SPECIFICATIONS

FOR

LCD MODULE

Customer: _____

Model name: 800480F-0B-0A

Description: LIQUID CRYSTAL DISPLAY MODULE

Date: 2010-06-08

CUSTOMER APPROVAL

Customer Approval	☐ Accept ☐ Reject comment: Approved by: _____

SUPPLIER APPROVAL

APPROVED	CHECKED	ORGANIZED

1、OTHERS：

APPROVAL FOR SPECIFICATIONS ONLY

APPROVAL FOR SPECIFICATIONS AND SAMPLE

NOTE: VERSION OF SPECIFICATIONS: 00

2、 OTHERS:

History of revision

Revision	Contents	Date	Note
01	**New Revision**	2010-06-08	1.0

CONTENTS PAGE

1. Introduction And General Specifications

Liquid crystal Displays (LCDS) have widely used in many applications such as industrial measurements, office mechanisms, and household electronic–equipment etc. LCM (LCD Module) integrates with LCD and driving circuit that is easily to be interfaced by user. This LCM contains a standard built-in dot –matrix font set.

1.1Applications of LCM

Telephone
Facsimile mechanism
Electronic Typewriter
Word processor
Electronic memo pads
Remote controller

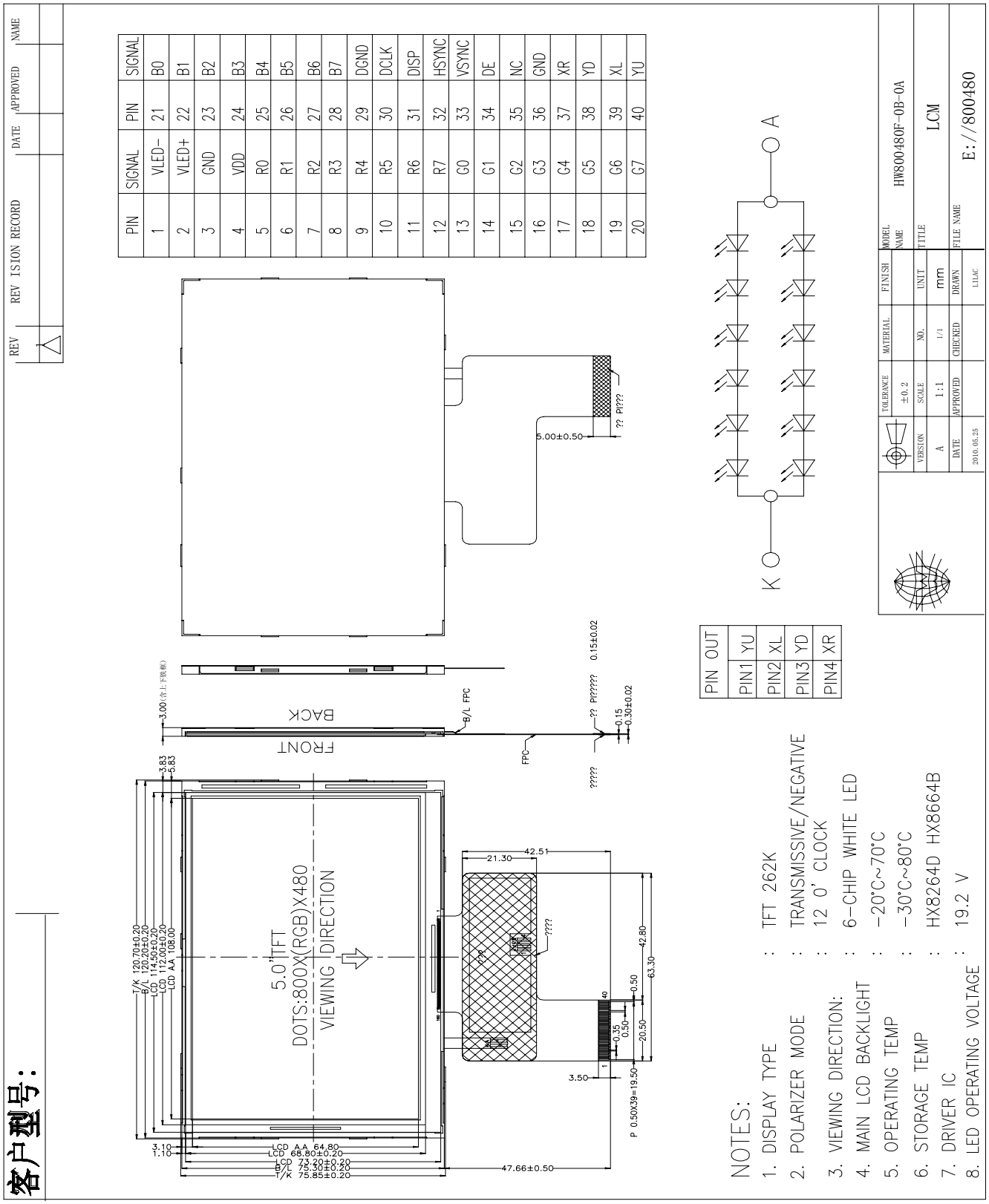
1.2 Features of LCM

Compact, thin and light
Wide view angle
Low power consumption
High contrast image
Wide operating temperature
High reliability

1.2 General specification

Parameter	Value	Unit
Display Mode	Normal white TN	-
Display Resolution	800*RGB*480	pixels
Pixel Arrangement	RGB-stripe	-
Viewing Direction	12 o' clock	
Display Mode	Normally white	
IC Package Type	COG	-
MPU Interface	24-bit parallel RGB interface	-
Power Supply Voltage	2.8~3.3	V
Back-light	White LED*12	pcs

