

**Preliminary Specification
of
LCD Module Type
Model No.: DT2001-02**

1. General Description

- 480 x 48 dots, ISTN, negative, black & white, transmissive, dot matrix LCD graphic module.
- Viewing direction: 12 o'clock.
- Driving scheme: 1/48 duty, 1/8 bias.
- 'EPSON' S1D13700 or equivalent dot matrix LCD controller.
- 'NOVATEK' NT7702 or equivalent LCD drivers.
- 'NOVATEK' NT7703 or equivalent LCD driver.
- White and red LED02 backlight.
- FFC connection.
- RoHS.

2. Mechanical Specifications

The mechanical detail is shown in Fig. 1(A) and summarized in Table 1 below.

Table 1

Parameter	Specifications	Unit
Outline dimensions	202.0(W) x 31.1(H) x 14.7(D) (Excluded FFC and LCD end seal)	mm
Viewing area	189.2(W) x 20.09(H)	mm
Active area	187.17(W) x 18.69(H)	mm
Display format	480 (Horizontal) x 48 (Vertical)	dots
Dot size	0.36(W) x 0.36(H)	mm
Dot spacing	0.03(W) x 0.03(H)	mm
Dot Pitch	0.39(W) x 0.39(H)	mm
Weight	TBD	grams

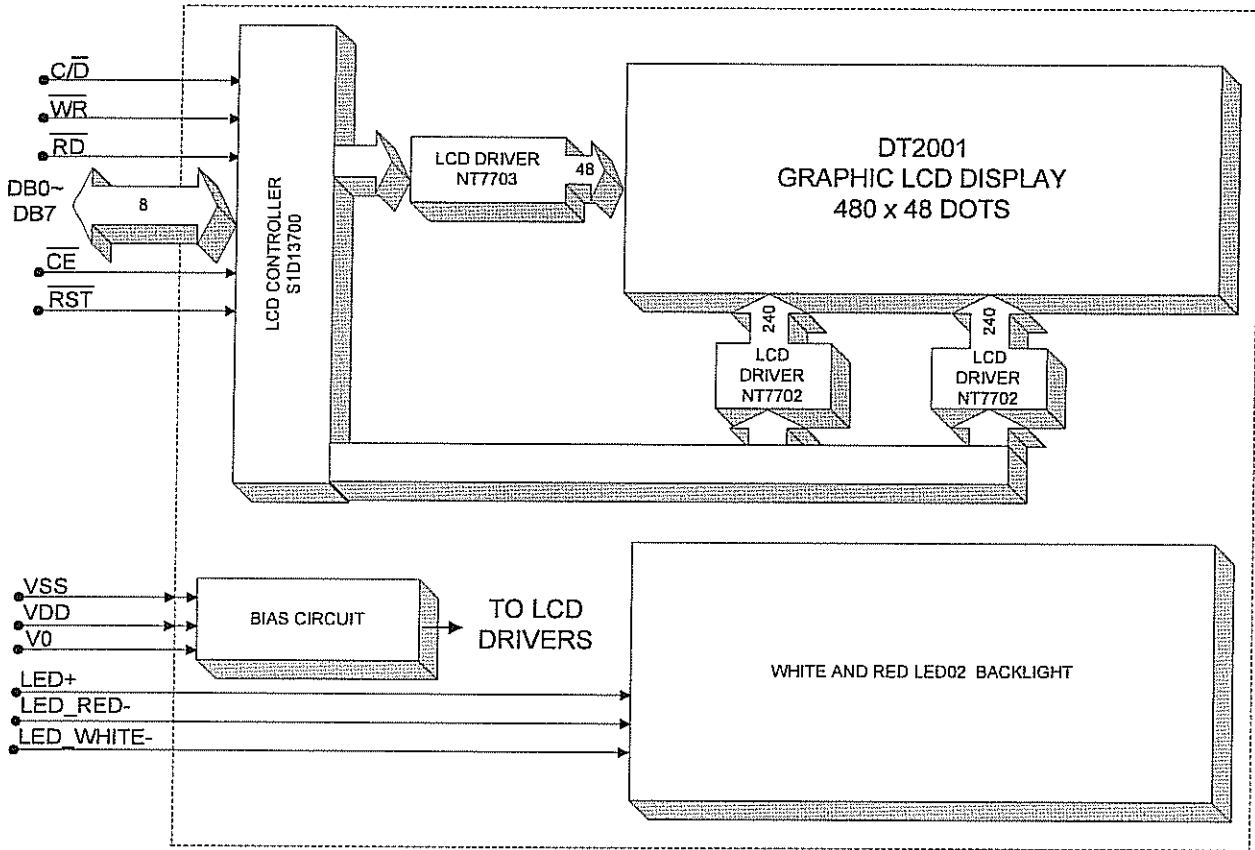


Figure 1(B): Block diagram

ISSUE	AMENDMENT	DATE
△	UPDATE TABLE	05.10.27
△	UPDATE TABLE & PIN ASSIGNMENT	05.11.14
△	UPDATE INFORMATION BOX	05.11.15

DISPLAY TYPE	401	1578, RAW, -V/L TRANSPARENT
DISPLAY RESOLUTION	480 X 480 DOTS	
VIEWING ANGLE	60° CLOCK	
PIXEL RATIO AND IMAGE LEVEL	1/48 DUTY, 1/48 DUTY	
LED CENTER-TO-CENTER	HT779 + HT770 X.2 + HT1770	
LED DRIVE VOLTAGE	5V	
LED DRIVE CURRENT	700mA	
OPERATING TEMPERATURE	0 TO 50°C	
STORAGE TEMPERATURE	-5°C TO 65°C	
BACKLIGHT		
TYPE		LED
COLOR		WHITE AND RED
WAVELENGTH		625nm (RED)
DRIVING VOLTAGE		3.0V
LUMINANCE (cd/m²)		MIN.
(ON THE BACKLIGHT SURFACE)		TYP.
		MAX.

