1.45' watch(272RGB x 340)

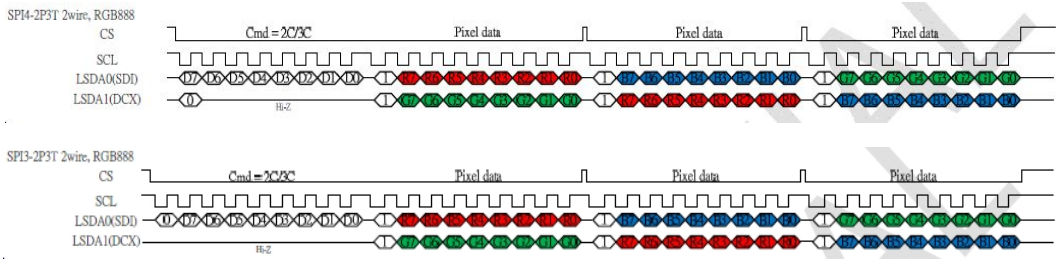
INPUT TIMING

VCLK Active Edge	Video data is fetched at rising edge
Horizontal resolution	272
HBP	20
HFP	40
HSW	2
HS polarity	Inverted(active low)
Vertical resolution	340
VBP	18
VFP	18
VSW	2
VS polarity	Inverted(active low)
VDEN polarity	Normal(active high)

