

NEC NEC LCD Technologies, Ltd.

Connection Cable for LED Driver Board

121CBL03

DATA SHEET 
DOD-PP-1071 (1st edition)

**All information is subject to change without notice.
Please confirm the sales representative before
starting to design your system.**

INTRODUCTION

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Some electronic parts/components would fail or malfunction at a certain rate. In spite of every effort to enhance reliability of products by NEC, the possibility of failures and malfunction might not be avoided entirely. To prevent the risks of damage to death, human bodily injury or other property arising out thereof or in connection therewith, each customer is required to take sufficient measures in its safety designs and plans including, but not limited to, redundant system, fire-containment and anti-failure.

The products are classified into three quality grades: "**Standard**", "**Special**", and "**Specific**" of the highest grade of a quality assurance program at the choice of a customer. Each quality grade is designed for applications described below. Any customer who intends to use a product for application other than that of Standard quality grade is required to contact an NEC sales representative in advance.

The **Standard** quality grade applies to the products developed, designed and manufactured in accordance with the NEC standard quality assurance program, which are designed for such application as any failure or malfunction of the products (sets) or parts/components incorporated therein a customer uses are, directly or indirectly, free of any damage to death, human bodily injury or other property, like general electronic devices.

Examples: Computers, office automation equipment, communications equipment, test and measurement equipment, audio and visual equipment, home electronic appliances, machine tools, personal electronic equipment, industrial robots, etc.

The **Special** quality grade applies to the products developed, designed and manufactured in accordance with an NEC quality assurance program stricter than the standard one, which are designed for such application as any failure or malfunction of the products (sets) or parts/components incorporated therein a customer uses might directly cause any damage to death, human bodily injury or other property, or such application under more severe condition than that defined in the Standard quality grade without such direct damage.

Examples: Control systems for transportation equipment (automobiles, trains, ships, etc.), traffic control systems, anti-disaster systems, anti-crime systems, medical equipment not specifically designed for life support, safety equipment, etc.

The **Specific** quality grade applies to the products developed, designed and manufactured in accordance with the standards or quality assurance program designated by a customer who requires an extremely higher level of reliability and quality for such products.

Examples: Military systems, aircraft control equipment, aerospace equipment, nuclear reactor control systems, medical equipment/devices/systems for life support, etc.

The quality grade of this product is the "**Standard**" unless otherwise specified in this document.

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1. OUTLINE

This 121CBL03 Connection Cable for LED Driver Board is for an LCD module. Adaptable LCD modules and adaptable LED Driver Board are as follows. In addition, this 121CBL03 is compliant with the European RoHS directive (2002/95/EC).

Adaptable LCD modules	Adaptable LED Driver Board
NL8060BC31-50F	104PW03F

2. SPECIFICATIONS

2.1 GENERAL SPECIFICATIONS

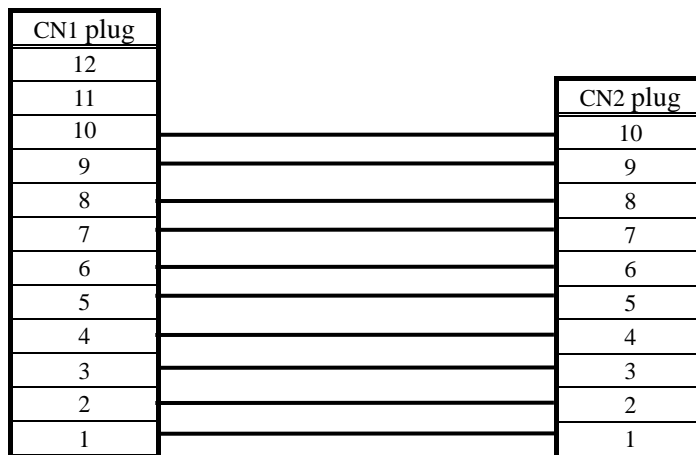
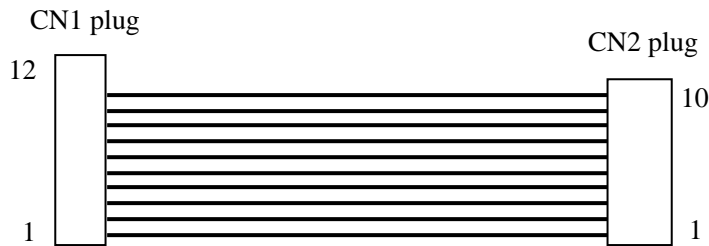
Item	Specification	Unit
Size	See "4. OUTLINE DRAWINGS".	mm
Weight	2 (typ.)	g
Delivery unit	100 (min.)	p

