

# ***2 Bit Micro, LLC.***



## **SPECIFICATION**

**PART NUMBER:** 2BM-10005

<b>SALES BY</b>	<b>APPROVED BY</b>	<b>CHECKED BY</b>	<b>PREPARED BY</b>

**ISSUE DATE:**

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## **2.Precautions in use of LCD Modules**

- (1) Avoid applying excessive shock to the module or making any alterations or modifications to it.
- (2) Don't make extra holes in the printed circuit board, modify its shape or change the components of LCD module.
- (3) Don't disassemble the LCM.
- (4) Don't operate it beyond the absolute maximum rating.
- (5) Don't drop, bend or twist LCM.
- (6) Storage: please store in an ESD safe container and clean environment.

## **3.General Specification**

Item	Dimension	Unit
Logical Dimensions	240 x RGB x 400 pixels	—
Module dimension	77.0 x 45.04 x 14.7(MAX)	mm
Active area	38.88 x 64.80	mm
Dot size	0.162 (W) x 0.162 (H)	mm
Dot pitch	0.162 (W) x 0.162 (H)	mm
LCD type	TFT, Crystalfontz part number CFAF240400D-030T	
View direction	12 o'clock	
Backlight Type	LED, White	

## **4.Absolute Maximum Ratings**

Item	Symbol	Min	Typ	Max	Unit
Operating Temperature	T <sub>OP</sub>	-20	—	+70	°C
Storage Temperature	T <sub>ST</sub>	-30	—	+80	°C
Input Voltage	V <sub>I</sub>	0	—	V <sub>DD</sub>	V
Supply Voltage For Logic	V <sub>DD</sub>	0	—	3.5	V