2. LCD&LCM Outline Drawing

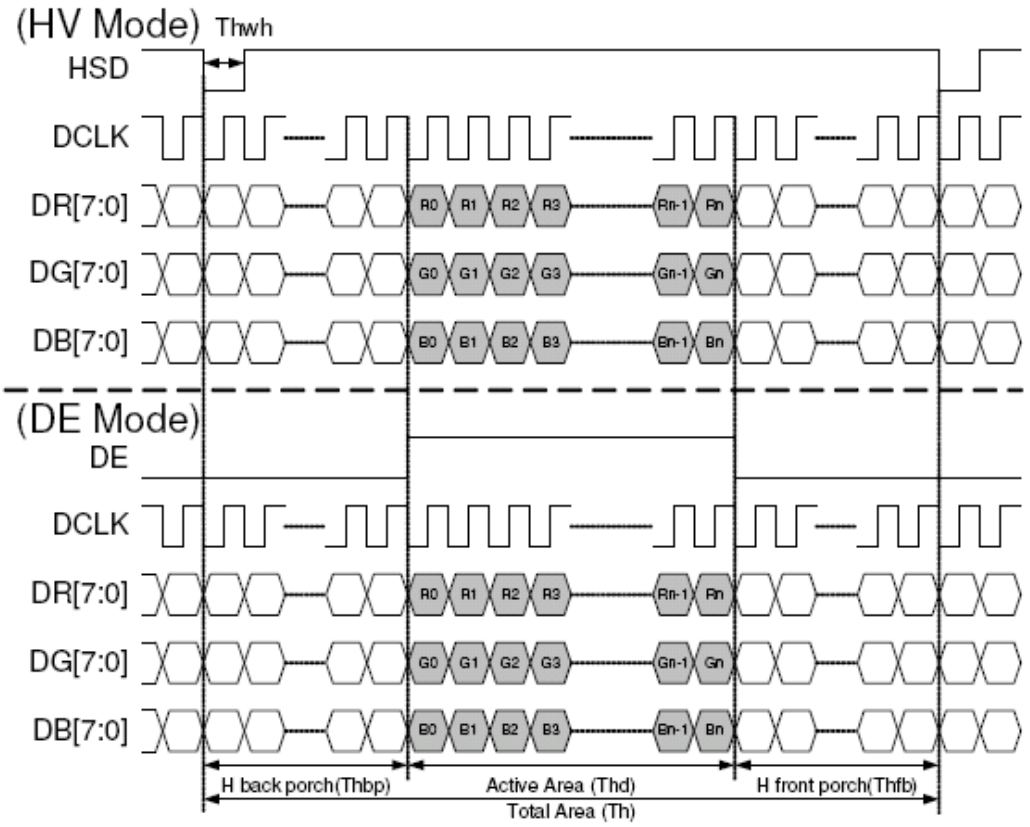


3. 24-bit Interface pin Connections Circuit Block Diagram

PIN NO.	SYMBOL	DESCRIPTION
1	VLED-	Backlight LED power supply (cathode)
2	VLED+	Backlight LED power supply (Anode)
3	GND	Ground
4	VDD	Power Supply
5-12	R0-R7	Red data bit line,(对于16bpp显示模式，RGB=5:6:5时， R0-R2: NC, R7为高位).
13-20	G0-G7	Green data bit line, (对于 16bpp 显示模式，RGB=5:6:5 时，G0-G1: NC, G7 为高位).
21-28	B0-B7	Blue data bit line, (对于16bpp显示模式，RGB=5:6:5时，B0-B2: NC, B7为高位).
29	GND	Ground
30	DCLK	Clock signal, The input data is latched on the rising edge of CLK.
31	DISP	Display on/off
32	HSYNC	In esternal interface mode, served as a horizontal synchronizing signal input;
33	VSYNC	In external interface mode , served as a vertical synchronizing signal input;
34	DE	Data Enable
35	NC	Not Connected
36	GND	Ground
37	XR	Touch panel XR