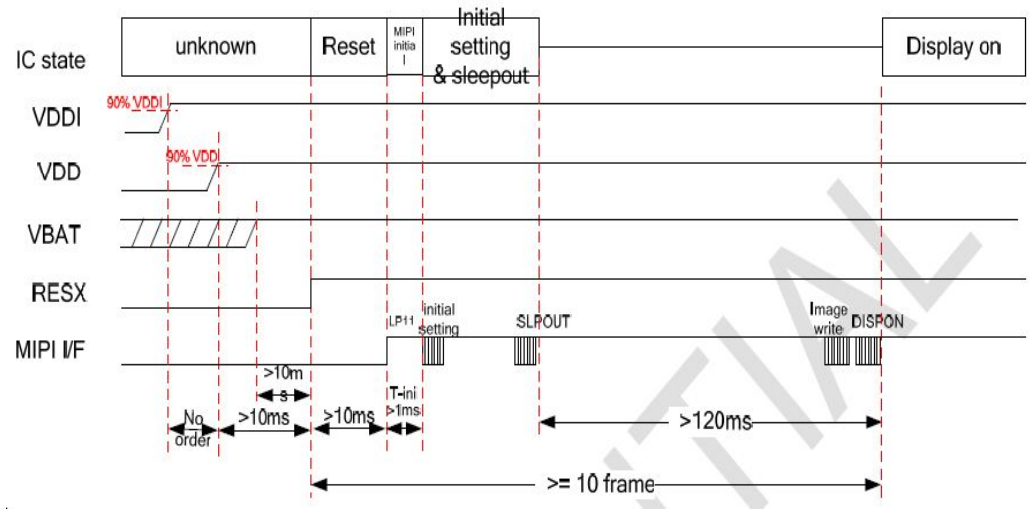
POWER DESCRIPTION

VCI	2.8V
VDDIO	1.8V
ELVSS	-3.0V
ELVDD	4.6V
AVDD	6.4V

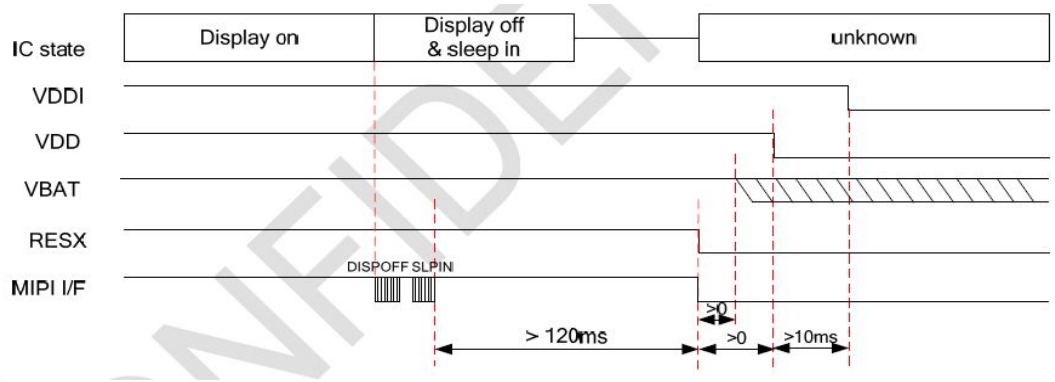
DUAL SPI 协议



power on sequence



power off sequence



1.45 WATCH Initial code

step	Instruction/ Parameter	Delay times	R/W	mipi data type	address		data	备注
					mipi	others		
1	IC frame rate control		w	0x39	0xFE	0xFE40	0x01	
					0x05	0x0540	0x40	
					0x06	0x0640	0x55	
					0x10	0x1040	0x71	
					0x0E	0x0E40	0x80	
					0x0F	0x0F40	0x80	
					0x19	0x1940	0x55	
					0x18	0x1840	0x88	
					0x1A	0x1A40	0x10	
					0x1C	0x1C40	0x77	
					0x1D	0x1D40	0x03	
					0x23	0x2340	0x21	
					0x21	0x2140	0x40	
					0x22	0x2240	0x'b7	
					0x25	0x2540	0x05	
					0x26	0x2640	0xFC	
					0x2A	0x2A40	0x25	
					0x2B	0x2B40	0xFC	
					0x70	0x7040	0xFF	
2	VSR Command		w	0x39	0xFE	0xFE70	0x04	
					0x5D	0x5D70	0x10	
					0x5A	0x5A70	0xFF	
3	VSR1 Timing Set		w	0x39	0xFE	0xFE70	0x04	
					0x00	0x0070	0xCC	
					0x01	0x0170	0x00	
					0x02	0x0270	0x02	
					0x03	0x0370	0x00	
					0x04	0x0470	0xA8	
					0x05	0x0570	0x01	
					0x06	0x0670	0x8E	
					0x07	0x0770	0xFC	
					0x08	0x0870	0x05	

4	VSR2 Timing Set		w	0x39	0xFE	0xFE70	0x04	
					0x09	0x0970	0xCC	
					0x0A	0x0A70	0x00	
					0x0B	0x0B70	0x04	
					0x0C	0x0C70	0x00	
					0x0D	0x0D70	0x80	
					0x0E	0x0E70	0x02	
					0x0F	0x0F70	0x01	
					0x10	0x1070	0x00	
					0x11	0x1170	0x05	
5	VSR3 Timing Set		w	0x39	0xFE	0xFE70	0x04	
					0x12	0x1270	0x8C	
					0x13	0x1370	0x00	
					0x14	0x1470	0x02	
					0x15	0x1570	0x01	
					0x16	0x1670	0x08	
					0x17	0x1770	0x00	
					0x18	0x1870	0x8E	
					0x19	0x1970	0x36	
					0x1A	0x1A70	0x05	
6	VSR4 Timing Set		w	0x39	0xFE	0xFE70	0x04	
					0x1B	0x1B70	0xCC	
					0x1C	0x1C70	0x00	
					0x1D	0x1D70	0x02	
					0x1E	0x1E70	0x00	
					0x1F	0x1F70	0x08	
					0x20	0x2070	0x00	
					0x21	0x2170	0x8E	
					0x22	0x2270	0x00	
					0x23	0x2370	0x05	
7	VSR5 Timing Set		w	0x39	0xFE	0xFE70	0x04	
					0x24	0x2470	0xCC	
					0x25	0x2570	0x00	
					0x26	0x2670	0x02	
					0x27	0x2770	0x00	
					0x28	0x2870	0x08	
					0x29	0x2970	0x01	
					0x2A	0x2A70	0x8E	
					0x2B	0x2B70	0x42	
					0x2D	0x2D70	0x05	
8	VSR6 Timing Set		w	0x39	0xFE	0xFE70	0x04	
					0x2F	0x2F70	0x8C	
					0x30	0x3070	0x00	
					0x31	0x3170	0x01	
					0x32	0x3270	0x03	
					0x33	0x3370	0x00	
					0x34	0x3470	0x00	
					0x35	0x3570	0x01	
					0x36	0x3670	0x43	
					0x37	0x3770	0x05	

