



Ckingway

SPECIFICATION

LCD Number: CKT013W101STN-G03

| | | | |
|----------------------|------------|----------|-------------|
| CUSTOMER APPROVED | PREPARE BY | CHECK BY | APPROVED BY |
| | | | |
| | | | |
| SUPPLIER APPROVED | PREPARE BY | CHECK BY | APPROVED BY |
| | | | |

1. General Specification

| Item | Contents | Unit |
|--------------------------------|------------------|---------|
| LCD TYPE | TFT/TRANSMISSIVE | |
| MODULE SIZE (W*H*T) | 35.90*39.70*1.53 | MM |
| ACTIVE SIZE (W*H) | 23.40*23.40 | MM |
| PIXEL PITCH (W*H) | 0.135*0.135 | MM |
| NUMBER OF DOTS | 240*240 | |
| DRIVER IC | GC9A01A | |
| INTERFACE TYPE | SPI/RGB/MCU | |
| TOP POLARIZER TYPE | ANTI-GLARE | |
| RECOMMEND VIEWING DIRECTION | ALL | O'CLOCK |
| GRAY SCALE INVERSION DIRECTION | - | O'CLOCK |
| BACKLIGHT TYPE | 2-DIES WHITE LED | |
| TOUCH PANEL TYPE | WITHOUT | |

2. Mechanical Drawing

PIN DESCRIPTION

| No | LED | IM1 | IM0 | INTERFACE | READ BACK DATA BUS SELECTION |
|----|-------|-----|------|-----------|------------------------------|
| 1 | LED A | 16 | DBI2 | 31 | DE |
| 2 | NC | 17 | DBI1 | 32 | HSYNC |
| 3 | LEDK | 18 | DBI0 | 33 | VSYNC |
| 4 | NC | 19 | DB09 | 34 | RD |
| 5 | GND | 20 | DB08 | 35 | WR(RS) |
| 6 | GND | 21 | DB07 | 36 | RK(SCL) |
| 7 | VCC | 22 | DB06 | 37 | CS |
| 8 | VCC | 23 | DB05 | 38 | RESET |
| 9 | I0VCC | 24 | DB04 | 39 | IM0 |
| 10 | SDD | 25 | DB03 | 40 | IM1 |
| 11 | DBI7 | 26 | DB02 | 41 | IM2 |
| 12 | DBI6 | 27 | DB01 | 42 | IM3 |
| 13 | DBI5 | 28 | DB00 | 43 | NC |
| 14 | DBI4 | 29 | SDA | 44 | NC |
| 15 | DBI3 | 30 | PCLK | 45 | NC |

| NO | IM2 | IM1 | IM0 | INTERFACE | READ BACK DATA BUS SELECTION |
|----|-----|-----|-----|----------------------------|------------------------------|
| 0 | 1 | 0 | 0 | 80-BIT PARALLEL I/F | DBI(30) |
| 0 | 1 | 0 | 0 | 80-BIT PARALLEL I/F | DBI(30) |
| 0 | 1 | 0 | 1 | 80-BIT PARALLEL I/F | DBI(30) |
| 0 | 1 | 1 | 0 | 80-BIT PARALLEL I/F | DBI(70) |
| 0 | 1 | 1 | 1 | 80-BIT SERIAL I/F | SDAIN/OUT |
| 1 | 1 | 0 | 1 | 4- LINE LANE SERIAL I/F | SDAIN/OUT/ECLKIN |
| 1 | 1 | 1 | 1 | 4- LINE RGB SERIAL I/F | SDAIN/OUT |
| 0 | 0 | 0 | 0 | 80-BIT PARALLEL I/F II | DBI(710) DBR(1) |
| 0 | 0 | 0 | 0 | 80-BIT PARALLEL I/F II | DBI(710) |
| 0 | 0 | 1 | 1 | 80-BIT PARALLEL I/F II | DBI(720) |
| 1 | 0 | 1 | 1 | 8- LINE BRIT SERIAL I/F II | SDAIN/SB00OUT |
| 1 | 0 | 1 | 1 | 8- LINE BRIT SERIAL I/F II | SDAIN/SB00OUT |

Notes: 1? If not use PINfix to the GND,I0VCC or NC.
1? If use RGB interface must select serial interface.

