TOUCH PANEL CONTROL BOARD 5-WIRE Serial

N16B-0558-B764 Serial Interface Controller Board Quick Reference

5-Wire Resistive Touch Panels

**FEATURES**
- This controller board applies to the 5-wire analog resistive input touch panel.
- High quality and reliability resistive touch panel control board with integrated switch for selectable cable tail exit direction for FPC cable.
- RS-232C interface for direct connection to PC or serial interfaces.
- PnP or non-PnP mode selectable
- RoHS compliant

**SWITCH SETTINGS**

<table>
<thead>
<tr>
<th>SW 1</th>
<th>Function</th>
<th>Setting</th>
<th>State of factory shipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Direction setting</td>
<td>Please refer to ‘Origin of Coordinate Position’ on page 2.</td>
<td>OFF</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Coordinate</td>
<td>ON: 14bit coordinate</td>
<td>OFF</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OFF: 12bit coordinate</td>
<td></td>
</tr>
</tbody>
</table>
Serial 5-Wire Control Board

■ ORIGIN OF COORDINATE POSITION
The origin of coordinate position is set with the dip switch 1 to 3.

<table>
<thead>
<tr>
<th>Location of origin</th>
<th>SW1-1</th>
<th>SW1-2</th>
<th>SW1-3</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>OFF</td>
<td>ON</td>
<td>ON</td>
</tr>
<tr>
<td>B</td>
<td>ON</td>
<td>ON</td>
<td>OFF</td>
</tr>
<tr>
<td>C</td>
<td>OFF</td>
<td>OFF</td>
<td>OFF</td>
</tr>
<tr>
<td>D</td>
<td>ON</td>
<td>OFF</td>
<td>ON</td>
</tr>
</tbody>
</table>

The figure below shows the drawing outline of the touch panel with FPC on the right side. Ex.: In this figure the FPC cable terminal is to the right, set the dip switch for origin position to location 'A'. (OFF / ON / ON)

■ CONSTRUCTION

<table>
<thead>
<tr>
<th>Specification Item</th>
<th>N16B-0558-B764 5-Wire Serial Control Board</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mechanical Size / Weight</td>
<td>95mm x 30mm / tbd</td>
</tr>
<tr>
<td>Electrical Supply voltage (max./min.)</td>
<td>Vcc 5.5V / 4.1V*1</td>
</tr>
<tr>
<td>Operating current (detect)</td>
<td>35 mA at Vcc = 5V and T=25 degrees</td>
</tr>
<tr>
<td>Sleep mode current</td>
<td>28 mA at Vcc = 5V and T=25 degrees</td>
</tr>
<tr>
<td>Environment Operating temperature</td>
<td>-5°C to +60°C</td>
</tr>
<tr>
<td>Storage temperature</td>
<td>-30°C to +70°C</td>
</tr>
<tr>
<td>Humidity</td>
<td>20% RH to 85% RH at +38°C max. wet bulb temperature</td>
</tr>
</tbody>
</table>

*1: If the power supply voltage changes suddenly within the specification, the controller IC may malfunction. Stabilize the power supply voltage of controller IC, Vcc ripple change must be ±39 (mV) p-p or less.

■ TOUCH PANEL CONNECTION CN1 (FCI: SFW15R-1STAE1-LF)

■ INTERFACE CONNECTION CN3 (Molex: 53398-0571)

<table>
<thead>
<tr>
<th></th>
<th>-B764</th>
<th>Host</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. +5V (Vcc)</td>
<td>1+5V</td>
<td>+5V</td>
</tr>
<tr>
<td>2. Transmit data</td>
<td>2 TXD</td>
<td>RXD</td>
</tr>
<tr>
<td>3. Receive data</td>
<td>3 RXD</td>
<td>TXD</td>
</tr>
<tr>
<td>4.</td>
<td>4 CTS</td>
<td>RTS*2</td>
</tr>
<tr>
<td>5. Ground</td>
<td>5 Gnd</td>
<td>Gnd</td>
</tr>
</tbody>
</table>

*2: optional: used for plug-n-play detection
LABEL SPECIFICATION

Part number: N16B-0558-0764
Product version: (02A)
Manufacture lot: Y800001 = 2009 8 No.00001
August 2009 Serial No. 00001

Year: 2009 - Y
2010 - Z
2011 - A
2012 - B

Month: Jan - 1 Oct - X
Feb - 2 Nov - Y
Mar - 3 Dec - Z

Complete specification document is available on request for customers with whom we have an approved NDA in place.

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