

3. Application

This specification is applied to the 5.7 inch QVGA supported TFT-LCD module, and can display true 262,144 colors(6 bit/ color). The module is designed for OA, Car TV application and other electronic products which require flat panel display of digital signal interface. This module is composed of a 5.7" TFT-LCD panel, a driver circuit and LED backlight unit and used as the input devices for general electric appliances via both finger and pen-entry.

4. Features

- QVGA (320×240 pixels) resolution.
- Digital 18 bit parallel RGB.
- Line inversion mode with stripe type.
- Both DE mode and SYNC mode are supported for digital RGB input data format.
- Transparent Touch panel
 - 4-Wire
 - Analog Resistive

5. General Specifications

Item	Specifications	Unit
Screen Size	5.7 (Diagonal)	inch
Display Format	320RGB(H)×240(V)	dot
Active Area	115.2(H)×86.4(V)	mm
Dot Size	0.120(H)×0.360(V)	mm
Pixel Configuration	RGB Vertical Stripe	-
Display Mode	TN Type Transmissive Mode Normally White	-
Surface Treatment	Anti-Glare	-
Viewing Direction	12 O'clock	-
Outline Dimension	144.0(W)×104.6(H)×14.5(D)	mm
Weight	(250)	g

10. Interface Timing

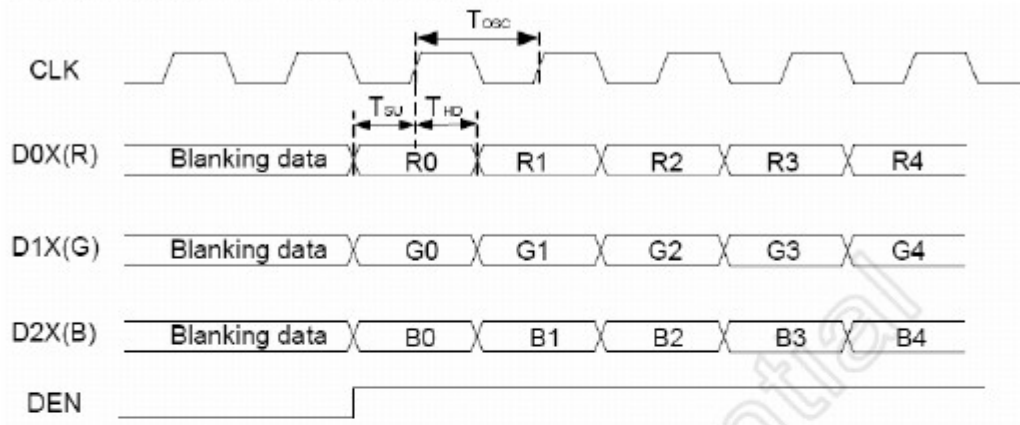
10.1 Input Signal Characteristics

PARAMETER	Symbol	Min.	Typ.	Max.	Unit	
CLK period	T_{OSC}	-	156	-	ns	
Data setup time	T_{SU}	12	-	-	ns	
Data hold time	T_{HD}	12	-	-	ns	
IHS period	T_H	-	408	-	T_{OSC}	
IHS pulse width	T_{HS}	5	30	-	T_{OSC}	
IHS setup time	T_{Cr}	12	-	-	ns	
IHS hold time	T_{Cf}	12	-	-	ns	
IVS pulse width	T_{VS}	1	3	5	T_H	
IVS setup time	T_{Vr}	12	-	-	ns	
IVS hold time	T_{Vf}	12	-	-	μs	
IVS-DEN time	NTSC	T_{VSE}	-	18	-	T_H
	PAL	T_{VSE}	-	26	-	T_H
IHS-DEN time	T_{HE}	36	68	88	T_{OSC}	
DEN pulse width	T_{EP}	-	320	-	T_{OSC}	
DEN-STH time	T_{DES}	-	1	-	T_{OSC}	
IVS period	NTSC	-	-	262.5	-	T_H
	PAL	-	-	312.5	-	T_H

Note: When SYNC mode is used, 1st data start from 68th CLK after IHS falling.