38	YD	Touch panelYD
39	XL	Touch panel XL
40	YU	Touch panel YU

4. 24-bit parallel RGB interface

Parallel RGB Mode Data format



Resolution: 800x480

- **Horizontal timing**

Parameter	Symbol	Spec.			Unit
		Min.	Typ.	Max.	
Horizontal Display Area	thd	-	800	-	DCLK
DCLK frequency	fclk	-	33.3	50	MHz
One Horizontal Line	th	-	928	-	DCLK
HS pulse width (Min.)	thpw	-	1	-	DCLK
HS pulse width (Typical.)	thpw	-	48	-	DCLK
HS pulse width (Max.)	thpw		-		DCLK
HS Back Porch (Blanking)	thb	-	88	-	DCLK
HS Front Porch	thfp	-	40	-	DCLK
DE mode Blanking	th-thd	85	128	-	DCLK

- **Vertical timing**

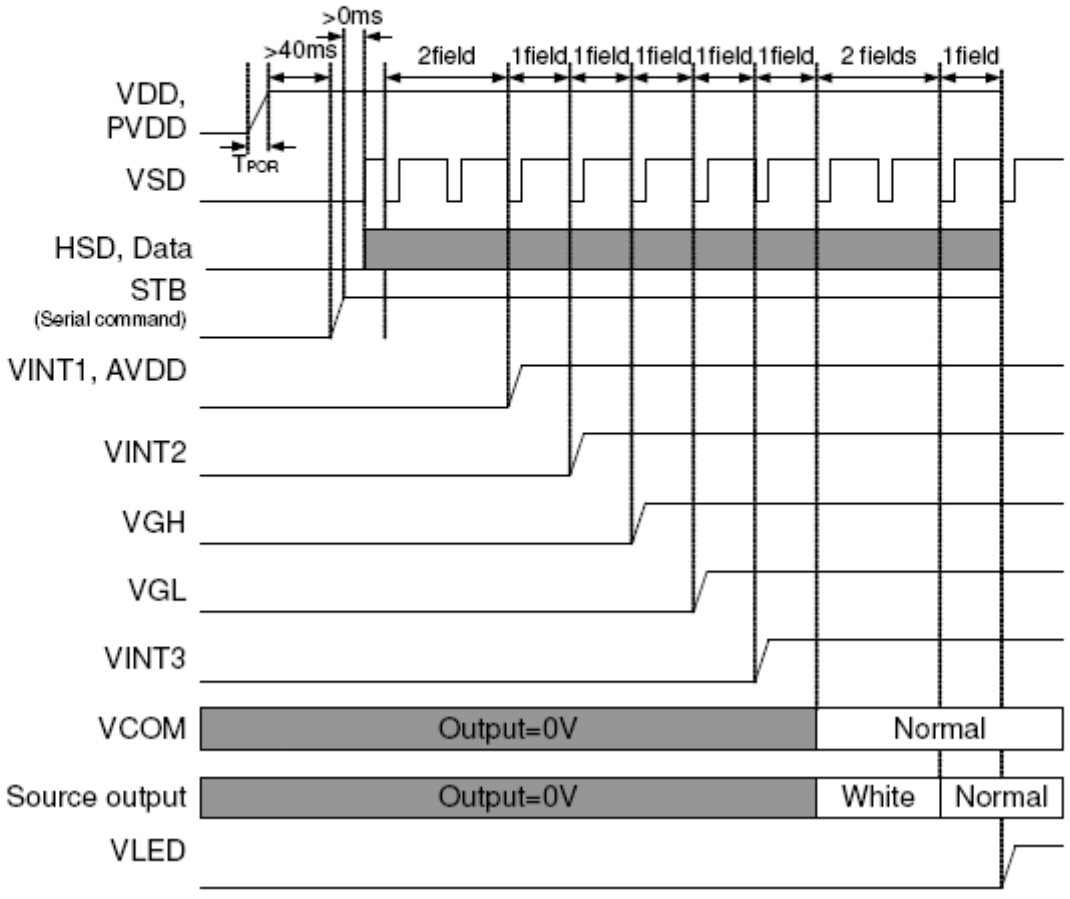
Parameter	Symbol	Spec.			Unit
		Min.	Typ.	Max.	
Vertical Display Area	tvd	-	480	-	T_H
VS period time	tv	-	525	-	T_H
VS pulse width	tvpw	-	3	-	T_H
VS Back Porch (Blanking)	tvb	-	32	-	T_H
VS Front Porch	tvfp	-	13	-	T_H

