

NCM25-AA is a color camera module with built-in ISP.

It has 1920 horizontal and 1280 vertical pixels and fits 1/2.57" optical format.

It can be configured for various environments, including high dynamic range (HDR) and LED Flicker Mitigation (LFM).

#### 1.Features

- MIPI CSI-2 Interface
- Built-in ISP
- LED flicker Mitigation (LFM)
- Wide-angle lens

### 2. Specification

• Image Sensor 1/2.57-inch CMOS color sensor

• Shutter Type Rolling shutter • Dimension  $32 \times 32$  [mm]  $*_1$ • Effective Pixels  $1920(H) \times 1280(V)$ 

• Pixel Size  $3.0\mu m(H) \times 3.0\mu m(V)$ 

• Output Interface MIPI CSI-2 serial output (4 lane)

Output Signal Format YCbCr422Frame rate (Max.) 30fps

• Function Auto Exposure Control, Auto White Balance,

Auto Gain Control,

HDR, Image Inversion (up/down, left/right),

LED Flicker Mitigation, etc.

• Angle of View (Typ.) (H)122°/(V) 80°/(D)149°

Optical Filter
 F Number
 Connection Type
 Power Consumption (Typ.)
 IRCF
 F2.4
 FPC
 400 [mW]

**※**1 : FPC part is not included

## 3. Recommended Operating Conditions

<ul> <li>Analog Power Supply (AVDD)</li> </ul>	$3.3 \pm 0.165$	[V]
• Digital Power supply (DVDD)	$1.1 \pm 0.1$	[V]
• I/O Power supply (HVDD)	$1.8 \pm 0.1$	[V]
• Operating Temperature	$-30 \sim +80$	$[^{\circ}\!C]$ $^{*_2}$
• Storage Temperature	-40 $\sim$ +85	$[^{\circ}\!\mathbb{C}]$ $^{*_2}$

\*2: No condensation

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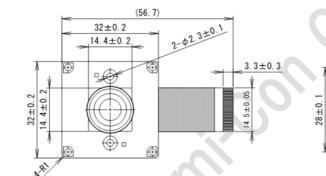
## 4. Terminal Description

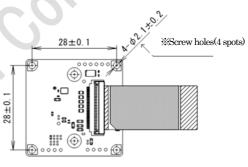


No	Symbol	I/O	Terminal Description	No.	Symbol	I/O	Terminal Description
1	GND	-	Ground	15	MOP	О	Digital data output (Lane0_P)
2	GND	-	Ground	16	MON	О	Digital data output (Lane0_N)
3	AVDD	I	Analog power supply	17	GND	-	Ground
4	HVDD	I	I/O power supply	18	MCP	О	Digital clock output (Clock_P)
5	DVDD	I	Digital power supply	19	MCN	О	Digital clock output (Clock_N)
6	DVDD	I	Digital power supply	20	GND	-	Ground
7	SDA	I/O	I2C serial data	21	M1P	О	Digital data output (Lane1_P)
8	SCL	I/O	I2C serial clock	22	M1N	О	Digital data output (Lane1_N)
9	GND	•	Ground	23	GND	-	Ground
10	RESET	I	System reset	24	M3P	О	Digital data output (Lane3_P)
11	GND	•	Ground	25	M3N	О	Digital data output (Lane3_N)
12	M2P	О	Digital data output (Lane2_P)	26	GND	-	Ground
13	M2N	О	Digital data output (Lane2_N)	27	FSYNC	I/O	Frame synchronous signal
14	GND	-	Ground	28	GND	-	Ground

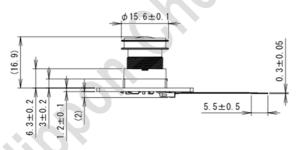
### 5. External Dimensions

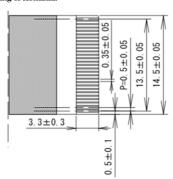
[Unit:mm]





\*Detail drawing of terminal.





# 6. Image Capture Polarity





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