

NEOLEC INTERNATIONAL INC.

產品承認書 Product Approval Sheet

客戶/Customer: _____

產品名稱/Product name: 觸控控制板
Touch Control Board

產品型號/Product Code: NLPCA-NEL070-5xx

Customer

本承認書若貴公司確認無誤，懇請於下方確認欄內簽章寄回
Please confirm your acceptance of this approval sheet by return fax.

| Approval | Comment |
|----------|---------|
| | |

Neolec

| Approved by | Reviewed by | Prepared by |
|-------------|-------------|-------------|
| | | |

Firmware Confirmation

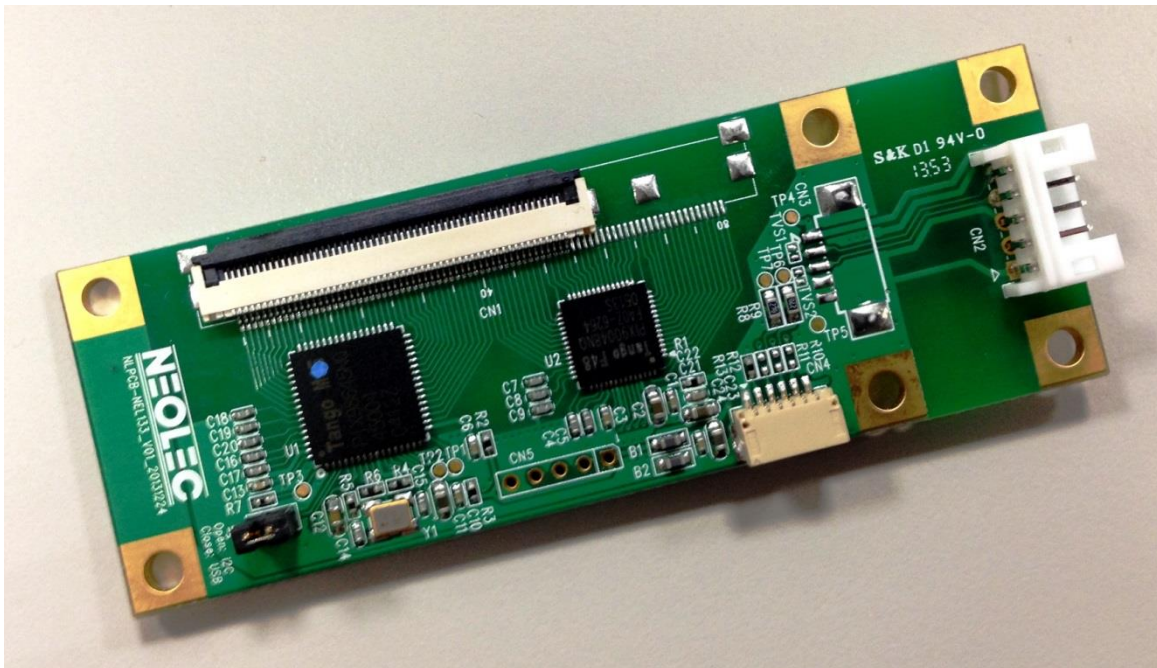
| | |
|--------------------------|--|
| Customer Project Name: | |
| Touch Panel Vendor: | |
| Touch Panel Part Number: | |
| Touch Panel Structure: | |
| Firmware Version: | |
| Firmware File Name: | |
| Checksum: | |
| Programming Marking: | |



