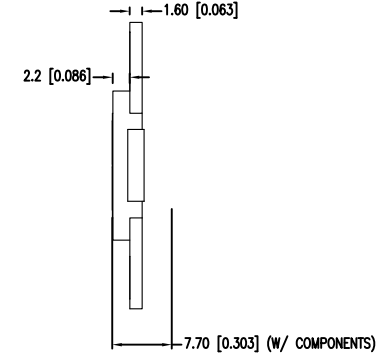
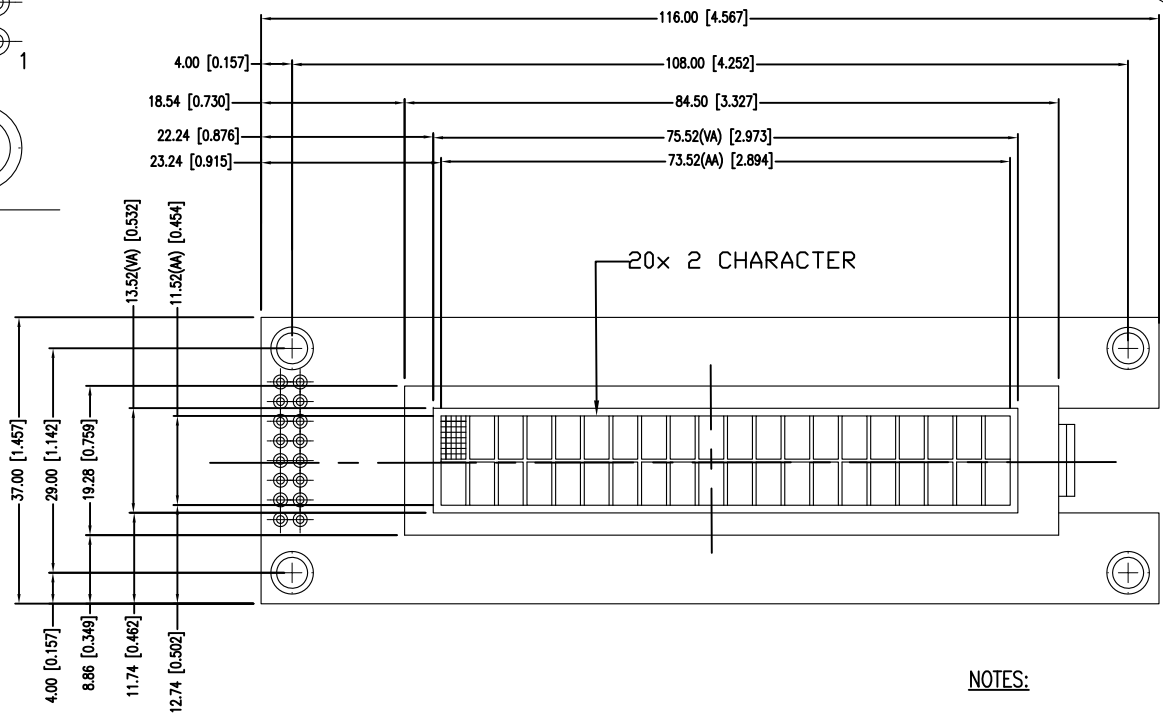


PIN DETAIL
SCALE: 2:1



CAUTION: STATIC SENSITIVE DEVICE
FOLLOW PROPER E.S.D. HANDLING PROCEDURES
WHEN WORKING WITH THIS PART.

NOTES:

1. BLACK BACKGROUND.
2. PIXEL COLOR WHITE
3. MINIMUM VIEWING ANGLE OF 65° FROM 12,3,6,9, O'CLOCK.
4. WISECHIP SEMI US2066 CONTROLLER.

*UNLESS OTHERWISE SPECIFIED TOLERANCES PER DECIMAL PRECISION ARE: X=±1 (±0.039), X.X=±0.5 (±0.020), X.XX=±0.25 (±0.010), X.XXX=±0.127 (±0.005). LEAD SIZE=±0.05 (±0.002), LEAD LENGTH=±0.75 (±0.030). MIN.=^{+0.00}/_{-0.00} DECIMAL PRECISION MAX.=^{+0.00}/_{-0.00} DECIMAL PRECISION

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20 X 2 OLED DISPLAY, WHITE CHARACTERS

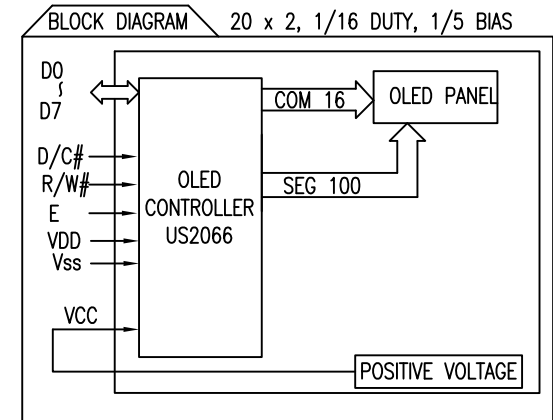
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| | |
|-----------------|---------------|
| DATE: 6.9.15 | DRAWN BY: MJK |
| PAGE: 1 OF 2 | CHKD BY: -- |
| SCALE: NTS | APRVD BY: -- |
| UNIT: mm [INCH] | Ⓟ |

