



NCM10-B is a color module with built-in ISP that complies with WVGA pixels. It has 1280 horizontal and 800 vertical pixels and via 1/2.7" optical format. Features included on-chip primary colors color filter, and small size by adjusting signal processing.

1.Features

- HDR
- Equipped with wide-angle lens
- I2C

2.Specification

- | | |
|----------------------------|--|
| ● Image Sensor | 1/2.7-inch CMOS color sensor |
| ● Shutter Type | Rolling shutter |
| ● Dimension | 18 × 18 [mm] ※1 |
| ● Effective Pixels | 1280(H) × 800(V) |
| ● Pixel Size | 4.2μm(H) × 4.2μm(V) |
| ● Output Interface | Digital 8bit parallel |
| ● Output Signal Format | YUV422 |
| ● Frame rate (Max.) | 30fps |
| ● Function | Auto Exposure Control, Auto White Balance, Auto Gain Control, HDR, Image Inversion (up/down, left/right), Flicker correction, etc. |
| ● Angle of View (Typ.) | (H)110°/(V)77°/(D)127°:1280(H)×800(V)
(H)110°/(V)70°/(D)124°:1280(H)×720(V) |
| ● Optical filter | IRCF |
| ● F Number | F2.4 |
| ● Connection Type | FFC |
| ● Power Consumption (Typ.) | 550 [mW] |

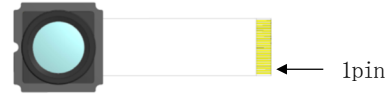
※1 : FPC/FFC part is not included

3. Recommended Operating Conditions

- | | | |
|-------------------------------|------------|---------|
| ● Analog Power Supply (AVDD) | 3.3 ± 0.16 | [V] |
| ● Digital Power Supply (DVDD) | 1.5 ± 0.75 | [V] |
| ● I/O Supply (HVDD) | 3.3 ± 0.16 | [V] |
| ● Operating Temperature | -30 ~ +80 | [°C] ※2 |
| ● Storage Temperature | -40 ~ +85 | [°C] ※2 |

※2 : No condensation

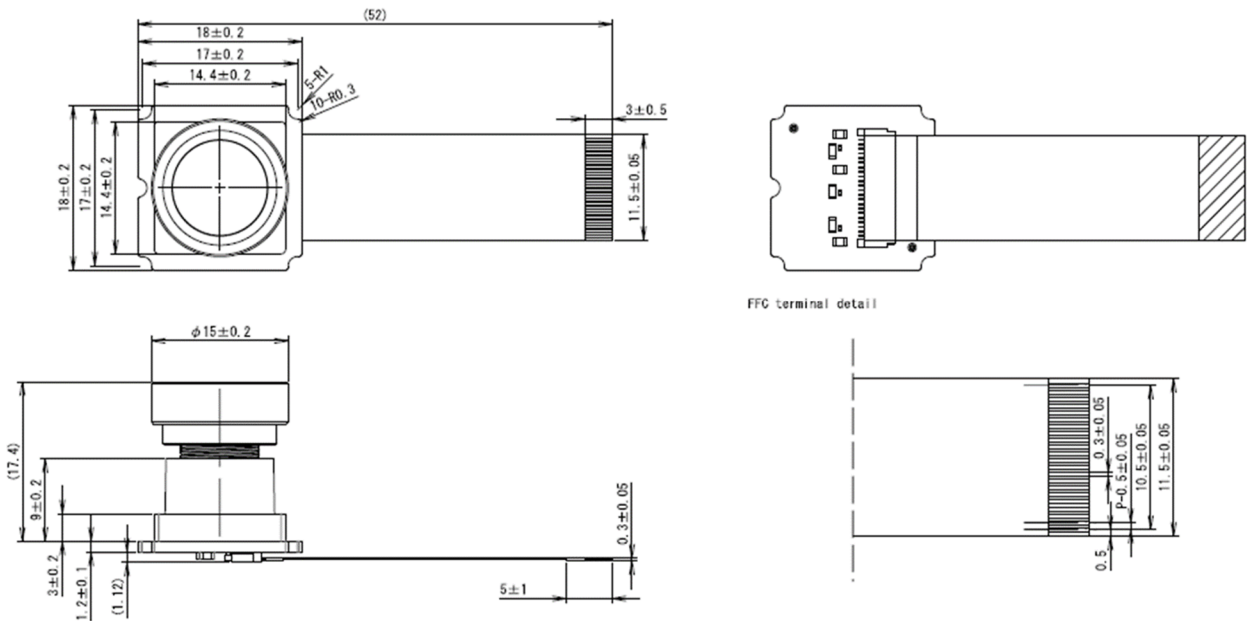
4. Terminal Description



No	Symbol	I/O	Terminal Description	N o.	Symbol	I/O	Terminal Description
1	DVDD	-	Digital power supply	12	DATA6	O	Digital data output (Data6)
2	DGND	-	Digital ground	13	DATA5	O	Digital data output (Data5)
3	PCLK	O	Data Clock	14	DATA4	O	Digital data output (Data4)
4	DGND	-	Digital ground	15	DATA3	O	Digital data output (Data3)
5	HSYNC	O	Horizontal synchronous signal	16	DATA2	O	Digital data output (Data2)
6	VSYNC	O	Vertical synchronous signal	17	DATA1	O	Digital data output (Data1)
7	HVDD	-	I/O supply	18	DATA0	O	Digital data output (Data0)
8	SDA	I/O	I2C serial data	19	STDBY	I	Standby mode
9	SCL	I	I2C serial clock	20	MCLK	I	System clock
10	RESET	I	System reset	21	AGND	-	Analog ground
11	DATA7	O	Digital data output (Data7)	22	AVDD	-	Analog power supply

5. External Dimensions

[Unit : mm]



※Please attach thermal conducting sheet etc. on the connector side of the module to dissipate the heat

6. Image Capture Polarity



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