NEW TWO AND THREE SLOT WIDE KITS

VXI-KIT

VXI MODULE HARDWARE KITS

- C-size VXI module kits.
  The most popular VXI size.

- Multiple kit configurations
  Wide range of 1, 2 and 3-slot wide modules.

- Simple mechanical design.
  Easy to assemble, low cost case.

- Full RFI shielding.
  Attenuates signals up to 1 GHz.

- Component shield includes an address switch opening.
  Permits logical address changes without removing the covers.

- Front panel kits available as separate items.
  Provides blank front panels and hardware where side shields are not required.

- All kits include ejector handles, all hardware, assembly instructions and PC board layout drawing.
  Complete package simplifies your module design.

- Complimentary CD with PCB design templates and CAD files.
  Provides a head start on your PCB design.

DESCRIPTION

ICS's VXI-Kits are complete hardware kits for assembling 1, 2 or 3-slot wide C-size VXI modules. Each kit includes a blank front panel with ejectors, side shields and all necessary hardware to assemble a VXI module. Documentation includes the complete PCB layout information and assembly directions. Designers receive a complimentary disk with CAD files and ORCAD design templates for starting their PCB layout. The user only needs his printed circuit board assembly to complete the VXI module.
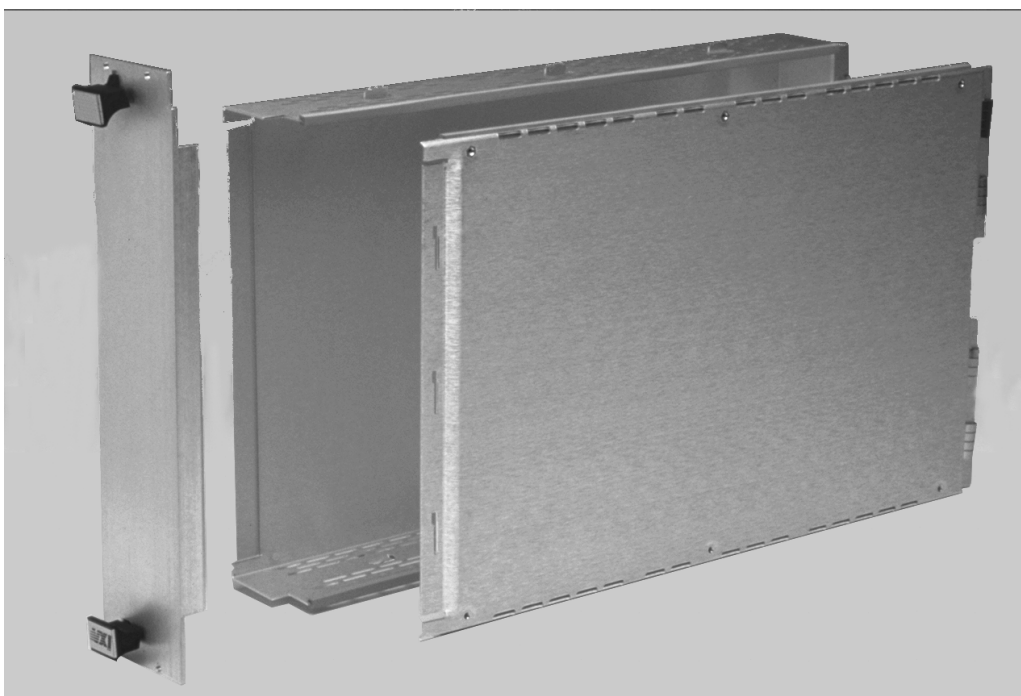
Full RFI Shielding

The VXI module kit incorporates design details for complete RFI/EMI emission control. Each side shield includes air vents at the top and bottom of the module for passing cooling air through the module. The air slot size was selected to attenuate RF signals up to 1 GHz. RFI gaskets seal the sides of the case to the PC board. Copper bushings and connector skirts pick up the VXI back plane ground and ground the side shields to the adjacent module.

Construction Concept

Shield construction is essentially a clamshell type design with the printed circuit board assembly in the middle. The printed circuit board assembly fits in the chassis card guides and supports the module. The user provides 6 clearance holes in his circuit board for screws which hold the two side pieces together. A 0.25 inch (6.3 mm) strip along the top and bottom edges of the card acts as a grounding strip for the RFI gaskets on the module's side shields. The front panel is a separate piece that mounts directly to the front edge of the user's PCB. The front panel stays attached to the PC Board assembly when the side shields are removed.

Multiple Configurations

VXI-Kits are available in a variety of module widths and configurations. The single-wide kits enclose the main printed circuit assembly which slides into the chassis card guides and supports the module. The PCB centerline is offset to the left edge of the module. Single-wide modules can accommodate components up to 0.76 inches high.

C-Size Dual Wide VXI-KIT

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Module Configurations Cont'd

Dual-wide modules are available with the extra 1.2 inches of space on either the circuit side or on the component side of the printed circuit assembly. When the extra space is added to the circuit side, the circuit side interior space is increased to 1.426 inches and the printed circuit board is on the right-hand portion of the module. This increased space accommodates many types of RF modules and socket wire-wrap tails for prototyping circuits.