PIN CONFIGURATION

| PIN NO. | SYMBOL | LEVEL | DESCRIPTION |
|---------|-----------------|--------|---|
| 1 | V _{SS} | 0V | SUPPLY VOLTAGE FOR LOGIC GROUND |
| 2 | V _{DD} | 5.0V | SUPPLY VOLTAGE FOR LOGIC |
| 3 | NC | - | - |
| 4 | RS | H/L | H:DATA, L: INSTRUCTION CODE |
| 5 | R/W | H/L | H:READ (MPU-->MODULE);L:WRITE(MPU-->MODULE) |
| 6 | E | H,H->L | CHIP ENABLE SIGNAL |
| 7 | DB0 | H/L | DATA BIT 0 |
| 8 | DB1 | H/L | DATA BIT 1 |
| 9 | DB2 | H/L | DATA BIT 2 |
| 10 | DB3 | H/L | DATA BIT 3 |
| 11 | DB4 | H/L | DATA BIT 4 |
| 12 | DB5 | H/L | DATA BIT 5 |
| 13 | DB6 | H/L | DATA BIT 6 |
| 14 | DB7 | H/L | DATA BIT 7 |
| 15 | V _{CC} | 12.0V | SUPPLY VOLTAGE FOR PANEL(POSITIVE VOLTAGE OUTPUT) |
| 16 | NC | - | - |



ELECTRICAL/OPTO CHARACTERISTICS

V_{DD}=5V , T_A=25°C

| ITEM | SYMBOL | CONDITION | STANDARD VALUE | | | UNIT |
|--------------------------|----------------------------------|-----------------|--------------------|----------|--------------------|-------------------|
| | | | MIN. | TYP. | MAX. | |
| SUPPLY VOLTAGE FOR LOGIC | V _{DD} -V _{SS} | - | 4.7 | | 5.3 | V |
| SUPPLY VOLTAGE FOR PANEL | V _{CC} -V _{SS} | - | 11.5 | 12.0 | 12.5 | V |
| INPUT VOLTAGE | HIGH | V _{IH} | 0.8V _{DD} | - | V _{DD} | V |
| | LOW | V _{IL} | 0 | - | 0.2V _{DD} | V |
| OUTPUT VOLTAGE | HIGH | V _{OH} | 0.9V _{DD} | - | V _{DD} | V |
| | LOW | V _{OL} | 0 | - | 0.1V _{DD} | V |
| OLED DRIVING CURRENT | I _{DD} | - | - | 83 | - | mA |
| VIEW ANGLE | | | | FREE | | |
| DARK ROOM CONTRAST | | | - | >10000:1 | - | - |
| C.I.E. (C.I.E. 1931) | X | - | 0.25 | 0.29 | 0.33 | - |
| | Y | - | 0.27 | 0.31 | 0.35 | - |
| RESPONSE TIME | | | - | - | 30 | ns |
| BRIGHTNESS W/POLARIZER | | | 60 | 80 | - | cd/m ² |

*BRIGHTNESS=80cd/m² , T_a=25°C, 60% RH, V_{DD}=5.0V, V_{CC}=12.0V, 100% DISPLAY AREA TURN ON.

ABSOLUTE MAXIMUM RATINGS

| ITEM | SYMBOL | TEST CONDITION | STANDARD VALUE | | UNIT |
|--------------------------|----------------------------------|----------------------|----------------|-----|------|
| | | | MIN | MAX | |
| SUPPLY VOLTAGE FOR LOGIC | V _{DD} -V _{SS} | T _a =25°C | 2.4 | 5.5 | V |
| SUPPLY VOLTAGE FOR PANEL | V _{CC} -V _{SS} | T _a =25°C | 7 | 13 | V |
| HUMIDITY | | | - | 85 | % |
| OPERATING TEMPERATURE* | T _{opr} | - | -40 | 80 | °C |
| STORAGE TEMPERATURE | T _{stg} | - | -40 | 90 | °C |

OPERATING LIFE 30,000 HRS
END OF LIFE IS SPECIFIED AS 50 %OF INITIAL BRIGHTNESS

*UNLESS OTHERWISE SPECIFIED TOLERANCES PER DECIMAL PRECISION ARE: X=±1 (±0.039), X.X=±0.5 (±0.020), X.XX=±0.25 (±0.010), X.XXX=±0.127 (±0.005). LEAD SIZE=±0.05 (±0.002), LEAD LENGTH=±0.75 (±0.030). MIN.= +^{DECIMAL}PRECISION MAX.= +^{0.00}/_{-0.00}DECIMAL PRECISION



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20 x 2 OLED DISPLAY, WHITE CHARACTERS

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