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ACD-1886

PRODUCT DATA SHEET

01/12/10

15.0" XGA LED BACKLIT TFT DISPLAY WITH TOUCH-SCREEN AND BONDED GLASS

Sunlight Readability/1000:1 Dimming/Cool Operation

GENERAL DESCRIPTION

The ACD-1886 consists of the NEC NL10276BC30-18 XGA TFT display with the following modifications:

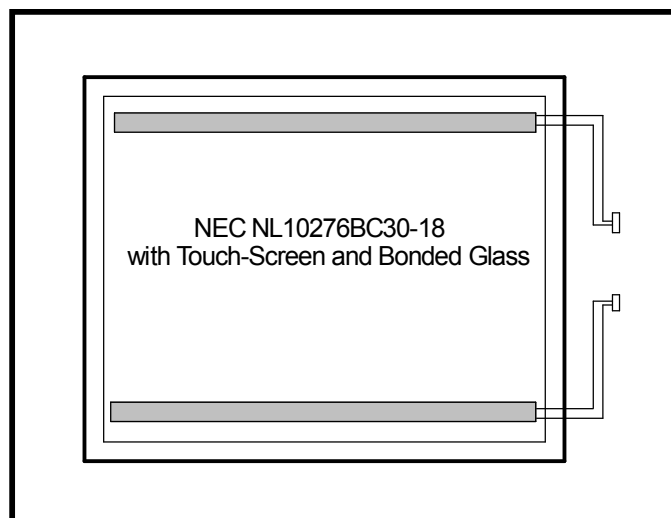
1. High-Performance Backlight
2. Bonded Mounting Glass P/N RCL-5015-301
3. Touch Screen P/N Panjit 150507A3

The resulting performance exceeds that of the standard CCFL equipped backlight by 2.75:1.

Performance at given brightness levels

500 cd/m² with 9 Watts LED Power
1000 cd/m² with 18 Watts LED Power
1500 cd/m² with 27 Watts LED Power

For many applications, satisfies sunlight readability goals.



LCD PANEL HIGHLIGHTS

15.0" TFT Active Matrix Color
304.128mm (H) x 228.096mm (V) Viewable Area
XGA 1024 x 768 Pixels, 16,777,216 Colors
500:1 Typical Contrast Ratio
40% Color Gamut (NTSC Color Space)

For complete LCD specifications (standard panel), refer to NEC datasheet NL10276BC30-18.

LED BACKLIGHT FEATURES

White LED edge-light rails

Two-wire connection (Typically 8 inches in length), allows easy interconnect with LED driver¹.

Projected lifetime > 75,000 hours

Active fault protection keeps remaining LEDs operating normally, if one should ever fail.

1000:1 or better dimming ratio, guaranteed¹.

¹For best power transfer and control, use ACI-C120125-1852 LED drivers. Please contact the factory for more specific use LED driver solutions, if required.

MAXIMUM RATINGS*

Symbol	Parameter	Value	Unit
Top	Operating Temperature of Display (Center of Display Surface)	-10 to +70	°C
Tled	Operating Temperature of LED Edge Light (Light Rail Contact)	-20 to +75	°C
Tstg	Display Storage Temperature	-20 to +80	°C
Ifwd	Maximum LED Edge-Light Forward Current	150	mADC

*Maximum Ratings are those values beyond which damage may occur

PANEL/BACKLIGHT OPTICAL CHARACTERISTICS

Ifwd = 125mA (LED Rail ACR-1091-1727, 2 Rails per Display), Ta = +25°C, LCD un-powered

Symbol	Parameter	Test Condition	Min	Typ	Max	Unit
Bp	Panel Brightness	After 1 hour stabilization	1350	1500	1650	cd/m ²
X	White X Coordinate			0.330		-
Y	White Y Coordinate			0.403		-

LED EDGE-LIGHT ELECTRICAL CHARACTERISTICS

Ifwd = 125mA, Top = +25°C

Symbol	Parameter	Test Conditions	Min	Nom	Max	Unit
Vfwd	LED Rail Forward Voltage Drop		97.2	108	118.8	VDC

TYPICAL LCD/LED BACKLIGHT PERFORMANCE GRAPHS