LED A

CIRCUIT DIAGRAM
5.6-6.8V@20MA

| | |
|-----------------------|--------------------------|
| Display Type | I/F, TRANSMISSIVE |
| Upper Planeizer Type | NORMALLY BLACK |
| Viewing Angle | Glare |
| LCD Driver IC | GC9A01A |
| Operating Voltage | VCC=2.8V,I0VCC=1.8V/2.8V |
| Operation Temperature | -20°C TO 70°C |
| Storage Temperature | -30°C TO 80°C |
| Interface | SP/RGB/MCU |
| Backlight | 2-LED White |
| Surface luminance | 450cd/m2 |
| White-X/Y | |

VIEWING DIRECTION ALL

Single

FPC PIN Detail

| | |
|---------------------|-------------------|
| MODULE SPEC. | |
| DRAWING No. | CKT013W101STN-G03 |
| UNIT | mm |
| 3rd Angle | |
| SCALE | FIT |
| SHEET | 1 OF 1 |

深圳市创想华凯科技有限公司
SHENZHEN CKINGWAY TECHNOLOGY CO., LTD

| | | |
|---------------------|----------------|-------------|
| DRAWN | ME.CHECKED | EE.CHECKED |
| | | APPROVED |
| CUSTOMER'S APPROVAL | | |
| V00. | Frist issuance | 2021.06.10A |
| VER. SYMBOL | AMENDMENT | DATE |

3. Interface Pin Function

| Pin No. | Symbol | Description |
|---------|---------|---|
| 1 | LEDA | Anode of LED backlight. |
| 2 | NC | No connection. |
| 3 | LEDK | Cathode of LED backlight. |
| 4 | NC | No connection. |
| 5 | GND | Power ground. |
| 6 | GND | Power ground. |
| 7 | VCC | Supply Voltage. |
| 8 | VCC | Supply Voltage. |
| 9 | IOVCC | IO Voltage. |
| 10 | SDO | Serial output signal. The data is outputted on the falling edge of the SCL signal. |
| 11 | DB17 | Data bus. |
| 12 | DB16 | Data bus. |
| 13 | DB15 | Data bus. |
| 14 | DB14 | Data bus. |
| 15 | DB13 | Data bus. |
| 16 | DB12 | Data bus. |
| 17 | DB11 | Data bus. |
| 18 | DB10 | Data bus. |
| 19 | DB09 | Data bus. |
| 20 | DB08 | Data bus. |
| 21 | DB07 | Data bus. |
| 22 | DB06 | Data bus. |
| 23 | DB05 | Data bus. |
| 24 | DB04 | Data bus. |
| 25 | DB03 | Data bus. |
| 26 | DB02 | Data bus. |
| 27 | DB01 | Data bus. |
| 28 | DB00 | Data bus. |
| 29 | SDA | When IM[3]:Low, Serial in/out signal in 3-wire 9-bit/4-wire 8-bit serial data interface. When IM[3]:High, Serial input signal in 3-wire 9-bit/4-wire 8-bit serial data interface. The data is applied on the rising edge of the SCL signal. |
| 30 | PCLK | Dot clock signal for RGB interface operation. |
| 31 | DE | Data enable signal for RGB interface operation. |
| 32 | HSYNC | Line synchronizing signal for RGB interface operation. |
| 33 | VSYNC | Frame synchronizing signal for RGB interface operation. |
| 34 | RD | 8080-I/8080-II system (RDX): Serves as a read signal and MCU read data at the rising edge. |
| 35 | WR(RS) | 8080-I/8080-II system (WRX): Serves as a write signal and writes data at the rising edge. 4-line system (D/CX): Serves as command or parameter select. |
| 36 | RS(SCL) | This pin is used to select "Data or Command" in the parallel interface. This pin is used serial interface clock in 3-wire 9-bit / 4-wire 8-bit serial data interface. |

| | | |
|----|-------|--|
| 37 | CS | Chip select input pin("Low" enable). |
| 38 | RESET | This signal will reset the device and must be applied to properly initialize the chip. Signal is active low. |
| 39 | IM0 | Select the MCU interface mode |
| 40 | IM1 | Select the MCU interface mode |
| 41 | IM2 | Select the MCU interface mode |
| 42 | IM3 | Select the MCU interface mode |
| 43 | NC | No connection. |
| 44 | NC | No connection. |
| 45 | NC | No connection. |

Note:Select the MCU interface mode MPU Parallel interface bus and serial interface select If use RGB Interface must select serial interface.

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