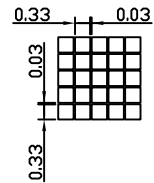
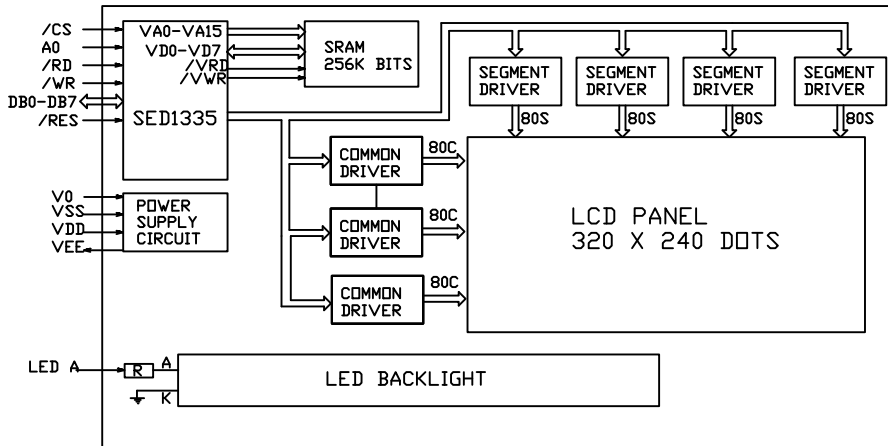
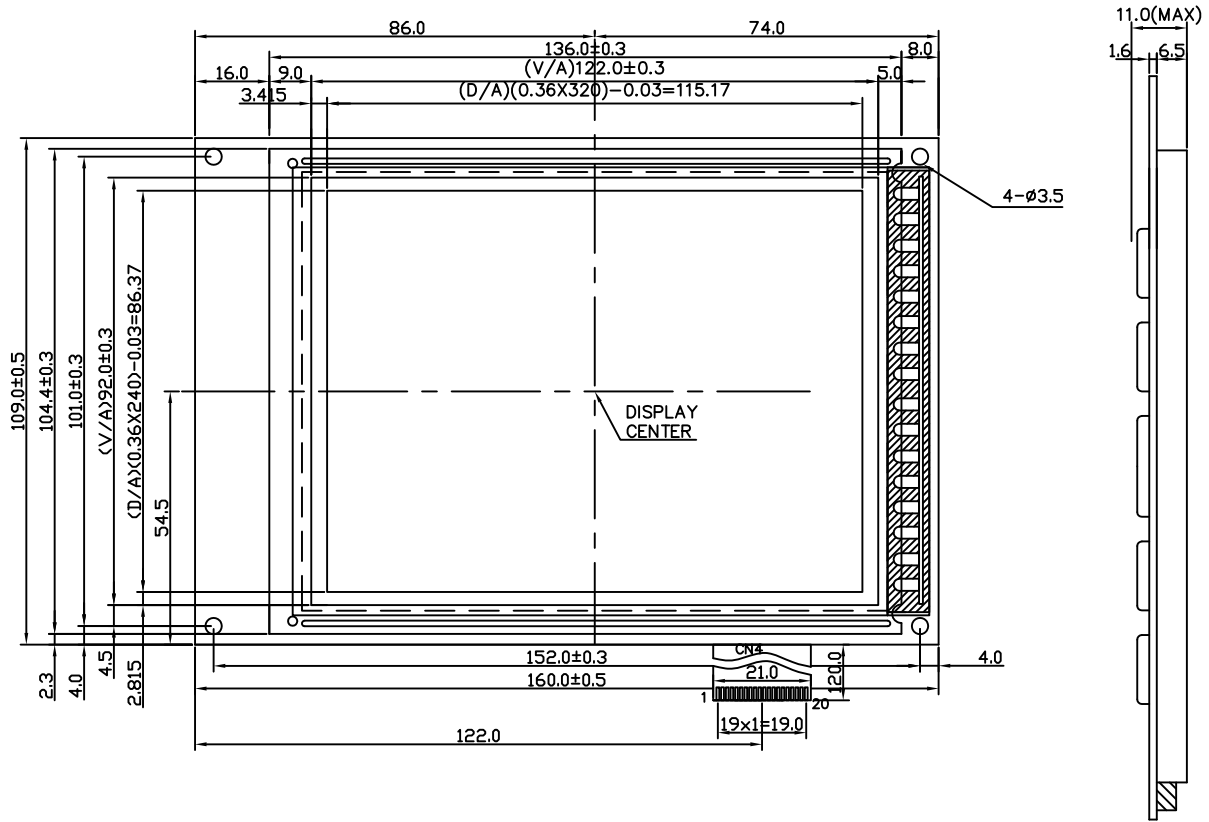


