



PIN CONNECTIONS(CON1)

| Pin | Symbol | | | |
|-----|-----------------|-----------------|-----------------|-----------------|
| | CON1 | | | CON2 |
| | SPI | UART | I2C | RS232 |
| 1 | V _{SS} | V _{SS} | V _{SS} | V _{SS} |
| 2 | V _{DD} | V _{DD} | V _{DD} | V _{DD} |
| 3 | NC | NC | NC | TX |
| 4 | SDI | RX | SCL | RX |
| 5 | SCLK | NC | SDA | |
| 6 | BUSY | BUSY | BUSY | |
| 7 | /REST | /REST | /REST | |
| 8 | /CS | NC | NC | |

NOTES:

- +5V/+3.3V power supply optional
- SPI, UART, I2C, RS232 interface optional

MECHANICAL DATA

| Item | Nominal Dimensions | Unit |
|-------------------------|--------------------|------|
| Module Size (W x H x T) | 144.0X104X11.5 | mm |
| Viewing Area (W x H) | 114.0 X64 | mm |
| Dot Pitch (W x H) | 0.45X0.45 | mm |
| Dot Size (W x H) | 0.40X0.40 | mm |

ABSOLUTE MAXIMUM RATINGS

| Item | Symbol | Min. | Max. | Unit |
|------------------------|----------------------------------|-----------------|-----------------|------|
| Supply Voltage (Logic) | V _{DD} -V _{SS} | -0.3 | 5.5 | V |
| Input Voltage | V _I | V _{SS} | V _{DD} | V |
| Operating Temp. | T _{OPR} | -20 | 70 | °C |
| Storage Temp. | T _{STG} | -30 | 80 | °C |

ELECTRICAL CHARACTERISTICS (V_{DD}=5V, Ta=25°C)

| Item | Symbol | Min. | Typ. | Max. | Unit |
|---------------------|-----------------|--------------------|------|--------------------|------|
| Input High Voltage | V _{IH} | 0.8V _{DD} | 3.3 | - | V |
| Input Low Voltage | V _{IL} | - | - | 0.2V _{DD} | V |
| Output High Voltage | V _{OH} | 0.8V _{DD} | - | - | V |
| Output Low Voltage | V _{OL} | - | - | 0.2V _{DD} | V |
| Supply Current | I _{DD} | - | 110 | - | mA |

LED BACKLIGHT SPECIFICATION (Ta=25°C)

| Item | Forward Voltage | Forward Current |
|-------|-----------------|-----------------|
| WHITE | 3.1V | If= 180 mA |