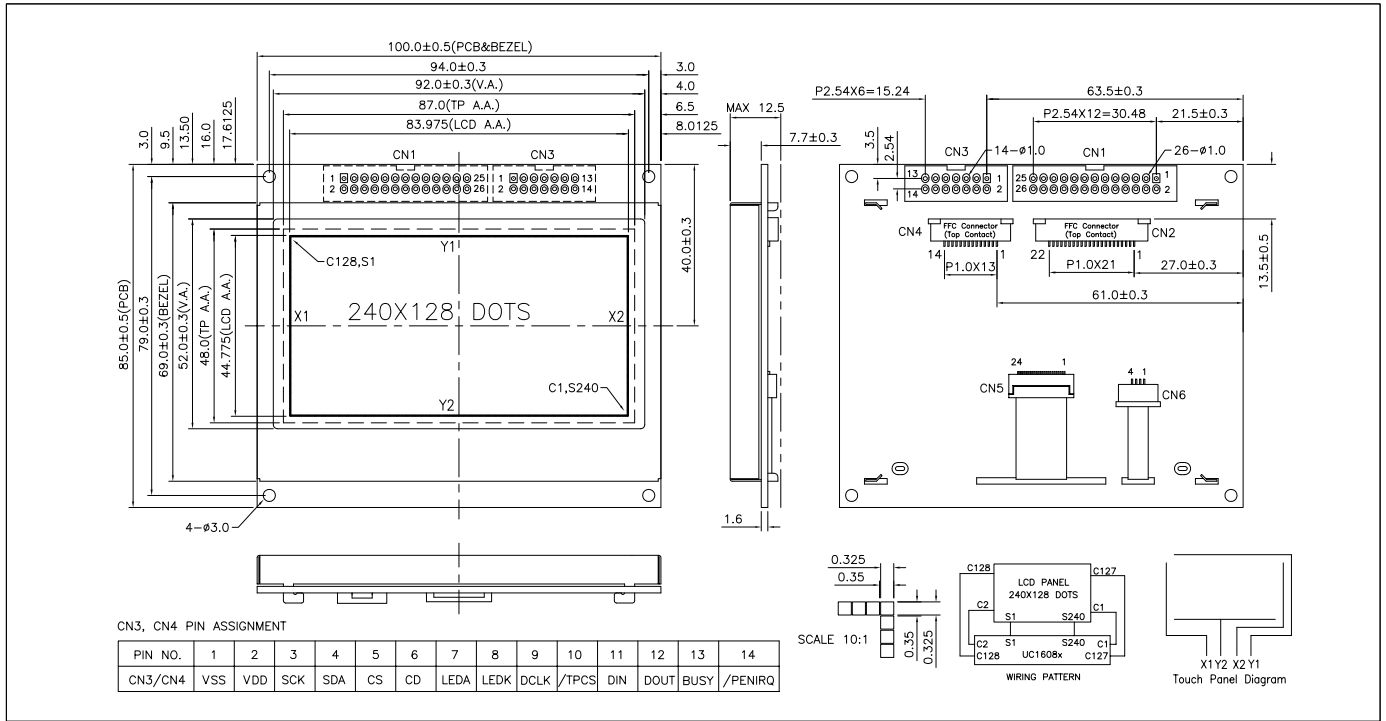


LG2401286-DW-TPC

240 x 128 dots + white led backlight + touch panel + touch panel controller



ABSOLUTE MAXIMUM RATINGS

| Item | Symbol | Min. | Max. | Unit |
|-----------------------|------------------------------------|------|-----------------------|------|
| Supply Voltage(Logic) | V _{DD} - V _{SS} | -0.3 | 6.0 | V |
| Supply Voltage(LCD) | V _{LCD} - V _{SS} | -0.3 | 17.0 | V |
| Input Voltage | V _I | -0.3 | V _{DD} + 0.3 | V |
| Operating Temp. | T _{opr} | -20 | 70 | °C |
| Storage Temp. | T _{stg} | -30 | 80 | °C |

MECHANICAL DATA

| Item | Nominal Dimensions | Unit |
|---------------------------|---------------------|------|
| Module Size (W x H x T) | 100.0 x 85.0 x 12.5 | mm |
| Viewing Area (W x H) | 92.0 x 52.0 | mm |
| Dot Pitch (W x H) | 0.35 x 0.35 | mm |
| Dot Size (W x H) | 0.325 x 0.325 | mm |
| Weight | Approx. 115 | g |