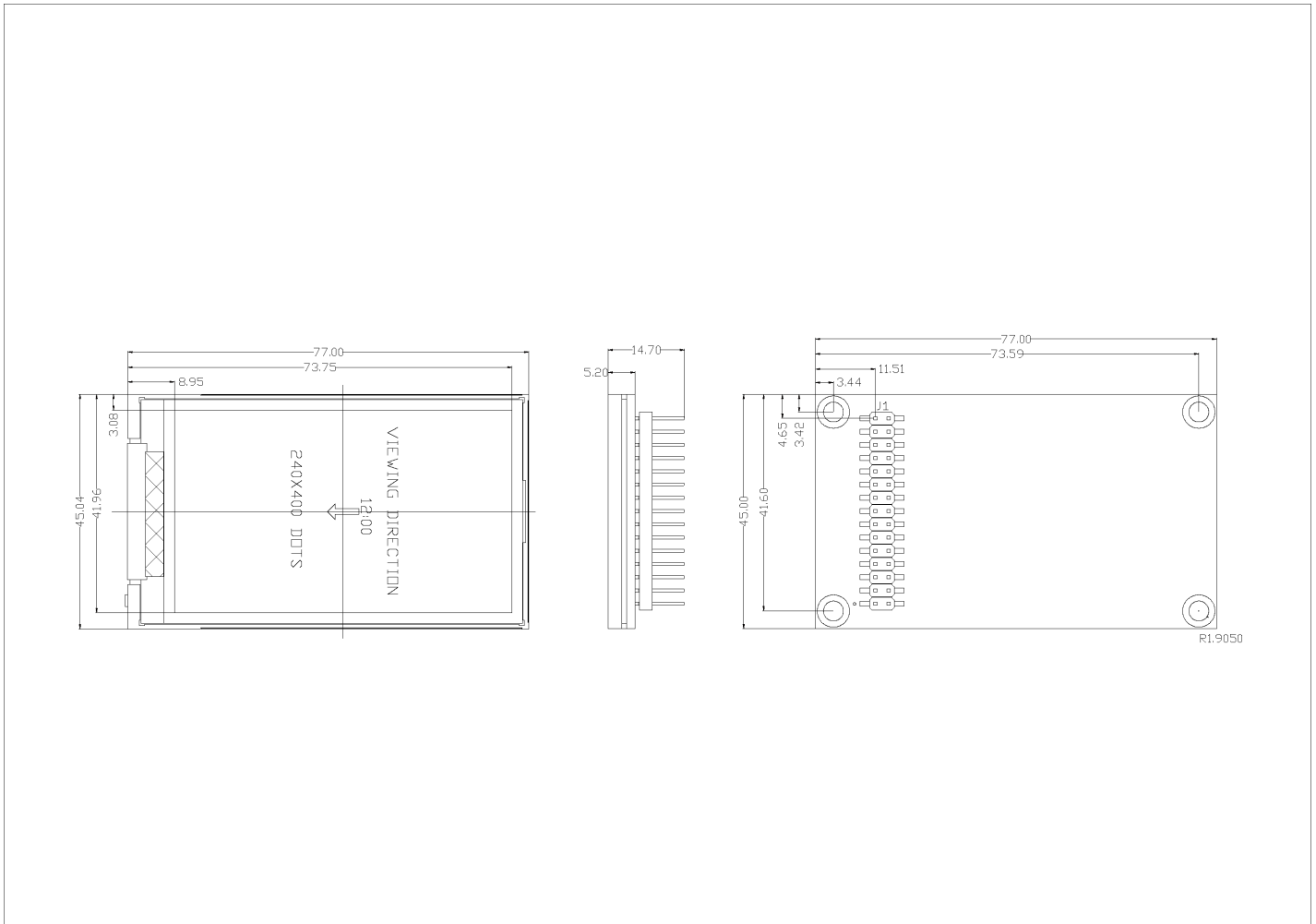
## **5.Electrical Characteristics**

Item	Symbol	Condition	Min	Typ	Max	Unit
Supply Voltage For Logic	V <sub>DD</sub>	—	3	3.3	3.5	V
Input High Volt.	V <sub>IH</sub>	—	0.7V <sub>DD</sub>	—	V <sub>DD</sub>	V
Input Low Volt.	V <sub>IL</sub>	—	0	—	0.3V <sub>DD</sub>	V
Output High Volt.	V <sub>OH</sub>	—	2.4	—	—	V
Output Low Volt.	V <sub>OL</sub>	—	—	—	0.4	V
Supply Current	I <sub>DD</sub>	V <sub>DD</sub> =3.3V	—	85	—	mA

## **6.Interface Description**

Pin No.	Symbol	Level	Description
1	Power ( $V_{dd}$ )	3.3V	Power supply for logic
2	GND ( $V_{ss}$ )	0V	Ground
3	DB08	H/L	Data bus
4	DB17	H/L	Data bus
5	DB07	H/L	Data bus
6	DB16	H/L	Data bus
7	DB06	H/L	Data bus
8	DB15	H/L	Data bus
9	DB05	H/L	Data bus
10	DB14	H/L	Data bus
11	DB04	H/L	Data bus
12	DB13	H/L	Data bus
13	DB03	H/L	Data bus
14	DB12	H/L	Data bus
15	DB02	H/L	Data bus
16	DB11	H/L	Data bus
17	DB01	H/L	Data bus
18	DB10	H/L	Data bus
19	DB00	H/L	Data bus
20	DB09	H/L	Data bus
21	/RESET	H/L	Low → Reset
22	IM0 (ID)	H/L	Interface select pin
23	IM1 (IM0)	H/L	Interface select pin
24	IM2 (IM1)	H/L	Interface select pin
25	/RD	H/L	Low → Read strobe signal, active low
26	/WR	H/L	Low → Write Strobe signal, active low
27	RS	H/L	High → Data, Low → Command
28	/CS	H/L	Chip select, active low, serial and parallel interfaces
29	/BL_SHUTDOWN	H/L	High → Backlight Enabled, Low → Backlight Disabled
30	NC	H/L	No Connect

## 7. Outline Drawing



<b>2 Bit Micro, LLC.</b>	Title: 2BM-10005 Outline Drawing	SCALE: 1:1	DRAWN BY: Brian	DRAWING NUMBER: 2BM10005_v01	HARDWARE REV: v0.1
		UNITS: Millimeters	Copyright 2011 2 Bit Micro, LLC.	DATE: 2011/04/17	SHEET: 1 of 1

## 8. Functional Description

See <http://www.crystalfontz.com/product/CFAF240400D030T#docs> for the full functional details for the display and display controller.

## 9. Appendix: Controller Datasheet