



GENERAL SPECIFICATION

| Item                | Content                                                 |
|---------------------|---------------------------------------------------------|
| Number of Character | 122x32                                                  |
| Module Size         | 59.0(W)x29.3(H)x5.5(D)mm Max                            |
| Viewing Area        | 52.0(W)x15.0(H)mm                                       |
| Dot Size/Dot Pitch  | 0.345(W)x0.345(H)mm/0.375(W)x0.375(H)mm                 |
| Backlight           | Without/LED                                             |
| Options             | Gray STN/Yellow STN,Extended Temperature,Bottom Viewing |
| Built-In Controller | SED1520DOA                                              |

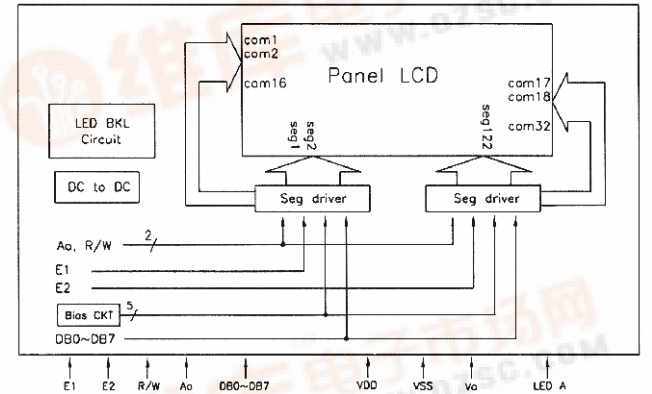
ELECTRICAL CHARACTERISTICS

| Item                                     | Symbol                 | Condition                          | Min.        | Typ         | Max. | Unit | note |
|------------------------------------------|------------------------|------------------------------------|-------------|-------------|------|------|------|
| Power Supply for Logic                   | $V_{DD}-V_{SS}$        | -                                  | 2.4         | 5.0         | 7.0  | Volt | -    |
| Input Voltage                            | $V_{IL}$               | L level                            | $V_{SS}$    | $0.2V_{DD}$ | -    | Volt | -    |
|                                          | $V_{IH}$               | H level                            | $0.8V_{DD}$ | $V_{OD}$    | -    | Volt |      |
| LCM Recommend LCD Module Driving Voltage | $V_{DD}-V_O$           | Ta=0°C                             | -           | -           | -    | Volt | -    |
|                                          |                        | Ta=25°C                            | 4.0         | 4.3         | 4.6  |      |      |
|                                          |                        | Ta=50°C                            | -           | -           | -    |      |      |
| Power Supply Current for LCM             | $I_{DD}$ (LED B/L OFF) | $V_{DD}=5.0V$<br>$V_{DD}-V_O=4.3V$ | -           | 0.6         | 1.1  | mA   | -    |
|                                          | $I_{EE}$ (LED B/L ON)  | FLM=64Hz                           | -           | 45          | 60   |      |      |
|                                          |                        | $V_{LED}=4.2V$                     | -           |             |      |      |      |

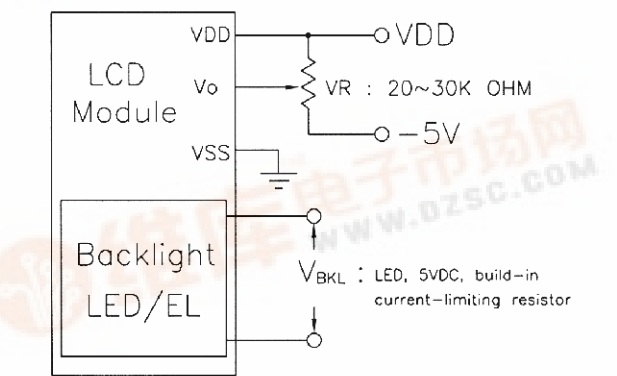
INTERFACE PIN ASSIGNMENT

| Pin No. | Pin Out   | Function Description                                                                                                                           |
|---------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------|
| 1       | $V_{LED}$ | Cathode of LED backlight, which is common Anode with logic circuit.                                                                            |
| 2       | $V_{SS}$  | GND                                                                                                                                            |
| 3       | $V_{DD}$  | Logic supply voltage                                                                                                                           |
| 4       | $V_O$     | LCD driver supply voltage                                                                                                                      |
| 5       | $A_O$     | Display Data/Display commands switching input. Ao=0: DB0~DB7 are command input and status output. Ao=1: DB0~DB7 are Display Data input/output. |
| 6       | E1        | Enable signal for the left half of the screen. Active Low                                                                                      |
| 7       | E2        | Enable signal for the right half of the screen. Active Low                                                                                     |
| 8~15    | DB0~DB7   | 3-state I/O Data Bus                                                                                                                           |
| 16      | R/W       | High for Read, Low for Write                                                                                                                   |

BLOCK DIAGRAM



POWER SUPPLY



MECHANICAL