5. Power sequence

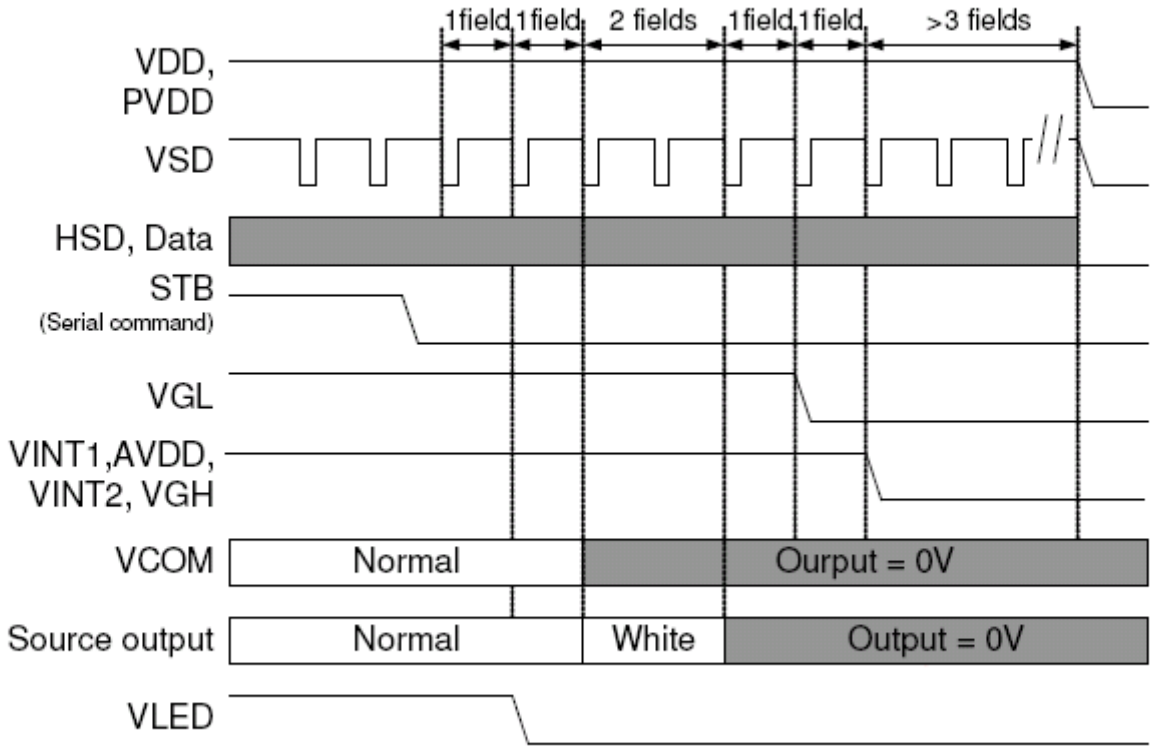
Power on/off sequence:

This IC is a high-voltage LCD driver, so it may be damaged by a large current flow if an incorre power sequence is used. Connecting the drive powers, VEE & VGG, after the logical power, VCC, is recommended sequence. When shutting off the power, first shut off the drive power and then the lo system or turn off all power simultaneously.

■ **Power on sequence**



■ **Power off sequence**



6. **Notice packing method**

Pack the products so that they may not touch each other.
Put the inner cartons containing module into outer carton.
Attach the display label on the visible location on the outer carton.