



Weltrend Semiconductor, Inc.

WT6804
Monitor On-Screen Display
Data Sheet

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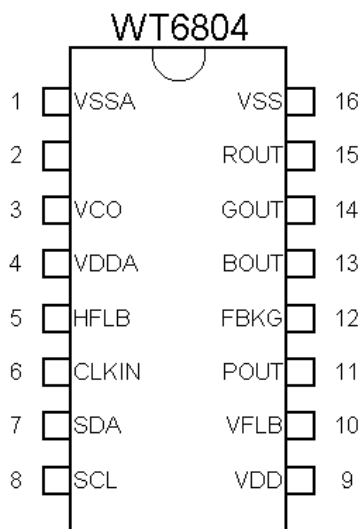
GENERAL DESCRIPTION

The WT6804 is an on-screen display (OSD) IC which display color symbols or characters onto monitor. With the control of microcontroller through I²C interface, it can display characters with special effect like blinking or shadowing automatically.

FEATURES

- Programmable horizontal resolutions up to 1530 dots per line
- Horizontal frequency up to 120KHz
- On-chip PLL up to 100MHz
- Fully programmable character array of 15 rows by 30 columns
- 12x18 dot matrix per character
- 256 characters and graphic symbols ROM including 16 multi-color fonts
- 8 colors per display character
- 7 colors per display character background
- 4 programmable windows
- Double character height and width control
- Programmable character height (18 to 71 lines)
- Programmable row-to-row spacing
- Programmable vertical and horizontal positioning for display screen center
- Bordering, shadowing and blinking effect
- Fade-in/fade-out effects
- I²C interface with slave address \$7AH
- Power supply : 5V
- Package type : 16-pin plastic DIP/SOP

PIN CONFIGURATION



PIN DESCRIPTION

Pin No.	Pin Name	I/O	Description
1	VSSA		Analog ground.
2	NC		No connection.
3	LF	I/O	Loop filter of PLL.
4	VDDA		Analog power supply
5	HFLB	I	Horizontal sync input.
6	CLKIN	I	External clock input.
7	SDA	I/O	Serial data of I ² C interface.
8	SCL	I	Serial clock of I ² C interface.
9	VDD		Digital power supply
10	VFLB	I	Vertical sync input.
11	POUT	O	Programmable general purpose output pad
12	FBKG	O	Fast Blanking output. This pin controls the mixer of video amplifier to cutoff the video signal while displaying character or window.
13	BOUT	O	Blue color output
14	GOUT	O	Green color output
15	ROUT	O	Red color output
16	VSS		Digital ground