

# **SSD2119**

## ***RGB Interface***

This document contains information on a new product. Specifications and information herein are subject to change without notice.

## RGB Interface

SSD2119 supports RGB interface. RGB interface unit consists of D[17:0], HSYNC, VSYNC, DOTCLK and OE signals for display moving pictures. When the RGB interface is selected, the display operation is synchronized with external control signals (HSYNC, VSYNC and DOTCLK). Data is written in synchronization with the control signals when DEN is enabled for write operation in order to avoid flicker or tearing effect while updating display data.


## Mode Selection Pins

Name	Type	Connect to	Function	Description					When not in use
				PS3	PS2	PS1	PS0	Interface Mode	
PS[3:0]	I	V <sub>DDIO</sub> or V <sub>SS</sub>	Interface Selection	0	1	0	0	9-bit generic D[8:0] (262k colour) + 3-wire SPI If 65K color, D3 shorts to D8 internally	-
				0	1	0	1	16-bit generic (262k colour) + 3-wire SPI	
				0	1	1	0	18-bit generic (262k colour) + 3-wire SPI	
				0	1	1	1	6-bit generic D[8:3] (262k colour) + 3-wire SPI	

**SSD2119 init Code for RGB**

<b>Comment</b>	<b>Data[7:4]</b>	<b>Data[3:0]</b>	<b>Description</b>
28	00	06	
00	00	01	Turn Oscillator On
01	30	EF	
02	06	00	
			DFM[1:0] : 262k Color Mode
			DenMode = 0 : RGB interface controlled by HSYNC, VSYNC pin and HBP, VBP
11	46	70	WMode = 1 : Write RAM from Generic RGB data (POR, if PS:00xx)
			Nosync=1 : Dmode change immediately
			Dmode=0 : Display engine will be clocked by DOTCLK pin and onchip oscillator will be off (POR, if PS:00xx)
10	00	00	
07	00	33	
0C	00	05	
30	0	0	
31	3	2	
32	4	7	
33	3	3	
34	0	0	
35	6	3	Gamma Setting
36	7	7	
37	6	0	
3A	10	0	
3B	10	3	
0D	0	0d	
0E	31	0	
15	0	58	

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