

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-NEL240A-0xx

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:	



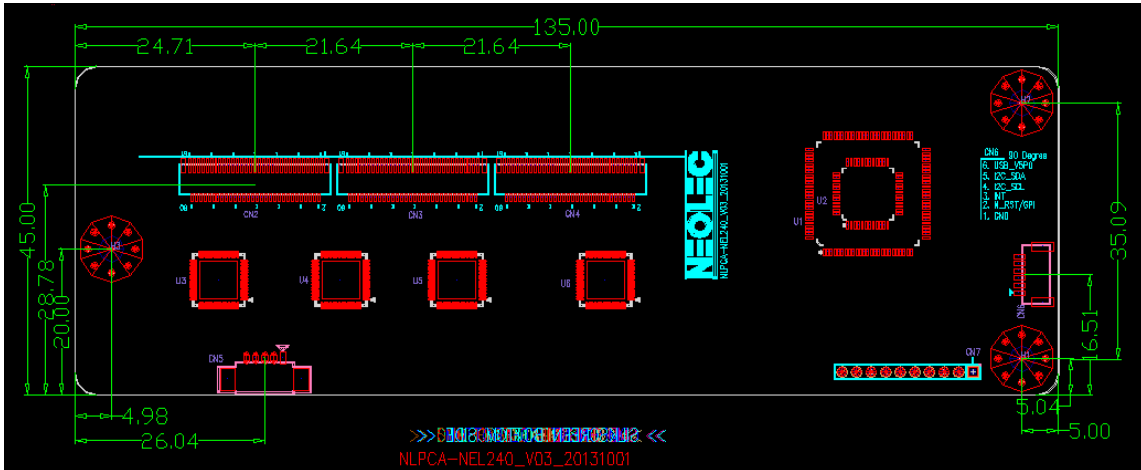
Projected Capacitive USB / RS232 / I²C Touch Panel Controller

OS	Version	Interfaces
Windows	Windows 7, Windows 8 Windows XP WinCE 5.0/6.0 Windows Embedded Windows XP Tablet PC edition	USB or RS232
Linux	up to Kernel 2.6.28 ~ 3.0.8	USB or RS232 I2C(Option)

Controller:



NLPCA-NEL240A-0xx



Thickness:

Total thickness: 5.05mm \pm 0.2mm

- PCB: 1.6mm
- USB/RS232 Connector: 3.45mm

NLPCA-NEL240A-0xx

Specifications:

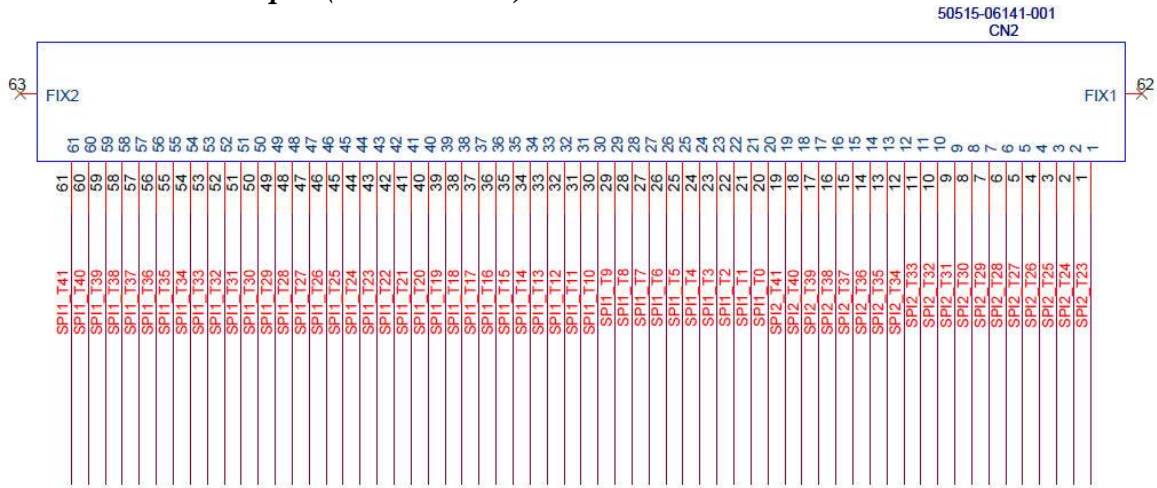
<i>USB / RS232 / I2C Type Controller</i>	
Circuit Board Dimension	135mm x 45mm
Channels of Panel	Max.168 channels (dummy pins included)
Input Voltage	USB / RS232→5V, I2C→5V
Operating Temperature	-30 to 85°C
Storage Temperature	-40 to 90°C
Relative Humidity	T = 60°C, RH = 85%
Linearity(Note 1)	Line drawing 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 or RS232 I2C(Option, Open-Drain)
Resolution	1920x1080 resolution(Adjustable)
Power consumption(mA)	Active Mode: Max. 44mA(USB) Sleep Mode: Max. 1.07mA(USB)
Report rate(points/sec) (Note 2)	Single touch: Typ.150 Hz Dual touch : Typ.150 Hz 5 point touch: Typ.100 Hz
Response time	Max.15 ms

Note 1: Channel pitch should be 4.7mm ~ 8mm

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

NLPCA-NEL240A-0xx

FPC Connector Pin Assignment (Adjustable): CN2 Connector 61 pin (Pitch 0.3mm)