9	VSR7 Timing Set		w	0x39	0xFE	0xFE70	0x04	
					0x38	0x3870	0xCC	
					0x39	0x3970	0x00	
					0x3A	0x3A70	0x02	
					0x3B	0x3B70	0x00	
					0x3D	0x3D70	0x20	
					0x3F	0x3F70	0x01	
					0x40	0x4070	0xA4	
					0x41	0x4170	0x57	
					0x42	0x4270	0x05	
10	VSR8 Timing Set		w	0x39	0xFE	0xFE70	0x04	
					0x43	0x4370	0xCC	
					0x44	0x4470	0x00	
					0x45	0x4570	0x04	
					0x46	0x4670	0x00	
					0x47	0x4770	0x00	
					0x48	0x4870	0x00	
					0x49	0x4970	0x01	
					0x4A	0x4A70	0x00	
					0x4B	0x4B70	0x05	
11	VSR Timing Set		w	0x39	0xFE	0xFE70	0x04	
					0x4C	0x4C70	0x88	
					0x4D	0x4D70	0x00	
					0x4E	0x4E70	0x01	
					0x4F	0x4F70	0x08	
					0x50	0x5070	0x01	
					0x51	0x5170	0x8E	
					0x52	0x5270	0x36	
12	Mux SWitch Timing command		w	0x39	0xFE	0xFE40	0x01	
					0x3A	0x3A40	0x00	
					0x3B	0x3B40	0x00	
					0x3D	0x3D40	0x10	
					0x3F	0x3F40	0x2F	
					0x40	0x4040	0x10	
					0x41	0x4140	0x0A	
					0x37	0x4240	0x10	
13	VSR Marping command		w	0x39	0xFE	0xFE70	0x04	
					0x5E	0x5E70	0x30	
					0x5F	0x5F70	0x32	
					0x60	0x6070	0x84	
					0x61	0x6170	0x76	
					0x62	0x6270	0x51	
14	ELVSS VOLTAGE SET		w	0x39	0xFE	0xFE80	0x05	power IC STAM1332 :0x05=0x11 power IC STAM1330
					0x05	0x5E80	0x11	
					0x2A	0x5F80	0x00	
					0x91	0x6080	0x00	

15	SW Mapping		w	0x39	0xFE	0xFE40	0x01	
					0x42	0x4240	0x33	
					0x43	0x4340	0x22	
					0x44	0x4440	0x11	
					0x45	0x4540	0x66	
					0x46	0x4640	0x55	
					0x47	0x4740	0x44	
					0x4C	0x4C40	0x33	
					0x4D	0x4D40	0x22	
					0x4E	0x4E40	0x11	
					0x4F	0x4F40	0x66	
					0x50	0x5040	0x55	
					0x51	0x5140	0x44	
					0x56	0x5640	0x11	
					0x58	0x5840	0x22	
					0x59	0x5940	0x33	
					0x5A	0x5A40	0x44	
					0x5B	0x5B40	0x55	
					0x5C	0x5C40	0x66	
					0x61	0x6140	0x11	
					0x62	0x6240	0x22	
					0x63	0x6340	0x33	
					0x64	0x6440	0x44	
					0x65	0x6540	0x55	
					0x66	0x6640	0x66	
16			w	0x39	0xFE	0xFE00	0x00	
					0x35	0x3500	0x00	
17	sleep out		w	0x39	0x11	0x1100		
18	delay(ms)	120						
19	display on		w	0x39	0x29	0x2900		

send format: send cmd,data.

Example: send 0xFE,0x04
0x4C,0x88

address		data
mipi	other	
0xFE	0xFE70	0x04
0x4C	0x4C70	0x88