## 1. Scope

This data sheet is to introduce the specification of DLC0700BWM27RT-2 active matrix TFT module. It is composed of a color TFT-LCD panel, driver IC, FPC and a backlight unit. The 7.0″ display area contains 800 (RGB) x 480 pixels.

## 2. Application

Digital equipments which need color display outdoor, mobile navigator/video systems.

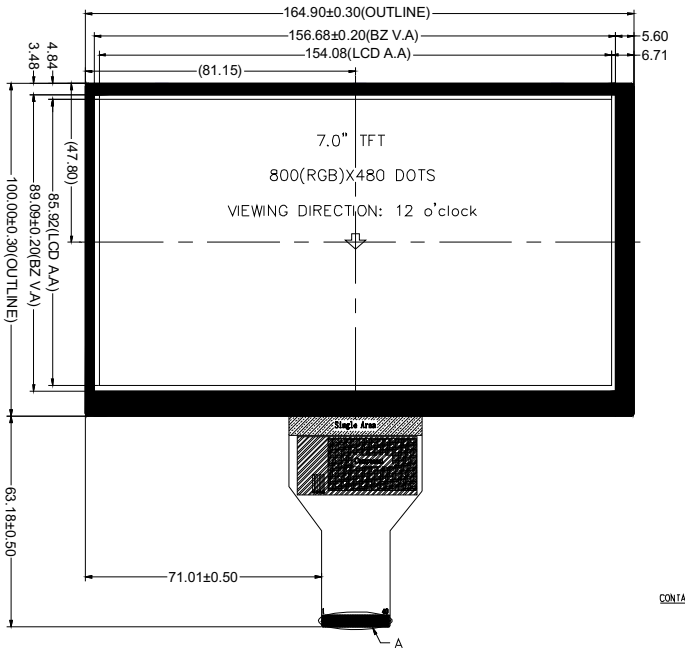
## 3. General Information

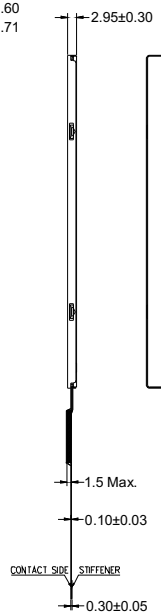
| Item | Contents | Unit |
|---|---|---|
| Size | 7.0 | inch |
| Resolution | 800(RGB) X 480 | / |
| Interface | Parallel 24-bit RGB | / |
| Technology type | a-Si TFT | / |
| Pixel pitch | 0.1926 x 0.1790 | mm |
| Pixel Configuration | R.G.B. Vertical Stripe | |
| Outline Dimension (W x H x D) | 164.90 x 100.00 x 2.95 | mm |
| Active Area | 154.08 x 85.92 | mm |
| Display Mode | Transmissive/POSITIVE | / |
| Display Driver IC | EK9713CA/EK73002ACGB | / |
| Viewing Direction | 12 o’clock | / |
| Backlight Type | LED | / |
| Weight | TBD | g |

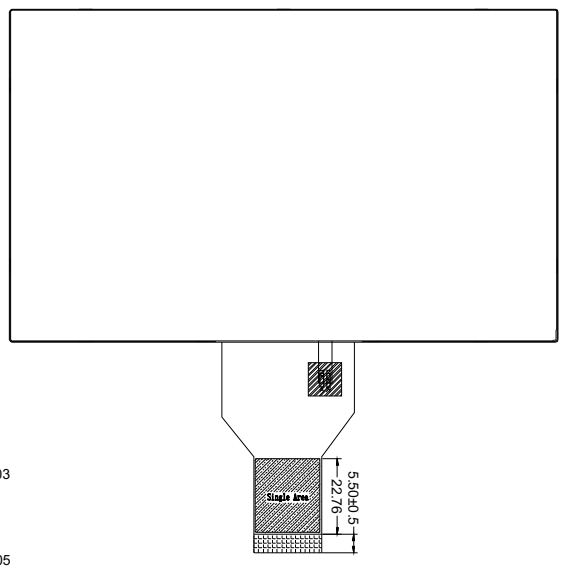
## 4. Outline Drawing

CUSTOMER P/N:

| Rev. | DATA | NOTES |
|---|---|---|
| V1.0 | 2017.12.25 | New issue |
| V1.1 | 2018.07.24 | Change the shape of the drawing;<br>Add the drive IC model |

