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## SCXI-1381K Custom Terminal Block Assembly

This guide explains how to assemble your SCXI-1381K custom terminal block assembly kit and includes specifications for designing your own circuit boards.

### Introduction

The SCXI-1381K custom terminal block assembly kit includes the unassembled components you need to build a custom SCXI terminal block, but not the actual circuit board. All of the mechanical components of an SCXI terminal block, such as the metal enclosure, front and back panels, and connectors, are included. A 96-position, right-angle DIN connector also is included for attaching to your custom circuit board, if needed.

The SCXI-1381K is intended for developers of custom SCXI terminal blocks who design and lay out custom circuit boards for terminal blocks.

### What You Need to Get Started

To use your SCXI-1381K to build a custom SCXI terminal block, you will need the following:

- SCXI-1381K custom terminal block assembly kit
  - SCXI-1381K Custom Terminal Block Assembly Kit Installation Guide*
  - Terminal block enclosure base
  - Terminal block enclosure cover
  - Terminal block blank front panel
  - Terminal block rear panel
  - Top strain-relief bar
  - Bottom strain-relief bar
  - Two self-adhesive rubber foam strips
  - Two 4-40 angle brackets
  - Two No. 6 lock washers
  - Two 6-32 5/16 screws
  - Two 6-32 hex nuts

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Two 10-32 3/4 screws  
Two eyelet solder terminals  
Two 4-40 5/16 screws  
Three 4-40 5/16 flathead screws  
Two 4-40 3/8 screws  
Two thumbscrews  
One 96-position, right-angle DIN connector

No. 1 and No. 2 Phillips-head screwdrivers

## Installation

Refer to Figure 1 as you install your custom circuit board into the SCXI-1381K custom terminal block assembly.

1. Attach the angle brackets to the front panel using the two 6-32 5/16 screws, the No. 6 lock washers, the 6-32 hex nuts, and a No. 2 Phillips-head screwdriver.
2. Attach the self-adhesive rubber foam to the top and bottom strain-relief bars.
3. Screw the strain-relief bars together with the two 10-32 3/4 screws using the No. 2 Phillips-head screwdriver.
4. Using the No. 1 Phillips-head screwdriver, attach the strain-relief assembly to the angle brackets with the No. 4 eyelet solder lock terminals and the 4-40 3/8 screws.
5. Attach the front panel to the enclosure base using the two 4-40 5/16 screws.
6. Slide your circuit board into the slots in the SCXI enclosure base.
7. Using a No. 1 Phillips-head screwdriver, attach the terminal block rear panel to the enclosure base with two 4-40 5/16 flathead screws.
8. Snap the enclosure cover over the enclosure base. Secure with one 4-40 5/16 flathead screw. This screw also grounds the cover.
9. Attach the thumbscrews. These thumbscrews are used to attach your custom terminal block to an SCXI chassis.

Assembly is complete. You are now ready to attach cabling to your custom circuit board.

Figure 2 displays detailed dimensions for circuit boards designed for SCXI terminal blocks. Use these diagrams as guides when designing custom circuit boards for your SCXI terminal block enclosures.

