



REVISIONS

| NO. | DATE | BY | DESCRIPTION |
|-----|--------------|----|-------------|
| 1 | 06/02/12 Y.H | | NEW RELEASE |
| 2 | 06/07/04 Y.H | | INTERFACE |

| NO. | SYMBOL | DESCRIPTION |
|------|---------|------------------------------------|
| 1 | A0 | DATA/INSTRUCTION SELECT |
| 2 | /CS2 | CHIP SELECTION FOR IC(RIGHT PART) |
| 3 | /CS1 | CHIP SELECTION FOR IC(LEFT PART) |
| 4 | /RD(/E) | READ SIGNAL/ENABLE SIGNAL |
| 5 | /MR(/W) | WRITE SIGNAL // READ/WRITE CONTROL |
| 6 | VDD | POWER SUPPLY +5V |
| 7 | VSS | GROUND |
| 8-15 | DB0-DB7 | DATA BUS |
| 16 | RST | RESET AND INTERFACE TYPE SELECTION |
| 17 | V0 | DISPLAY CONTRAST ADJUST |
| 18 | VOUT | NEGATIVE VOLTAGE OUTPUT(-5V) |
| 19 | A | POWER SUPPLY FOR LED BACKLIGHT + |
| 20 | K | POWER SUPPLY FOR LED BACKLIGHT - |

| ABSOLUTE MAXIMUM RATING | | | |
|-------------------------|---------|------|-----|
| ITEM | SYMBOL | MIN | MAX |
| VOLTAGE FOR LOGIC | VDD-VSS | -0.3 | 5.5 |
| POWER SUPPLY(LOGIC) | VDD | -0.3 | 7.0 |
| POWER SUPPLY(LCD DRV.) | VLCD | -0.3 | 7.0 |
| INPUT VOLTAGE | VI | - | VDD |

| ELECTRICAL CHARACTERISTICS (VDD=5.0±0.25V, 25°C) | | | | | |
|--|---------|------|-----|------|------|
| ITEM | SYMBOL | MIN | TYP | MAX | UNIT |
| VOLTAGE FOR LOGIC | VDD-VSS | 4.75 | 5.0 | 5.25 | V |
| SUPPLY CURRENT | IDD | - | 0.6 | 0.8 | mA |
| VOLTAGE FOR LCD | VDD-V0 | - | 7.2 | - | V |
| INPUT VOLTAGE | VH | 2.2 | - | VDD | V |
| | VL | -0.3 | - | 0.6 | V |
| OUTPUT VOLTAGE | V0H | 2.4 | - | - | V |
| | V0L | - | - | 0.4 | V |

| MECHANICAL SPECIFICATIONS | | |
|---------------------------|------------------------|------|
| ITEM | SPECIFICATION | UNIT |
| OVERALL SIZE | 116.0W x 44.0H x 13.5T | MM |
| VIEWING AREA | 99.0W x 24.0H | MM |
| DOTS | 160 X 32 | MM |
| DOT SIZE | 0.55W x 0.55H | MM |
| DOT PITCH | 0.59W x 0.59H | MM |

- OPTIONS
- LCD TYPE: Y/G STN; GRAY STN;
 - BACKLIGHT: WITHOUT BACKLIGHT; LED; EL
 - COLOR OF BACKLIGHT: Y/G; BLUE; WHITE
 - TEMPERATURE RANGE: NORMAL(0--50°C) EXTENDED(-20--70°C)
 - POWER SUPPLY: 5.0V; 3.0V
 - VIEWING ANGLE: 6H; 12H

NT-G160324A 160 X 32 DOTS GRAPHICS LCM



ALL DIMENSIONS ARE IN MM. TOLERANCE IS +/-0.2 UNLESS OTHERWISE NOTED.

NFLY, YOUR SUPPLIER, AND YOUR PARTNER!