Pin No.	CN2	PIN No.	CN2	PIN No.	CN2
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	55	Trace
16	Trace	36	Trace	56	Trace
17	Trace	37	Trace	57	Trace
18	Trace	38	Trace	58	Trace
19	Trace	39	Trace	59	Trace
20	Trace	40	Trace	60	Trace
				61	Trace

Trace could be defined to Sensor pin or Dummy pin by F/W

NLPCA-NEL240A-0xx

CN3 Connector 61 pin (Pitch 0.3mm)



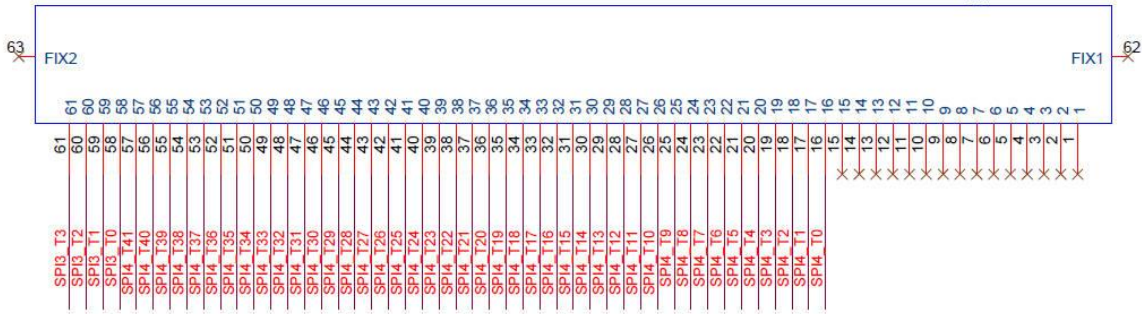
Pin No.	CN3	PIN No.	CN3	PIN No.	CN3
1	Trace	21	Trace	41	Trace
2	Trace	22	Trace	42	Trace
3	Trace	23	Trace	43	Trace
4	Trace	24	Trace	44	Trace
5	Trace	25	Trace	45	Trace
6	Trace	26	Trace	46	Trace
7	Trace	27	Trace	47	Trace
8	Trace	28	Trace	48	Trace
9	Trace	29	Trace	49	Trace
10	Trace	30	Trace	50	Trace
11	Trace	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	55	Trace
16	Trace	36	Trace	56	Trace
17	Trace	37	Trace	57	Trace
18	Trace	38	Trace	58	Trace
19	Trace	39	Trace	59	Trace
20	Trace	40	Trace	60	Trace
				61	Trace

Trace could be defined to Sensor pin or Dummy pin by F/W

NLPCA-NEL240A-0xx

CN4 Connector 61 pin (Pitch 0.3mm)

50515-06141-001
CN4



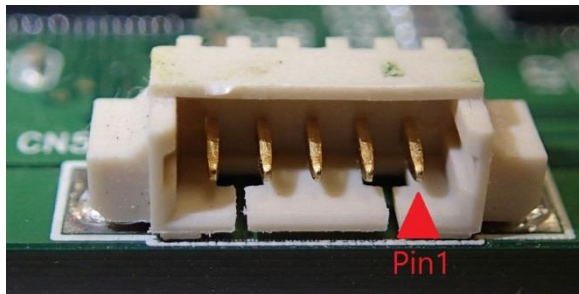
Pin No.	CN4	PIN No.	CN4	PIN No.	CN4
1	NC	21	Trace	41	Trace
2	NC	22	Trace	42	Trace
3	NC	23	Trace	43	Trace
4	NC	24	Trace	44	Trace
5	NC	25	Trace	45	Trace
6	NC	26	Trace	46	Trace
7	NC	27	Trace	47	Trace
8	NC	28	Trace	48	Trace
9	NC	29	Trace	49	Trace
10	NC	30	Trace	50	Trace
11	NC	31	Trace	51	Trace
12	NC	32	Trace	52	Trace
13	NC	33	Trace	53	Trace
14	NC	34	Trace	54	Trace
15	NC	35	Trace	55	Trace
16	Trace	36	Trace	56	Trace
17	Trace	37	Trace	57	Trace
18	Trace	38	Trace	58	Trace
19	Trace	39	Trace	59	Trace
20	Trace	40	Trace	60	Trace
				61	Trace

Trace could be defined to Sensor pin or Dummy pin by F/W
Max. = 168ch. (Sensor pin + Dummy pin)

NLPCA-NEL240A-0xx

Wire To Board Connector Pin Assignment:

CN5 Connector: USB/RS232 interface



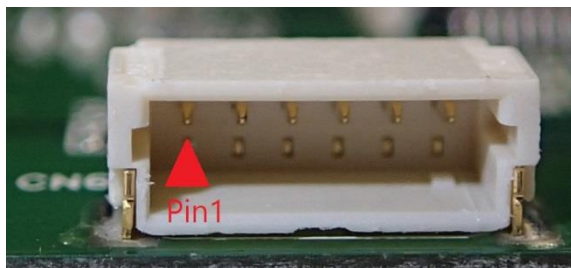
USB pin define

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

RS232 pin define

Pin 1	Pin 2	Pin 3	Pin 4	Pin 5
5V	RS232 Tx	RS232 Rx	GND	NC

(Option) CN6 Connector: I²C interface



I²C pin define

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

NLPCA-NEL240A-0xx

Ordering Information

NLPCA-NEL240A-x x x