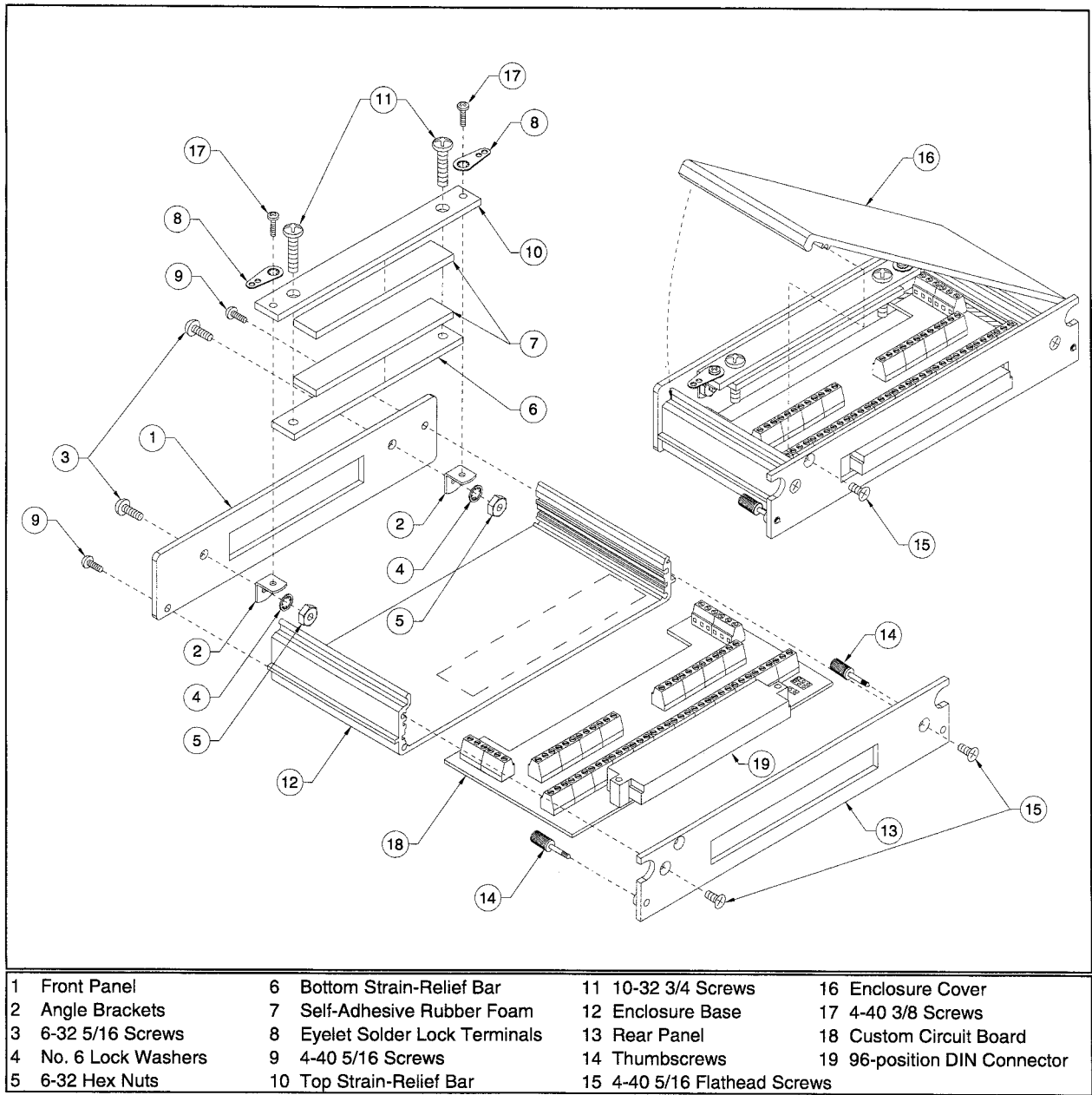


Figure 1. SCXI-1381K Custom Terminal Block Parts Locator Diagram

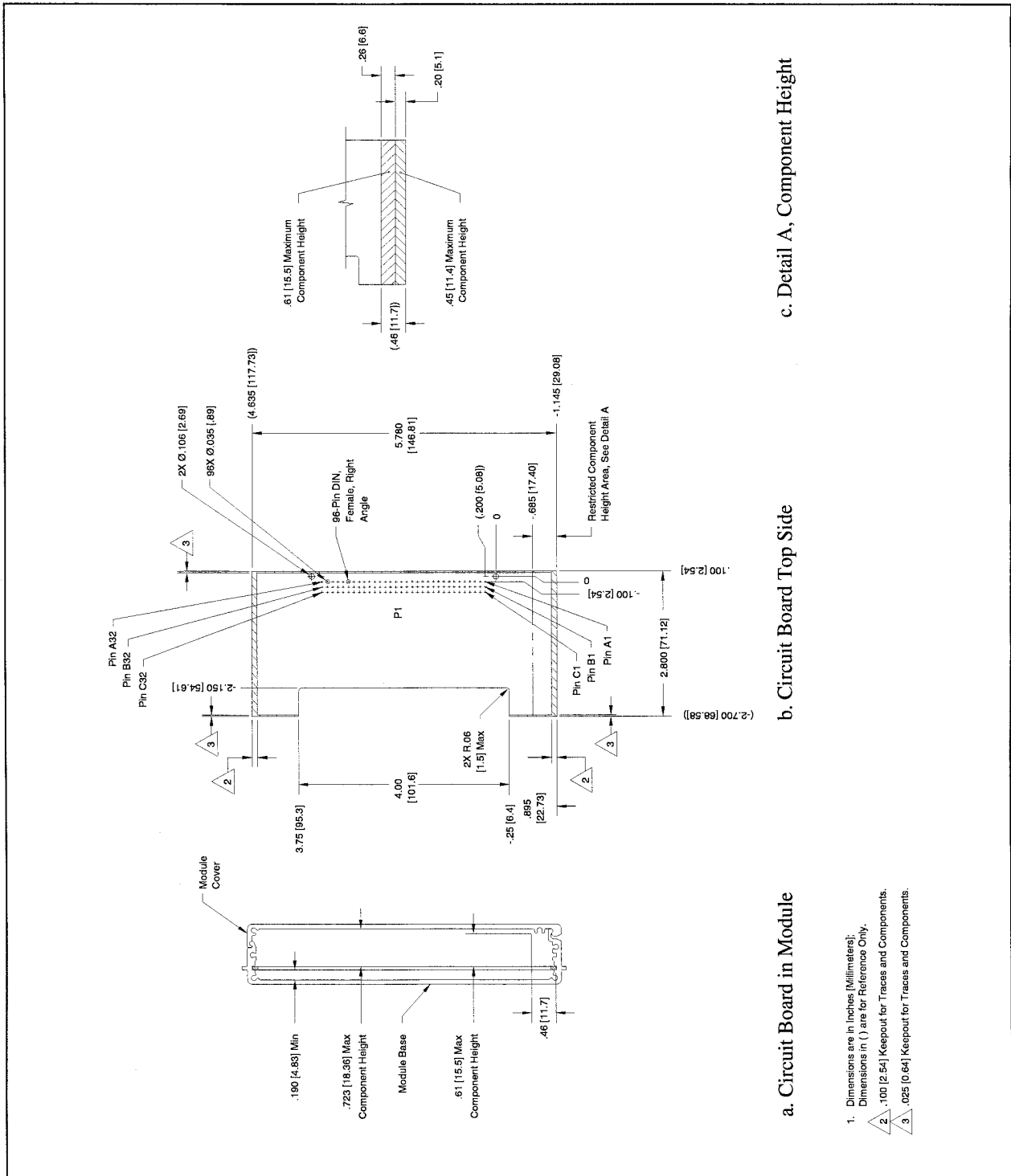


Figure 2. Custom Circuit Board Specifications

