

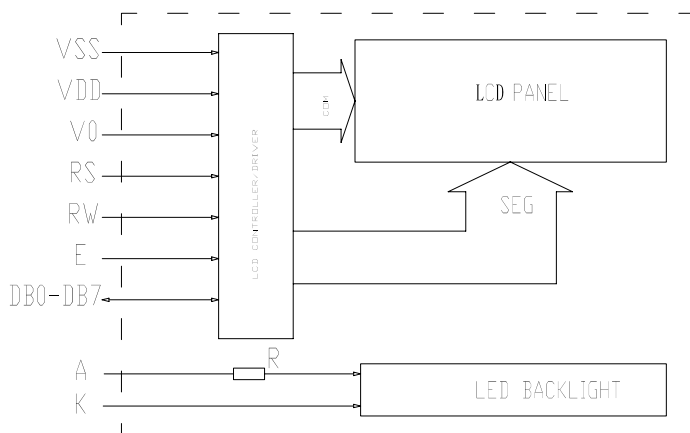
### Display character address code

| Display position | 01 | 02 | --- | 08  | 09 | --- | 15 | 16  |
|------------------|----|----|-----|-----|----|-----|----|-----|
| DDRAM address    | 00 | 01 | --- | 07H | 40 | --- | 46 | 47H |

### Pin connections

| Pin   | Symbol  |
|-------|---------|
| 1     | VSS     |
| 2     | VDD     |
| 3     | V0      |
| 4     | RS      |
| 5     | RW      |
| 6     | E       |
| 7~10  | DB0~DB3 |
| 11~14 | DB4~DB7 |
| 15    | A       |
| 16    | K       |

### Block diagram



### Feature

- 16 character \* 1 lines display
- Built-in controller(S6A0069 or compliant)
- with 4-bit or 8-bit parallel interface
- 1/16 Duty cycle, 1/5 Bias.
- Display Mode & Backlight Variations.
- ROHS Compliant

### Mechanical thickness

| LCD module       | T1  | T2   | Unit |
|------------------|-----|------|------|
| Without or EL    | 4.5 | 9.5  | mm   |
| Edge backlight   | 7.0 | 11.0 | mm   |
| Bottom backlight | 8.5 | 13.5 | mm   |

### Mechanical data

| Item           | Standard   | Unit |
|----------------|------------|------|
| Module size    | 122.0X33.0 | mm   |
| View area      | 99.0X13.0  | mm   |
| Dot size       | 0.92X1.10  | mm   |
| Character size | 4.84X9.22  | mm   |

### Maximum Absolute Power Ratings

| Item          | Symbol          | Standard |     |                 | Unit |
|---------------|-----------------|----------|-----|-----------------|------|
|               |                 | Min      | Typ | Max             |      |
| Input voltage | V <sub>DD</sub> | -0.3     | --- | 5.5             | V    |
| Power supply  | V <sub>IN</sub> | -0.3     | --- | V <sub>DD</sub> |      |

### Electronical characteristics

| Item   | Symbol           | Condition              | Standard |     |     | Unit |
|--|------------------|------------------------|----------|-----|-----|------|
|  |                  |                        | Min      | Typ | Max |      |
| Operating voltage                                      | V <sub>DD</sub>  | V <sub>DD</sub> =5.0V  | 4.5      | --- | 5.5 | V    |
|  |                  | V <sub>DD</sub> =3.3V  | 2.7      | 3.3 | 5.5 |      |
| Operating current                                      | I <sub>DD</sub>  | V <sub>DD</sub> =5.0V  | ---      | 1.5 | --- | mA   |
| Recommended LCD driving voltage for normal temp module | V <sub>LCD</sub> | T <sub>A</sub> =+25    | ---      | 4.3 | --- | V    |
|  |                  | T <sub>A</sub> =0      | ---      | 4.5 | --- |      |
|  |                  | T <sub>A</sub> =-20    | ---      | 4.8 | --- |      |
| Backlight voltage                                      | V <sub>LED</sub> | Y-G                    | ---      | 4.2 | --- | V    |
| Backlight current                                      | I <sub>LED</sub> | V <sub>LED</sub> =4.2V | ---      | 180 | --- | mA   |
| Operating temperature                                  | T <sub>O</sub>   | ---                    | -20      | --- | 70  |      |
| Storage temperature                                    | T <sub>S</sub>   | ---                    | -30      | --- | 80  |      |