



NLT Technologies

Wiring Harness for LED Driver Board

121CBL02

DATA SHEET 
DOD-PP-1959 (5th edition)

**This DATA SHEET is updated document from
DATA SHEET DOD-PP-1867(4).**

**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 products would fail or malfunction at a certain rate. In spite of every effort to enhance reliability of products by NLT, 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 grades: "**Standard**", "**Special**", and "**Specific**".

Each quality grade is designed for applications described below. Any customer who intends to use a product for application other than that of Standard is required to contact an NLT sales representative in advance.

The **Standard**: Applications as any failure, malfunction or error of the products are free from any damage to death, human bodily injury or other property (Products Safety Issue) and not related the safety of the public (Social Issues), like general electric devices.

Examples: Office equipment, audio and visual equipment, communication equipment, test and measurement equipment, personal electronic equipment, home electronic appliances, car navigation system (with no vehicle control functions), seat entertainment monitor for vehicles and airplanes, fish finder (except marine radar integrated type), PDA, etc.

The **Special**: Applications as any failure, malfunction or error of the products might directly cause any damage to death, human bodily injury or other property (Products Safety Issue) and the safety of the public (Social Issues) and required high level reliability by conventional wisdom.

Examples: Vehicle/train/ship control system, traffic signals system, traffic information control system, air traffic control system, surgery/operation equipment monitor, disaster/crime prevention system, etc.

The **Specific**: Applications as any failure, malfunction or error of the products might severe cause any damage to death, human bodily injury or other property (Products Safety Issue) and the safety of the public (Social Issues) and developed, designed and manufactured in accordance with the standards or quality assurance program designated by the customer who requires extremely high level reliability and quality.

Examples: Aerospace system (except seat entertainment monitor), nuclear control system, life support system, etc.

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

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1. OUTLINE

This 121CBL02 is wiring harness for an NLT LCD module and its LED driver board. Adaptable LCD modules and adaptable LED driver boards are as follows. It is impossible to use this 121CBL02 wiring harness for other usage. In addition, this 121CBL02 is compliant with the European RoHS directive (2011/65/EU).

Adaptable LCD modules	Adaptable LED driver board	
NL6448BC33-70C/70F	104PW01F	
NL6448BC33-71C/71F		
NL8060BC26-35C/35F		
NL6448BC20-30/30D	65PW01F	
NL6448BC20-35/35D		
NL6448BC20-30/30A/30C/30D/30F	104PW03F	
NL6448BC20-35/35C/35D/35F		
NL6448BC26-26/26C/26D/26F		
NL6448BC26-27/27C/27D/27F		
NL8060BC21-11/11C/11D/11F		
NL10276BC16-06/06D		
NL8048BC24-09/09D		
NL8048BC24-12/12D		
NL6448BC33-70/70D		
NL6448BC33-71/71D		
NL8060BC26-35/35D/35E		
NL10276BC24-21/21L		
NL12880BC20-05/05D		
NL8060BC31-47/47D		121PW02F



2. SPECIFICATIONS

2.1 GENERAL SPECIFICATIONS

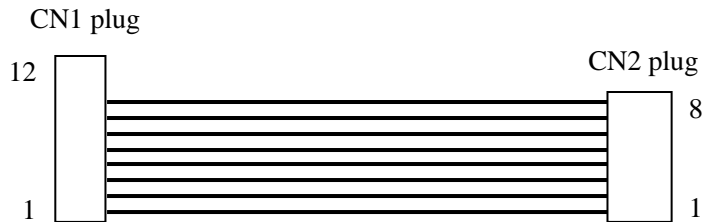
Item	Specification	Unit
Size	See "4. OUTLINE DRAWINGS".	mm
Weight	2 (typ.)	g
Delivery unit	100 (min.)	p

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-08V-S, (J.S.T. Mfg. Co., Ltd.)



CN1 plug		CN2 plug	
12			
11			
10			
9			
8	—————	8	
7	—————	7	
6	—————	6	
5	—————	5	
4	—————	4	
3	—————	3	
2	—————	2	
1	—————	1	


Connection diagram

Note1: CN1: Pin No.9-12 are not used.

3. PRECAUTIONS

3.1 MEANING OF CAUTION SIGNS

The following caution signs have very important meaning. **Be sure to read "3.2 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 wiring harness 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)

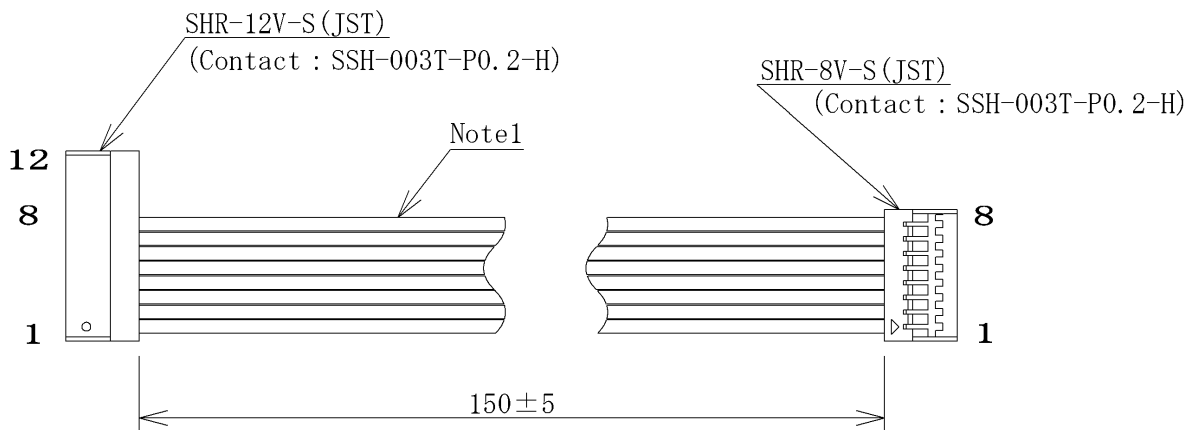
3.2.3 Others

- ① Pack the product with the original shipping package, in order to avoid any damages during transportation, when returning the product to NLT.
- 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.)