST_INPUT_KEY	35	36	STA_LED-	Running indicator (active low)
	GND	37	38	GND	
Line decoding signal	A	39	40	DCLK	Shift clock output 1
Line decoding signal	B	41	42	DCLK_2	Shift clock output 2
Line decoding signal	C	43	44	LAT	Latch signal output

JH2					
Line decoding signal	D	45	46	CTRL	Afterglow control signal
Line decoding signal	E	47	48	OE_RED	Display enable
Display enable	OE_BLUE	49	50	OE_GREEN	Display enable
	GND	51	52	GND	
/	Data2	53	54	Data1	/
/	Data4	55	56	Data3	/
/	Data6	57	58	Data5	/
/	Data8	59	60	Data7	/
/	Data10	61	62	Data9	/
/	Data12	63	64	Data11	/
	GND	65	66	GND	
/	Data14	67	68	Data13	/
/	Data16	69	70	Data15	/
/	Data18	71	72	Data17	/
/	Data20	73	74	Data19	/
/	Data22	75	76	Data21	/
/	Data24	77	78	Data23	/
	GND	79	80	GND	
/	Data26	81	82	Data25	/
/	Data28	83	84	Data27	/
/	Data30	85	86	Data29	/
/	Data32	87	88	Data31	/
/	Data34	89	90	Data33	/
/	Data36	91	92	Data35	/
	GND	93	94	GND	
/	Data38	95	96	Data37	/
/	Data40	97	98	Data39	/
/	Data42	99	100	Data41	/
/	Data44	101	102	Data43	/
/	Data46	103	104	Data45	/
/	Data48	105	106	Data47	/
	GND	107	108	GND	
	NC	109	110	NC	
	NC	111	112	NC	
	NC	113	114	NC	
	NC	115	116	NC	
	GND	117	118	GND	
	GND	119	120	GND	

Note

The recommended VCC power input is 5.0 V.

OE_RED, OE_GREEN and OE_BLUE are display enable signals. When RGB are not controlled separately, use OE_RED. When the PWM chip is used, they are used as GCLK signals.

In the mode of 128 groups of serial data, Data65–Data128 are multiplexed into Data1–Data64.

Reference Design for Extended Functions

Pins for Extended Functions			
Pin	Recommended Smart Module Pin	Recommended Module Flash Pin	Description
RFU1	Reserved	Reserved	A reserved pin for connection to MCU
RFU2	Reserved	Reserved	A reserved pin for connection to MCU
RFU3	HUB_CODE0	HUB_CODE0	Flash control pin 1
RFU4	HUB_SPI_CLK	HUB_SPI_CLK	Clock signal of serial pin
RFU5	HUB_CODE1	HUB_CODE1	Flash control pin 2
RFU6	HUB_SPI_CS	HUB_SPI_CS	CS signal of serial pin
RFU7	HUB_CODE2	HUB_CODE2	Flash control pin 3
RFU8	/	HUB_SPI_MOSI	Module Flash data storage input
	HUB_UART_TX	/	Smart module TX signal
RFU9	HUB_CODE3	HUB_CODE3	Flash control pin 4

Pins for Extended Functions			
RFU10	/	HUB_SPI_MISO	Module Flash data storage output
	HUB_UART_RX	/	Smart module RX signal
RFU11	HUB_H164_CSD	HUB_H164_CSD	74HC164 data signal
RFU12	/	/	/
RFU13	HUB_H164_CLK	HUB_H164_CLK	74HC164 clock signal
RFU14	POWER_STA1	POWER_STA1	Dual power supply detection signal 1
RFU15	MS_DATA	MS_DATA	Dual card backup connection signal
RFU16	POWER_STA2	POWER_STA2	Dual power supply detection signal 2
RFU17	MS_ID	MS_ID	Dual card backup identifier signal
RFU18	HUB_CODE4	HUB_CODE4	Flash control pin 5

Note

The RFU8 and RFU10 are signal multiplex extension pins. Only one pin from either the Recommended Smart Module Pin or the Recommended Module Flash Pin can be selected at the same time.

Specifications

Maximum Loading Capacity	512x384 pixels	
Electrical Parameters	Input voltage	DC 3.3 V to 5.5 V
	Rated current	0.6 A
	Rated power consumption	3.0 W
Operating Environment	Temperature	-20°C to +70°C
	Humidity	10% RH to 90% RH, non-condensing
Storage Environment	Temperature	-25°C to +125°C
	Humidity	0% RH to 95% RH, non-condensing
Physical Specifications	Dimensions	70.0 mm x 45.0 mm x 8.0 mm
	Net weight	17.3 g
Packing Information	Packing specifications	Each receiving card is packaged in a blister pack. Each packing box contains 80 receiving cards.
	Packing box dimensions	378.0 mm x 190.0 mm x 120.0 mm
Certifications	RoHS, EMC Class B Note: If the product does not have the relevant certifications required by the countries or regions where it is to be sold, please apply for the certifications yourself or contact NovaStar to apply for them.	

Copyright © 2021 Xi'an NovaStar Tech Co., Ltd. All Rights Reserved.

No part of this document may be copied, reproduced, extracted or transmitted in any form or by any means without the prior written consent of Xi'an NovaStar Tech Co., Ltd.

Trademark

 is a trademark of Xi'an NovaStar Tech Co., Ltd.

Statement

Thank you for choosing NovaStar's product. This document is intended to help you understand and use the product. For accuracy and reliability, NovaStar may make improvements and/or changes to this document at any time and without notice. If you experience any problems in use or have any suggestions, please contact us via the contact information given in this document. We will do our best to solve any issues, as well as evaluate and implement any suggestions.

[Official website](http://www.novastar.tech)
www.novastar.tech

[Technical support](mailto:support@novastar.tech)
support@novastar.tech