DISPLAY TYPE	400	1578, RAW, -V/L TRANSPARENT
DISPLAY RESOLUTION	480 X 480 DOTS	
VIEWING ANGLE	32° CLOCK	
PIXEL RATIO AND IMAGE LEVEL	1/48 DUTY, 1/48 DUTY	
LED CENTER-TO-CENTER	HT779 + HT770 X.2 + HT1770	
LED DRIVE VOLTAGE	5V	
LED DRIVE CURRENT	700mA	
OPERATING TEMPERATURE	0 TO 50°C	
STORAGE TEMPERATURE	-5°C TO 65°C	
BACKLIGHT		
TYPE		LED
COLOR		WHITE AND RED
WAVELENGTH		625nm (RED)
DRIVING VOLTAGE		3.0V
LUMINANCE (cd/m²)		MIN.
(ON THE BACKLIGHT SURFACE)		TYP.
		MAX.

TITLE: MODULE SPEC
PROJECT NO: DT2001-XX

TOLERANCE UNLESS OTHERWISE SPECIFIED:
X.X ±0.3
X.XX ±0.1

DIMENSIONS IN MM
MATERIALS N/A
FINISH: N/A

SCALE: 80% ON SCALE OVERALL THK: N/A

THIRD ANGLE PROJECTION

DRAWN: _____ NAME _____ SIGN _____ DATE _____

CHECKED: _____

APPROVED: _____

ITEM NO.: DT2001-XX

DESCRIPTION: DT2001-XX SPEC

FILE NO: DT2001-XX REV: 3

SHEET 1 OF 1

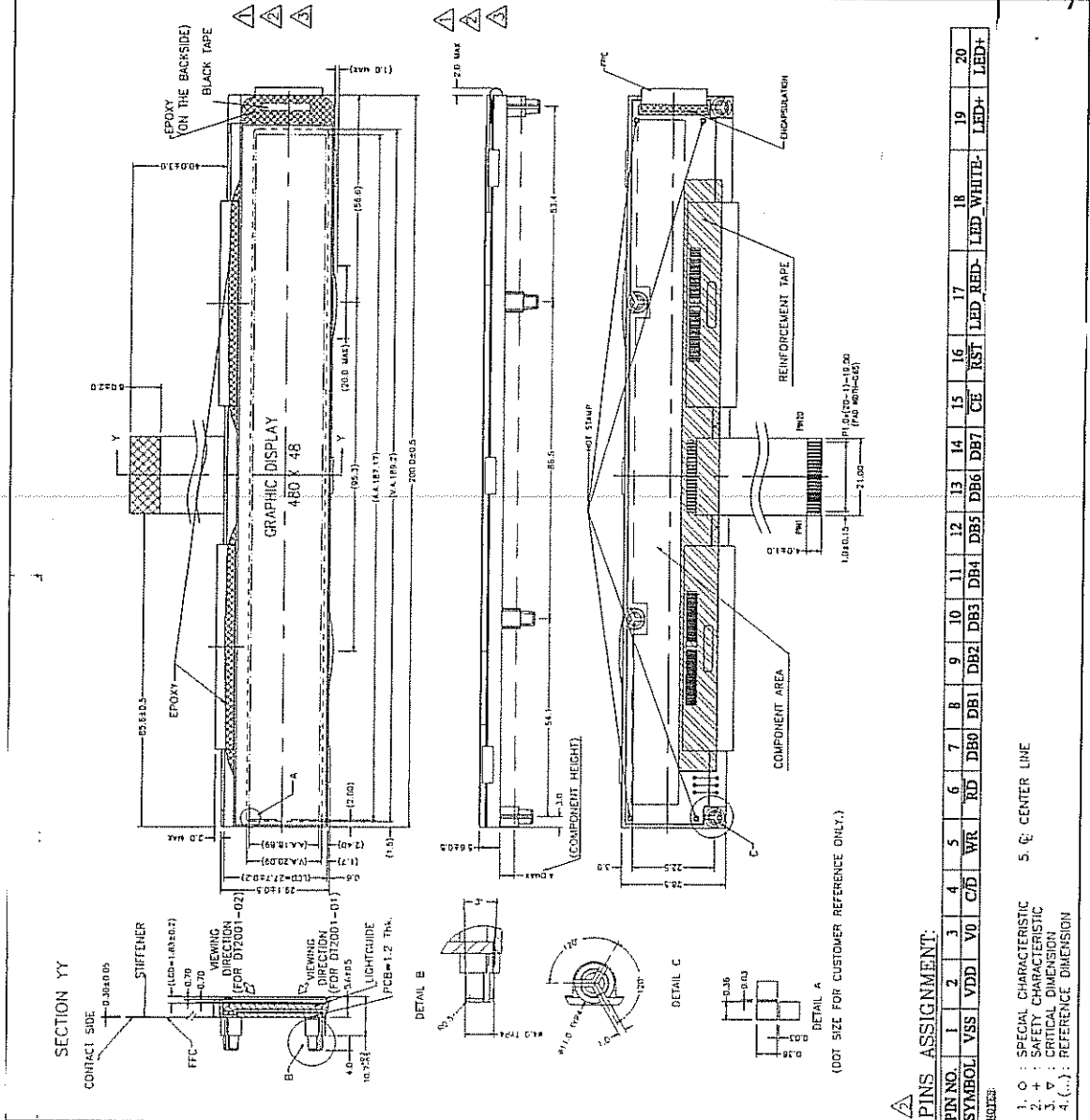


Figure 1(A): Outline drawing