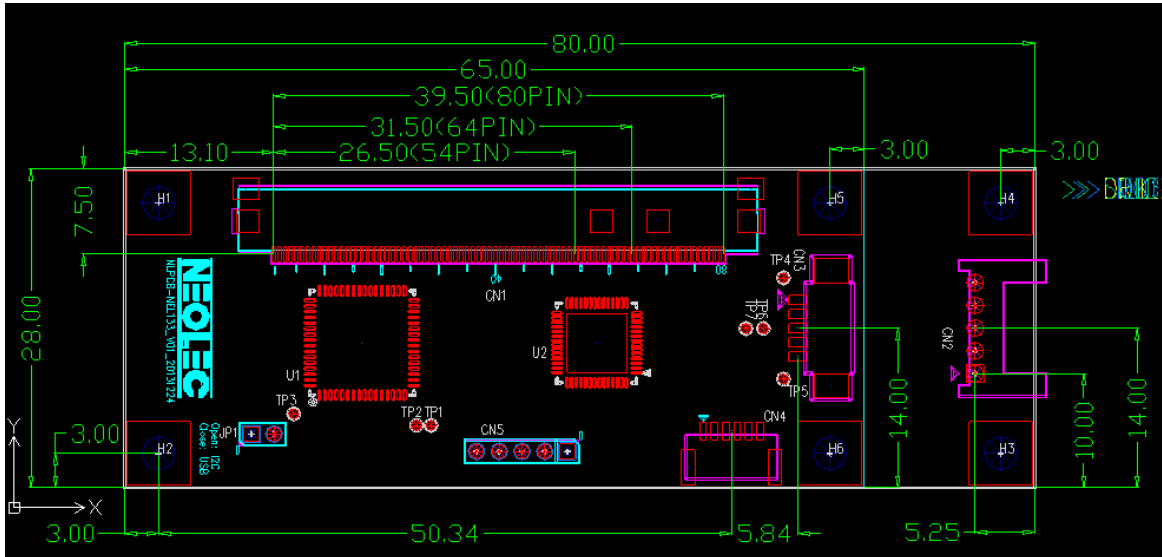
Projected Capacitive USB / I²C Touch Panel Controller

| OS | Version | Interfaces |
|----------------|------------------------------|------------------|
| Windows | Windows 7, Windows 8 | USB |
| | Windows XP | |
| | WinCE 5.0/6.0 | |
| | Windows Embedded | |
| | Windows XP Tablet PC edition | |
| Linux | up to Kernel 2.6.28 ~ 3.0.8 | USB or I2C |

Controller:



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Thickness:

Total thickness: 9.2mm ± 0.2mm

- PCB: 1.6mm
- USB connector: 5.1mm
- Jumper: 5.8mm
- Soldering pin: 1.8mm

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Specifications:

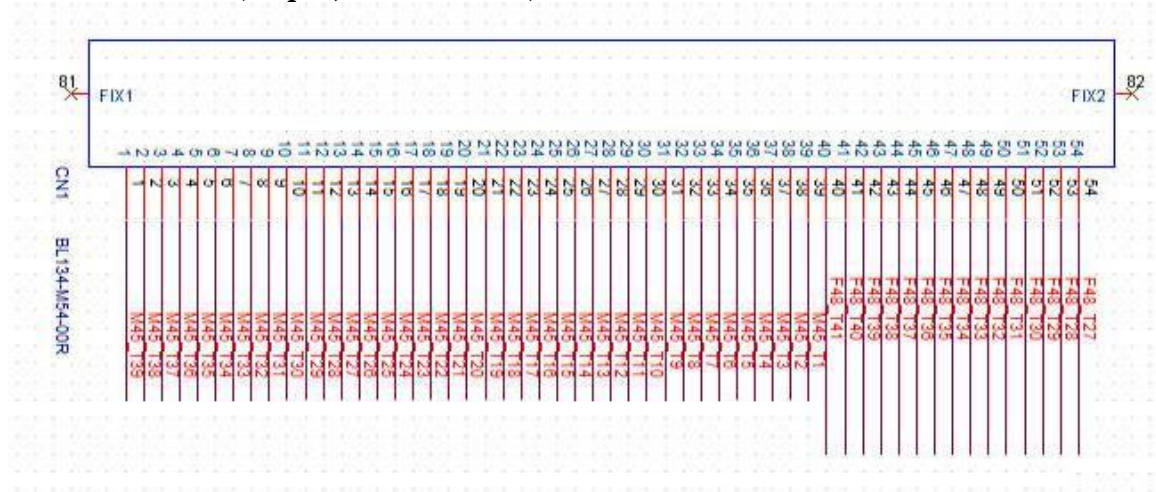
| <i>USB / I2C Type Controller</i> | |
|-------------------------------------|--|
| Circuit Board Dimension | 80 mm x 28 mm |
| Channels of Panel | Max. X + Y = 54ch. (dummy pin included) |
| Input Voltage | USB→5V, I2C→5V |
| Operating Temperature | -20 to 85 °C |
| Storage Temperature | -40 to 90 °C |
| Relative Humidity | T = 60°C, RH = 85% |
| Linearity(Note 1) | Line drawing accuracy: 1pt +/- 1mm Line drawing accuracy: 2pt +/- 2mm Touch (point) accuracy: 1pt +/- 2.5mm Touch (point) accuracy: 2pt +/- 5.0mm Refer to Windows 7 Logo regulation |
| Interface | USB(JP1 Closed) I2C(JP1 Open, Open-Drain) |
| Resolution | 1920x1080 resolution(Adjustable) |
| Power consumption(mA) | Active Mode: Typ.28mA(USB) Sleep Mode: Typ.0.058mA(USB) |
| Report rate(points/sec) (Note 2) | Single touch: Typ.150 Hz Dual touch : Typ.150 Hz 5 point touch: Typ.80 Hz |
| Response time | Max.20 ms |