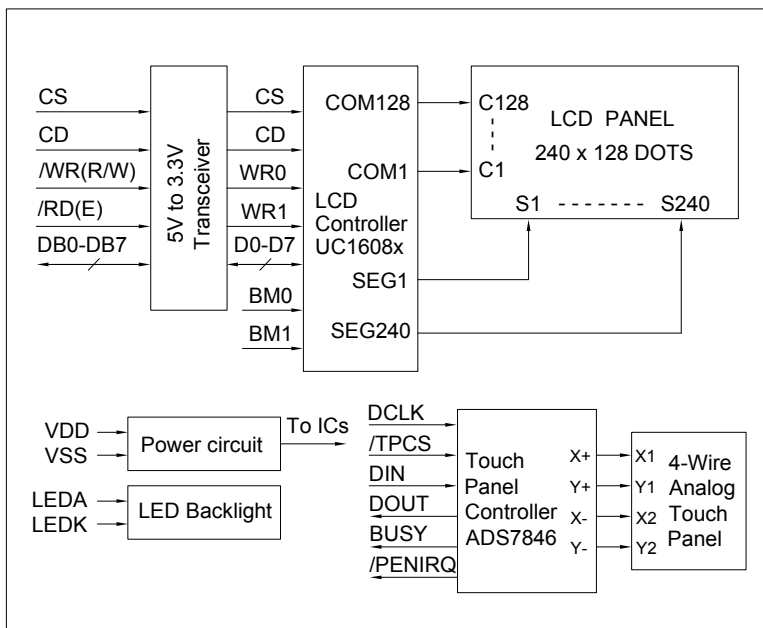
ELECTRICAL CHARACTERISTICS (V_{DD}=3.0V to 5.0V)

| Item | Symbol | Test Condition | Min. | Typ. | Max. | Unit |
|---------------------|-----------------------------------|--------------------------|----------------------|------|-----------------|------|
| Input High Voltage | V _{IH} | -- | 2.0 | -- | V _{DD} | V |
| Input Low Voltage | V _{IL} | -- | 0 | -- | 0.8 | V |
| Output High Voltage | V _{OH} | I _{OH} = -0.1mA | V _{DD} -0.2 | -- | V _{DD} | V |
| Output Low Voltage | V _{OL} | I _{OL} = 0.1mA | 0 | -- | 0.2 | V |
| Supply Current | I _{DD} | V _{DD} = 5.0V | -- | 1.0 | 2.5 | mA |
| LCD Driving Voltage | V _{LCD} -V _{SS} | T _a =25°C | -- | 15.2 | -- | V |

PIN CONNECTIONS(CN1/CN2)

| Pin | Symbol | Level | Function |
|-------|-----------------|-------|------------------------------------|
| 1 | V _{SS} | 0V | GND |
| 2 | V _{DD} | 3V-5V | Power supply for logic and booster |
| 3 | CD | H/L | H:Display data L:Instruction code |
| 4 | /WR(R/W) | H/L | /WR for 80 MPU, R/W for 68 MPU |
| 5 | /RD(E) | H/L | /RD for 80 MPU, E for 68 MPU |
| 6 | DB0 | H/L | Data bus |
| 7 | DB1 | H/L | |
| 8 | DB2 | H/L | |
| 9 | DB3 | H/L | |
| 10 | DB4 | H/L | |
| 11 | DB5 | H/L | |
| 12 | DB6 | H/L | |
| 13 | DB7 | H/L | |
| 14 | CS | H | Chip selection signal. Active "H". |
| 15 | LEDA | +5V | Power supply for LED backlight |
| 16 | LEDK | 0V | |
| 17 | DCLK | -- | DCLK signal of ADS7846 |
| 18 | /TPCS | -- | /CS signal of ADS7846 |
| 19 | DIN | -- | DIN signal of ADS7846 |
| 20 | DOUT | -- | DOUT signal of ADS7846 |
| 21 | BUSY | -- | BUSY signal of ADS7846 |
| 22 | /PENIRQ | -- | /PENIRQ signal of ADS7846 |
| 23-26 | NC | -- | No connection |

BLOCK DIAGRAM



LED BACKLIGHT SPECIFICATIONS (T_a=25°C)

| Item | Symbol | Typ. | Max. | Unit |
|-----------------|----------------|-------|------|------|
| Forward Voltage | V _f | 3.1 | 3.3 | V |
| Forward Current | I _f | 90 | -- | mA |
| LED Color | | White | | |