PIXELPLUS CO., LTD.

NTSC/PAL TV Encoder Chip

PI1008N

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NTSC/PAL TV Encoder Chip

▶ Features

▷ NTSC / PAL video encoder

▷ Video Input
YCbCr 4:2:2 (8bit-BT656 format)

▷ Video Output
◆ CVBS (NTSC/PAL)
◆ BT656 (interlaced @ 27Mhz)

▷ Video frame rate control
Built-in 16M bit SDRAM (MCP)

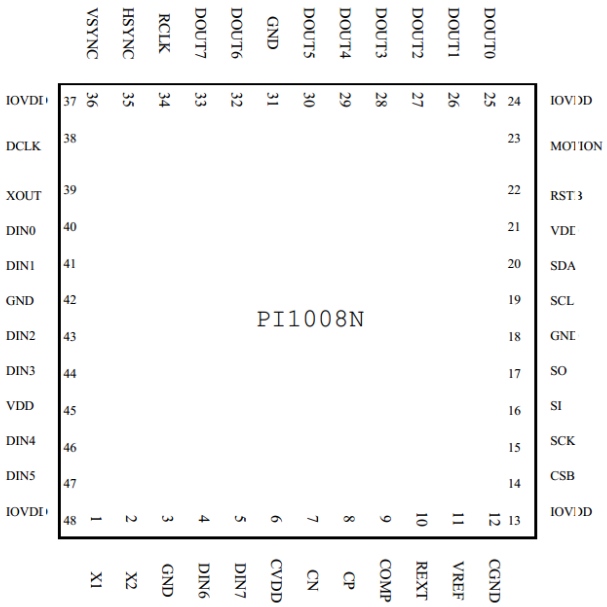
▷ Configuration by memory
I2C EEPROM, SPI ROM, Internal ROM

▷ Zoom function
X4 zoom processing at maximum

▷ OSD (On Screen Display)
- Up to 2 OSD pages supported
- 15 colors supported
- Logo, Character, Picture images (supported by OSD format converting S/W)

▷ Motion Detection
- 8 x 8 window section
- Wake-up function supported
- Each window section can be enable / disabled

▷ Strap
Flicker, Mirror, Indoor/Outdoor, BLC, TV_mode, OSD on/off

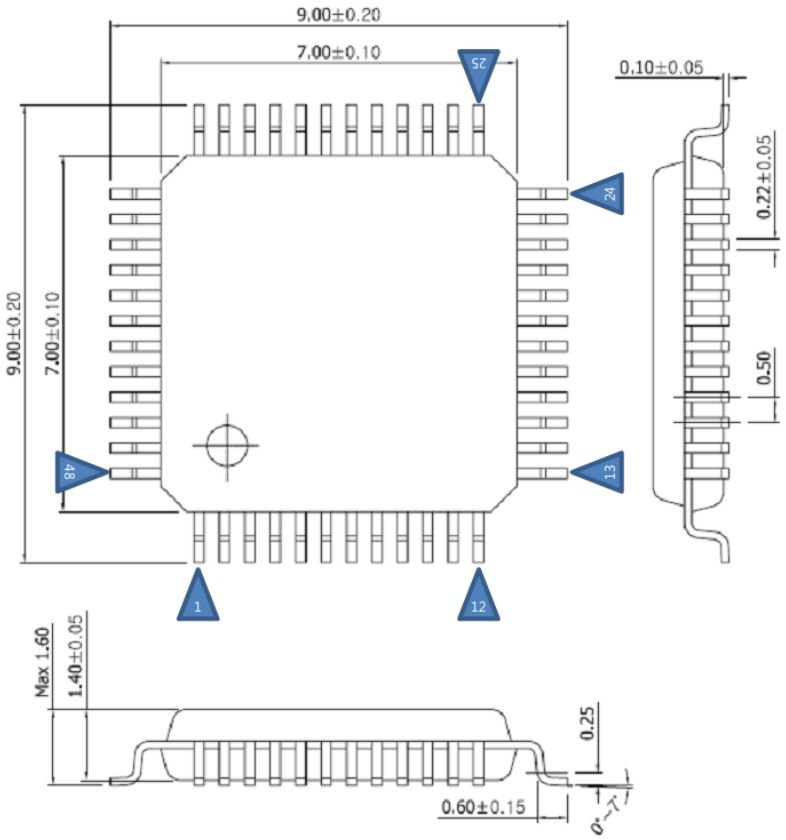


[Fig. 1] PIN Description

Clock frequency	27 Mhz
NTSC Output	720 x 487 pixel
PAL Output	720 x 576 pixel
Frame Rate	60 fps @ NTSC
	50 fps @ PAL
Power Voltage	IO : 3.3V DAC : 3.3C Core : 1.8V
Package	48 pin QFP (9 mm x 9 mm)

[Table 1] Typical Parameters

▶ 48LQFP Package Mechanical Drawing



No.	PAD Name	No.	PAD Name	No.	PAD Name	No.	PAD Name
1	X1	13	IOVDD	25	DOUT0	37	IOVDD
2	X2	14	CSB	26	DOUT1	38	DCLK
3	GND	15	SCK	27	DOUT2	39	XOUT
4	DIN6	16	MISO	28	DOUT3	40	DINO
5	DIN7	17	MOSI	29	DOUT4	41	DIN1
6	CVDD	18	GND	30	DOUT5	42	GND
7	CN	19	SCL	31	GND	43	DIN2
8	CP	20	SDA	32	DOUT6	44	DIN3
9	COMP	21	VDD	33	DOUT7	45	VDD
10	REXT	22	RSTB	34	RCLK	46	DIN4
11	VREF	23	MOTION	35	HSYNC	47	DIN5
12	CGND	24	IOVDD	36	VSYNC	48	IOVDD