Note 1: Channel pitch should be 5mm ~ 8mm

Note 2: Report rate depends on Sensor resistance, channel number, cover thickness and other parameters

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FPC Connector Pin Assignment (Adjustable)
CN1 Connector (54 pin, Pitch 0.5mm)



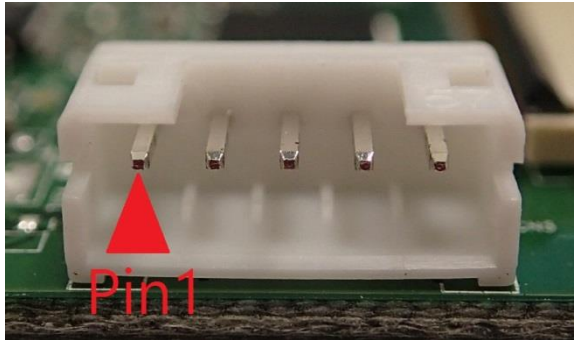
| Pin No. | CN3 | PIN No. | CN3 | PIN No. | CN3 |
|---------|-------|---------|-------|---------|-------|
| 1 | Trace | 21 | Trace | 41 | Trace |
| 2 | Trace | 22 | Trace | 42 | Trace |
| 3 | Trace | 23 | Trace | 43 | Trace |
| 4 | Trace | 24 | Trace | 44 | Trace |
| 5 | Trace | 25 | Trace | 45 | Trace |
| 6 | Trace | 26 | Trace | 46 | Trace |
| 7 | Trace | 27 | Trace | 47 | Trace |
| 8 | Trace | 28 | Trace | 48 | Trace |
| 9 | Trace | 29 | Trace | 49 | Trace |
| 10 | Trace | 30 | Trace | 50 | Trace |
| 11 | Trace | 31 | Trace | 51 | Trace |
| 12 | Trace | 32 | Trace | 52 | Trace |
| 13 | Trace | 33 | Trace | 53 | Trace |
| 14 | Trace | 34 | Trace | 54 | Trace |
| 15 | Trace | 35 | Trace | | |
| 16 | Trace | 36 | Trace | | |
| 17 | Trace | 37 | Trace | | |
| 18 | Trace | 38 | Trace | | |
| 19 | Trace | 39 | Trace | | |
| 20 | Trace | 40 | Trace | | |

Trace could be defined to Sensor pin or Dummy pin by F/W
Max. X + Y = 54ch. (Sensor pin + Dummy pin)

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Wire To Board Connector Pin Assignment:

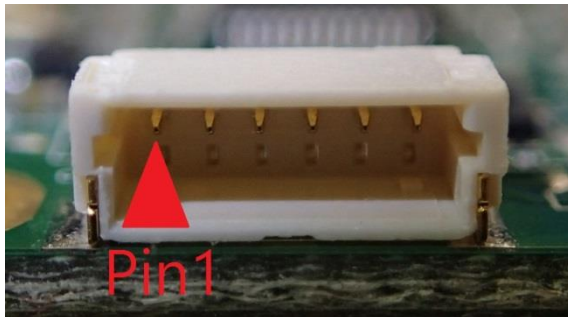
CN2 Connector – USB interface (5 Pin, Pitch 2.0mm):



USB pin define

| Pin 1 | Pin 2 | Pin 3 | Pin 4 | Pin 5 |
|-------|-------|-------|--------|--------|
| GND | 5V | GND | USB D+ | USB D- |

CN4 Connector - I²C interface (6 Pin, Pitch 1.0mm, H-Type):



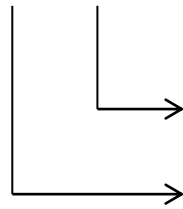
I²C pin define

| Pin 1 | Pin 2 | Pin 3 | Pin 4 | Pin 5 | Pin 6 |
|-------|---------|-------|-------|-------|-------|
| GND | RST/GPI | INT | SCL | SDA | 5V |

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Ordering Information

NLPCA-NEL070-x x x



Control Code

Interface

0 : USB

2 : I²C

5 : USB + I²C(Standard)