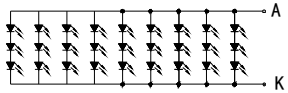


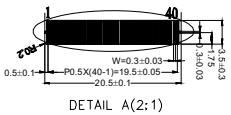




| PIN | SYMBOL |
|---|---|
| 1 | LEDK |
| 2 | LEDA |
| 3 | GND |
| 4 | VDD |
| 5 | R0 |
| 6 | R1 |
| 7 | R2 |
| 8 | R3 |
| 9 | R4 |
| 10 | R5 |
| 11 | R6 |
| 12 | R7 |
| 13 | G0 |
| 14 | G1 |
| 15 | G2 |
| 16 | G3 |
| 17 | G4 |
| 18 | G5 |
| 19 | G6 |
| 20 | G7 |
| 21 | B0 |
| 22 | B1 |
| 23 | B2 |
| 24 | B3 |
| 25 | B4 |
| 26 | B5 |
| 27 | B6 |
| 28 | B7 |
| 29 | GND |
| 30 | CLK |
| 31 | DISP |
| 32 | HSYNC |
| 33 | VSYNC |
| 34 | DEN |
| 35 | NC |
| 36 | GND |
| 37 | XR (NC) |
| 38 | YD (NC) |
| 39 | XL (NC) |
| 40 | YU (NC) |

Backlight Diagram:




Vf=9.3±0.6V. If=180mA




DETAIL A(2:1)

NOTES:
1. DISPLAY TYPE: 7.0" TFT
2. DISPLAY MODE: Transmissive,POSITIVE
3. VIEW DIRECTION: 12 o'clock
4. OPERATION TEMPERATURE: −20°C~+70°C
   STORAGE TEMPERATURE: −30°C~+80°C
5. GENERAL TOLERANCE: ±0.2
6. DISPLAY DRIVER IC: EK9713CA/EK73002ACGB
7. REQUIREMENT ON ENVIRONMENT PROTECTION: ROHS

first FC components

| | |
|---|---|
| Drawn: | Lucien |
| Checked: | |
| Approved: | |
| Critical Dim. | |
| Reference Dim. | ( ) |

DLC Display Co., Ltd

| | | | |
|---|---|---|---|
| Title | TFT LCM OUTLINE | Unit | mm |
| Part No. | DLC0700BWM27RT-2 | Scale | 1:1 |
| Revison | V1.1 | Page | 1/1 |
| Date | 2018-07-24 | 3rd Angle | |

## 5. Interface signals

| No | Symbol | Description | Remarks |
|---|---|---|---|
| 1 | LEDK | Power for LED Backlight Cathode | |
| 2 | LEDA | Power for LED Backlight Anode | |
| 3 | GND | Power ground | |
| 4 | VDD | Power supply | |
| 5~12 | R0~R7 | Red data | |
| 13~20 | G0~G7 | Green data | |
| 21~28 | B0~B7 | Blue data | |
| 29 | GND | Power ground | |
| 30 | CLK | Sample clock | |
| 31 | DISP | Display on/off | |
| 32 | HSYNC | Horizontal sync signal | |
| 33 | VSYNC | Vertical sync signal | |
| 34 | DE | Data enable | |
| 35 | NC | No connect | |
| 36 | GND | Power ground | |
| 37 | XR(NC) | Touch panel pin, No connection | |
| 38 | YD(NC) | Touch panel pin, No connection | |
| 39 | XL(NC) | Touch panel pin, No connection | |
| 40 | YU(NC) | Touch panel pin, No connection | |

Note: The recommended connector: FH12A-40S-0.5SH.

## 6. Absolute maximum Ratings

### 6.1. Electrical Absolute max. ratings

| Parameter | Symbol | MIN | MAX | Unit | Remark |
|---|---|---|---|---|---|
| Power Supply Voltage | VDD | -0.3 | 6.0 | V | Ta=25° C |
| Input voltage | VI | -0.3 | VCC+0.3 | V | |

### 6.2. Environment Conditions

| Item | Symbol | MIN | MAX | Unit | Remark |
|---|---|---|---|---|---|
| Operating Temperature | TOPR | -20 | 70 | ℃ | |
| Storage Temperature | TSTG | -30 | 80 | ℃ | |