LINK-SUN (HONG KONG) ELECTRONICS LTD

MODEL NO: LSM320240-1



CN1,CN2,CN3(NO SED1335 CONTROLL IC)

| NO | SYMBOL | LEVEL | FUNCTION | NO | SYMBOL | LEVEL | FUNCTION |
|----|-----------|-------|----------------------|----|--------|-------|------------------------------------|
| 1 | D0 | HL | Display Data | 8 | LP | | Data latch |
| 2 | D1 | HL | Display Data | 9 | CP | | Data shift |
| 3 | D2 | HL | Display Data | 10 | VCC | - | Power supply for Logic circuit (+) |
| 4 | D3 | HL | Display Data | 11 | VSS | - | GND(0V) |
| 5 | /DISP OFF | HL | HE on L: off | 12 | VLCD | - | Power supply for LCD(-) |
| 6 | FLM | | First line market | 13 | VADJ | - | Operating voltage LCD driving |
| 7 | M | | Frame reverse signal | 14 | FGND | - | FRAME GROUND |

ELECTRICAL CHARACTERISTICS

| ITEM | SYMBOL | MIN | TYP | MAX | UNIT |
|-----------------------|---------|--------|------|--------|------|
| VOLTAGE FOR LOGIC | VDD-VSS | 3.0 | 5.0 | 7.0 | V |
| SUPPLY CURRENT | IDD | - | 12.0 | - | mA |
| LCD OPERATING VOLTAGE | 0C | - | 19.0 | - | V |
| | 25C | - | 18.0 | - | V |
| | 40C | - | 17.5 | - | V |
| INPUT VOLTAGE | H VIH | 0.3VDD | - | VDD | V |
| | L VIL | 0 | - | 0.3VDD | V |

CN4(WITH SED1335 CONTROLL IC)

| NO | SYMBOL | LEVEL | FUNCTION | NO | SYMBOL | LEVEL | FUNCTION |
|----|--------|-------|-----------------------|----|--------|-------|--------------------------------------|
| 1 | /RES | L | Reset signal | 11 | DB5 | H/L | Data Bit5 |
| 2 | /RD | L | DATA read | 12 | DB6 | H/L | Data Bit6 |
| 3 | /WR | L | DATA Writed | 13 | DB7 | H/L | Data Bit7 |
| 4 | /CS | L | CHIP select | 14 | VDD | - | VDD(+5V) |
| 5 | A0 | H/L | Data/Instruction code | 15 | VSS | - | GND(0V) |
| 6 | DB0 | H/L | Data Bit0 | 16 | VEE | - | Negative voltage input |
| 7 | DB1 | H/L | Data Bit1 | 17 | V0 | - | Contrast Adjust |
| 8 | DB2 | H/L | Data Bit2 | 18 | D/OFF | - | 01 to 004 output control input pins. |
| 9 | DB3 | H/L | Data Bit3 | 19 | N.C | - | No connection |
| 10 | DB4 | H/L | Data Bit4 | 20 | N.C | - | No connection |

MECHANICAL SPECIFICATIONS

| ITEM | SPECIFICATION | UNIT |
|--------------|-------------------------|------|
| OVERALL SIZE | 160.0W x 109.0H x 11.0T | MM |
| VIEWING AREA | 122.0W x 92.0H | MM |
| DOT NUMBER | 320 x 240 | DOTS |
| DOT SIZE | 0.33W x 0.33H | MM |
| DOT PITCH | 0.36W x 0.36H | MM |

OPTIONS

- LCD TYPE: STN,BLUE,1/240 DUTY,1/17 BIAS,6H
- BACKLIGHT: LED
- COLOR OF BACKLIGHT: WHITE
- TEMPERATURE RANGE: NORMAL(-20C-70C)
- POWER SUPPLY: ON BOARD DC/DC(SINGLE 5.0V)
- VIEWING ANGLE: 6H;

CN5(WITH SED1335 CONTROLL IC)

| NO | SYMBOL | LEVEL | FUNCTION | NO | SYMBOL | LEVEL | FUNCTION |
|----|--------|-------|-----------------------|----|--------|-------|------------------------|
| 1 | VSS | - | GND(0V) | 11 | DB4 | H/L | Data Bit4 |
| 2 | VDD | - | VDD(+5V) | 12 | DB5 | H/L | Data Bit5 |
| 3 | V0 | - | Contrast Adjust | 13 | DB6 | H/L | Data Bit6 |
| 4 | /RD | L | DATA read | 14 | DB7 | H/L | Data Bit7 |
| 5 | /WR | L | DATA Writed | 15 | /CS | L | CHIP select |
| 6 | A0 | H/L | Data/Instruction code | 16 | /RES | L | Reset signal |
| 7 | DB0 | H/L | Data Bit0 | 17 | VEE | - | Negative voltage input |
| 8 | DB1 | H/L | Data Bit1 | 18 | FG | - | FRAME GROUND |
| 9 | DB2 | H/L | Data Bit2 | 19 | N.C | - | No connection |
| 10 | DB3 | H/L | Data Bit3 | 20 | N.C | - | No connection |

ABSOLUTE MAXIMUM RATING

| ITEM | SYMBOL | MIN | MAX | UNIT |
|------------------------|---------|-----|------|------|
| POWER SUPPLY(LOGIC) | VDD-VSS | 0 | 7.0 | V |
| POWER SUPPLY(LCD DRV.) | VDD-V0 | 0 | 18.0 | V |
| INPUT VOLTAGE | VI | VI | VDD | V |