10.2 Waveform

10.2.1 Clock and Data Waveform



10.2.2 Clock and Sync waveforms

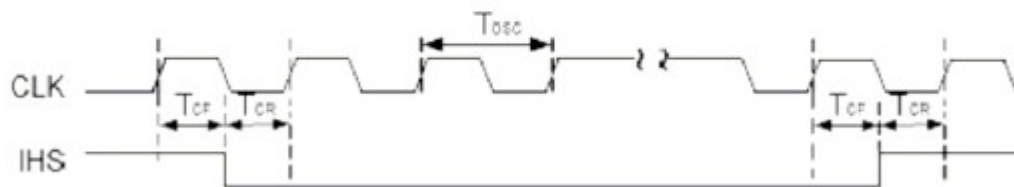
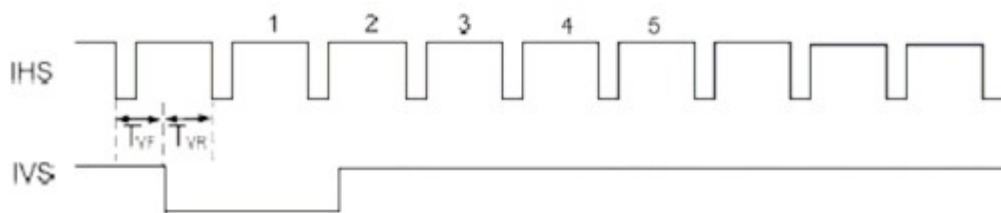
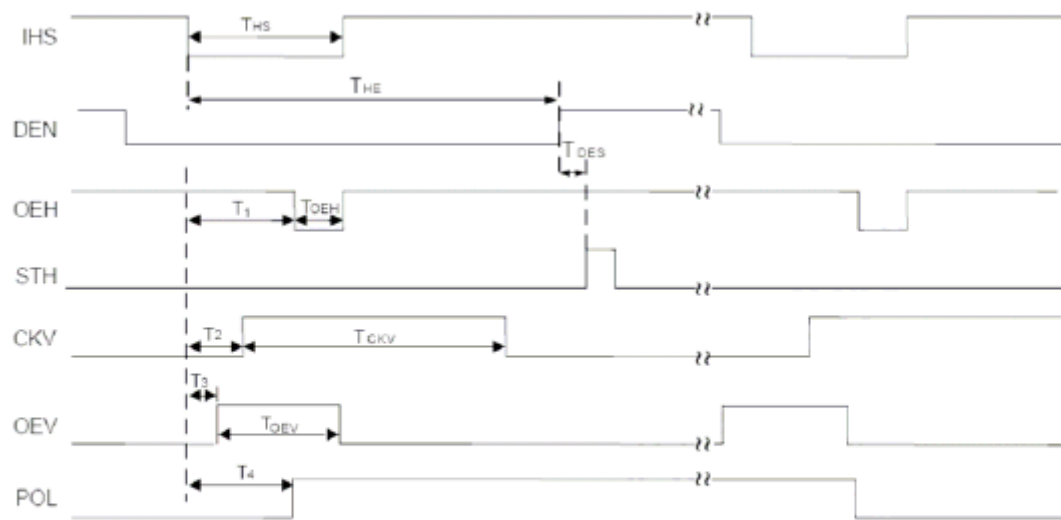


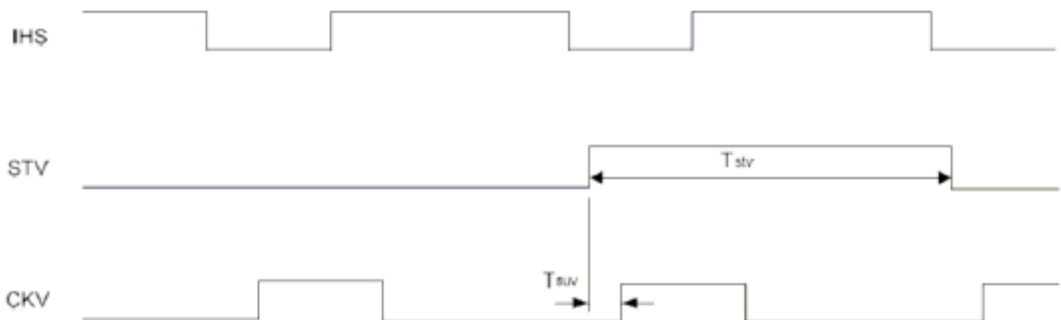
Figure 8. 6 CLK and IHS timing waveform



10.2.3 IHS and horizontal control timing waveforms



10.2.4 IHS and vertical shift clock timing waveforms



10.2.5 IHS and vertical control timing waveforms