2.2 ABSOLUTE MAXIMUM RATINGS

Parameter	Rating	Unit	Remarks
Voltage	50	V	-
Current	1.0	A	-
Operating temperature	-30 to +80	°C	-

2.3 CONNECTORS AND CABLES

CN1 plug (Driver Board side): SHR-12V-S (J.S.T. Mfg. Co., Ltd.)
 CN2 plug (LCD module side): SHR-10V-S (J.S.T. Mfg. Co., Ltd.)




Connection diagram

Note1: CN1: Pin No.11, 12 are not used.

3. PRECAUTIONS

3.1 MEANING OF CAUTION SIGNS

The following caution signs have very important meaning. **Be sure to read "3.3 ATTENTIONS"!**

	This sign has the meaning that a customer will be injured or the product will sustain damage if the customer practices wrong operations.
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3.2 ATTENTIONS 

3.2.1 Handling of the product

- ① Do not plug or unplug the connectors while the product is operating.
- ② Do not hook or pull cables in order to avoid any damage.
- ③ Properly connect the plug to adaptable socket without incomplete connection.

3.2.2 Environment

- ① Do not operate or store in high temperature, high humidity, dewdrop atmosphere or corrosive gases. Keep the product in packing box with antistatic pouch in room temperature to avoid dusts and sunlight, when storing the product.
- ② In order to prevent dew condensation occurred by temperature difference, the product packing box must be opened after enough time being left under the environment of an unpacking room. Evaluate the storage time sufficiently because dew condensation is affected by the environmental temperature and humidity. (Recommended leaving time: 6 hours or more with the original packing state after a customer receives the package)

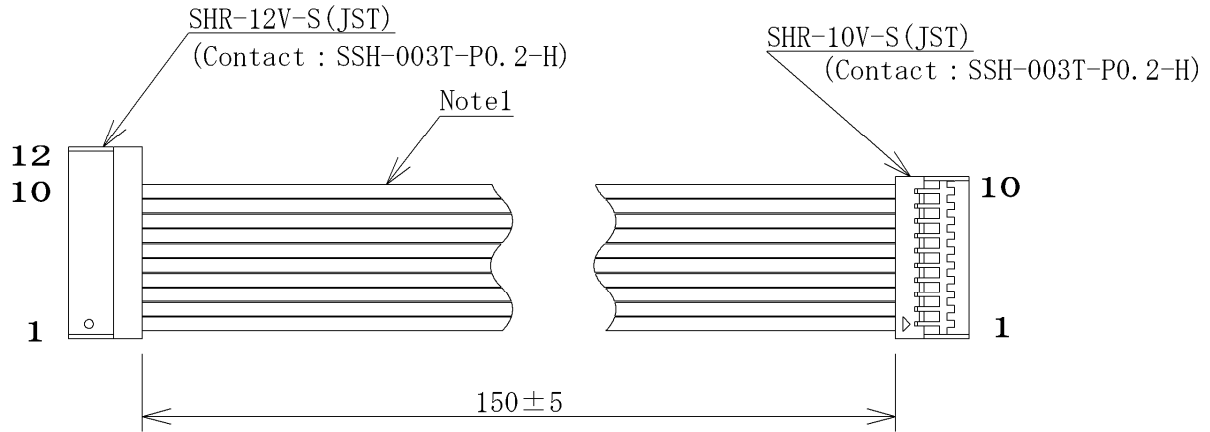
3.2.3 Others

- ① Pack the product with the original shipping package, in order to avoid any damages during transportation, when returning the product to NEC.
- ② The information of China RoHS directive six hazardous substances or elements in this product is as follows.

China RoHS directive six hazardous substances or elements					
Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr VI)	Polybrominated Biphenyls (PBB)	Polybrominated Biphenyl Ethers (PBDE)
○	○	○	○	○	○

Note1: ○: This indicates that the poisonous or harmful material in all the homogeneous materials for this part is equal or below the limitation level of SJ/T11363-2006 standard regulation.

4. OUTLINE DRAWINGS



(Unit: mm)

Note1: Cable: UL10368 (105°C 300V) AWG#30, diameter: ϕ 0.8mm, Cable color: white.
(Hitachi Cable Fine-Tech, Ltd.)