

# M5

## LED receiver series

Version: v1.2

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## Specification



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Professional Ultra HD Video Display  
Control system integrated solution and service provider

**Version history**

The version number	Change details	Publish time
V1.0	The first version was released	2021. 06.12
V1.1	Modify the document device description	2021. 07.08
V1.2	Modify the cover page	2021.10.25

# 1 Product overview

## 1.1 Product application

The M5 receiver card is a small, full-featured high-end receiver card that is used in the LED display as a receiving device for displaying data, which is used to convert the received data into the control signal of the module.

The M5 uses the DDR2 SODIMM interface, which can be easily integrated into the adapter board or display unit board, enabling a high degree of integration of the display module and the design of the display unit board and structure.

## 1.2 Features

- Supports 24 sets of RGB signal parallel output
- A single card with 256\*384 points.
- The small size and thickness make it easy to use in thin and light cabinets.
- Support a variety of general-purpose chips, PWM chips, dual latch chips.
- Unique arbitrary frequency doubling technology, the phone shoots without scanning lines.
- Unique color transformation technology makes the face complexion more realistic.
- Support high gray, high brush, low brightness high grayscale display.
- The details are handled perfectly to eliminate problems such as dark, low gray and red, ghosting and so on.
- Supports point-by-point correction of brightness and chromaticity, provides correction of low gray compensation, and ensures low gray effect.
- Support one-click read back profile information function.
- Support one-click repair function, card replacement worry-free.
- Support seam repair function.
- Supports real-time detection of network communication status and detection of network cable connection sequence.
- Support any extraction point, easy to set up a variety of special-shaped screens.
- Program write protection, upgrade power failure worry-free.
- Supports a full range of KYSTAR sending cards and Gigabit network cards.
- Complies with EU RoHS standards.
- Passed 3C, CE, FCC certification.

## 2 Product appearance



Figure 1 Front view of the M5 receiving card

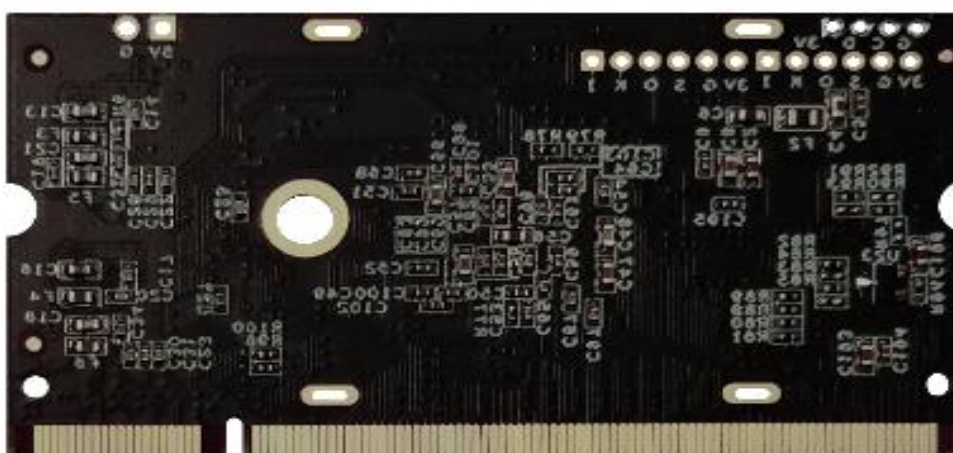


Figure 2 M5 receiving card back

### 3 Interface signal definition

Instructions for use	Pin definitions	Pin serial number		Pin definitions	Instructions for use
earthing	GND	1	2	D5V	Power supply to the system
	GND	3	4	D5V	
	GND	5	6	D5V	
	GND	7	8	D5V	
	GND	9	10	D5V	
	GND	11	12	D5V	
vacant	NC	13	14	NC	vacant
Network port 1 signal pin	Port1_T0+	15	16	Port2_T0+	Ethernet port 2 signal pin
	Port1_T0-	17	18	Port2_T0-	
	NC	19	20	NC	
	Port1_T1+	21	22	Port2_T1+	
	Port1_T1-	23	24	Port2_T1-	
	NC	25	26	NC	
	Port1_T2+	27	28	Port2_T2+	
	Port1_T2-	29	30	Port2_T2-	
	NC	31	32	NC	
	Port1_T3+	33	34	Port2_T3+	
Port1_T3-	35	36	Port2_T3-		
vacant	NC	37	38	NC	vacant
earthing	GND	39	40	GND	earthing
LED, multiplex	BTN_LED	41	42	A	Display control: 1, ABCDE is a line decoding signal; 2, LED_LAT is a signal latch; 3, LED_OE is enabled, PWM chips are GCLK;
Temperature	TEMP	43	44	B	
Humidity monitoring	HUM	45	46	C	
Fan control	FAN	47	48	D	
Line blanking	CTRL	49	50	E	
Serial shift clock	CLK	51	52	LAT	
When the second serial shifts	CLK_S	53	54	OE	
	GND	55	56	GND	
Part A RGB output, a total of 8 RGB groups, corresponding to LED_SCLK	R1	57	58	R2	Part B RGB output, a total of 8 RGB groups, corresponding to LED_SCLK
	G1	59	60	G2	
	B1	61	62	B2	
	R3	63	64	R4	
	G3	65	66	G4	
	B3	67	68	B4	
	R5	69	70	R6	
	G5	71	72	G6	
B5	73	74	B6		

	R7	75	76	R8	
	G7	77	78	G8	
	B7	79	80	B8	
	R9	81	82	R10	
	G9	83	84	G10	
	B9	85	86	B10	
	R11	87	88	R12	
	G11	89	90	G12	
	B11	91	92	B12	
	R13	93	94	R14	
	G13	95	96	G14	
	B13	97	98	B14	
	R15	99	100	R16	
	G15	101	102	G16	
	B15	103	104	B16	
earthing	GND	105	106	GND	earthing
	GND	107	108	GND	
	R17	109	110	R18	
	G17	111	112	G18	
	B17	113	114	B18	
	R19	115	116	R20	
	G19	117	118	G20	
	B19	119	120	B20	
	R21	121	122	R22	
	G21	123	124	G22	
	B21	125	126	B22	
	R23	127	128	R24	
	G23	129	130	G24	
	B23	131	132	B24	
	NC	133	134	NC	
	NC	135	136	NC	
	NC	137	138	NC	
	NC	139	140	NC	
	NC	141	142	NC	
	NC	143	144	NC	
	NC	145	146	NC	
	NC	147	148	NC	
	NC	149	150	NC	
	NC	151	152	NC	
	NC	153	154	NC	
	NC	155	156	NC	
earthing	GND	157	158	GND	earthing
	NC	159	160	NC	

Part C RGB output, a total of 4 RGB groups, corresponding to LED\_SCLK. Can be used as a point-and-check backhaul for Part A or as a circuit signal detection backhaul.

Part D RGB output, a total of 4 RGB groups, corresponding to LED\_SCLK. Can be used as a point check backhaul for Part B or as a circuit signal detection callback.

	NC	161	162	NC	
	NC	163	164	NC	
	NC	165	166	NC	
	NC	167	168	NC	
	NC	169	170	NC	
	NC	171	172	NC	
	NC	173	174	NC	
	NC	175	176	NC	
	NC	177	178	NC	
	NC	179	180	NC	
	NC	181	182	NC	
	NC	183	184	NC	
	NC	185	186	NC	
vacant	NC	187	188	NC	vacant
	NC	189	190	NC	
vacant	NC	191	192	NC	vacant
	NC	193	194	NC	
	NC	195	196	NC	
	NC	197	198	NC	
earthing	GND	199	200	GND	earthing

## 4 Description of the LED status

LED status	
LED1	The power indicator is red, and the solid light indicates that the power supply is normal and goes off The delegate is not powered on
LED2	The device operation indicator is green, flashes when there is a signal input, and is not lit or solid when there is no signal

## 5 Electrical parameters

project	The parameter value
Rated voltage	DC 3.3V-5.5V
Rated current	0.5A
Operating temperature	-10°C- 70°C
Operating humidity	0% - 95%

## 6 Dimensional drawings