When the extra space is added to the component side, the PCB centerline stays by the left edge of the module. Component side interior space is increased by 1.2 inches for stacking daughter boards or for tall components up to 1.96 inches high. The new triple-wide kit has 3.16 inches of inside space on the component side of the PCB. The dual and triple-wide component side shield has tabs which slides into the extra chassis card guides for increased module support.

Cover Screw Patterns

VXI-Kits are made with two different screw patterns and address switch opening locations. Figure 1 shows the original screw pattern and address switch opening. These kits are available in single and dual-wide versions with the extra space on the circuit side of the PCB. Figure 2 shows the layout for kits with the **new** screw pattern layout. The new screw pattern kits are available in single, dual and triple wide configurations. Dual-wide kits are available with the extra space on either side of the PCB.

New Two PCB Module Design

A new dual-wide kit is available for VXI module designs that require two full-size printed circuit cards. This dual board kit has a 'U' shaped inside spacer shield that fits between two printed circuit boards as shown in Figure 3.

The module designer fixes the two printed circuit boards to each other on 1.2 inch centers as a single assembly so both printed circuit boards slide into the chassis card guides together. The boards mount to the ejector assembly that on the rear of the front panel. The inside spacer shield slides onto the module from the rear. The outside shields are held against the printed circuit board assembly by mounting screws that go into pemnuts on the inside spacer shield. The completed module is supported by both printed circuit boards which slide into the chassis card guides.

Front Panel Kits

Front panel kits are available with single and dual slot wide blank front panels. The front panels are blank except for the retaining screw, ejector handle slot and mounting screw holes at the top and bottom ends. Front panel kits include all necessary hardware, assembly instructions and PCB layout information.
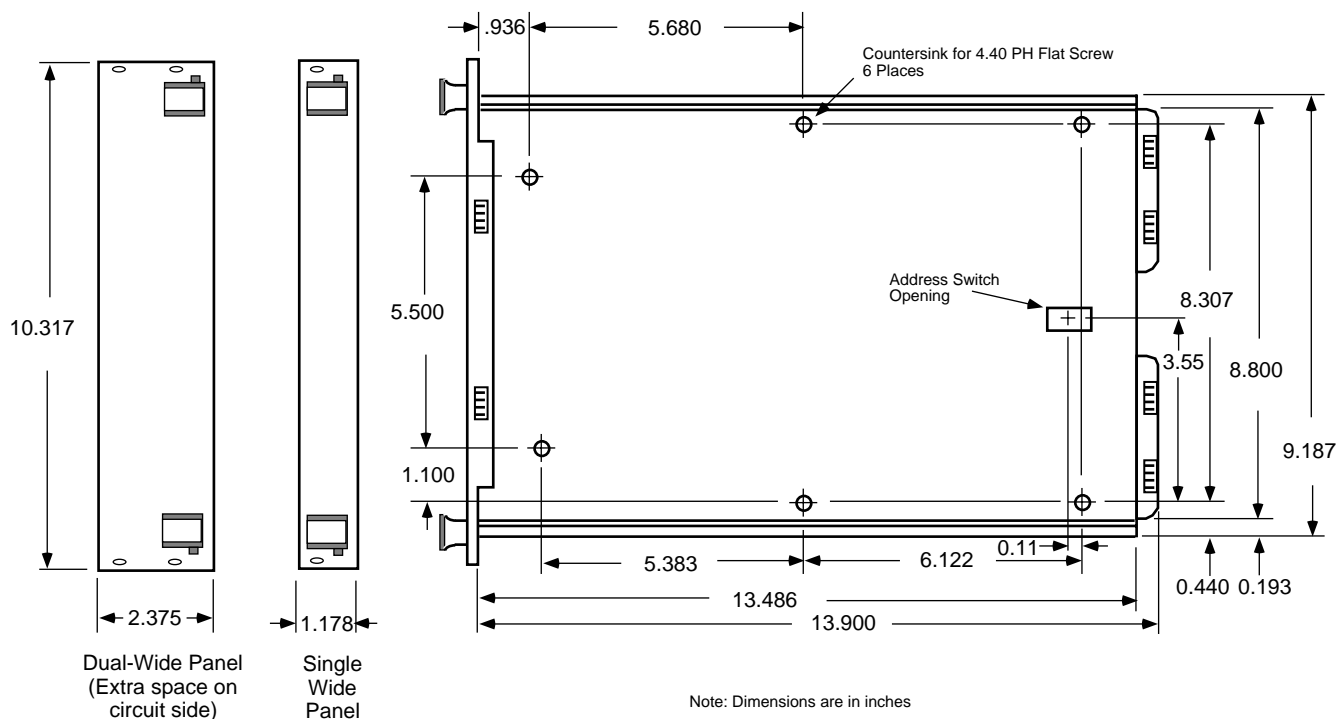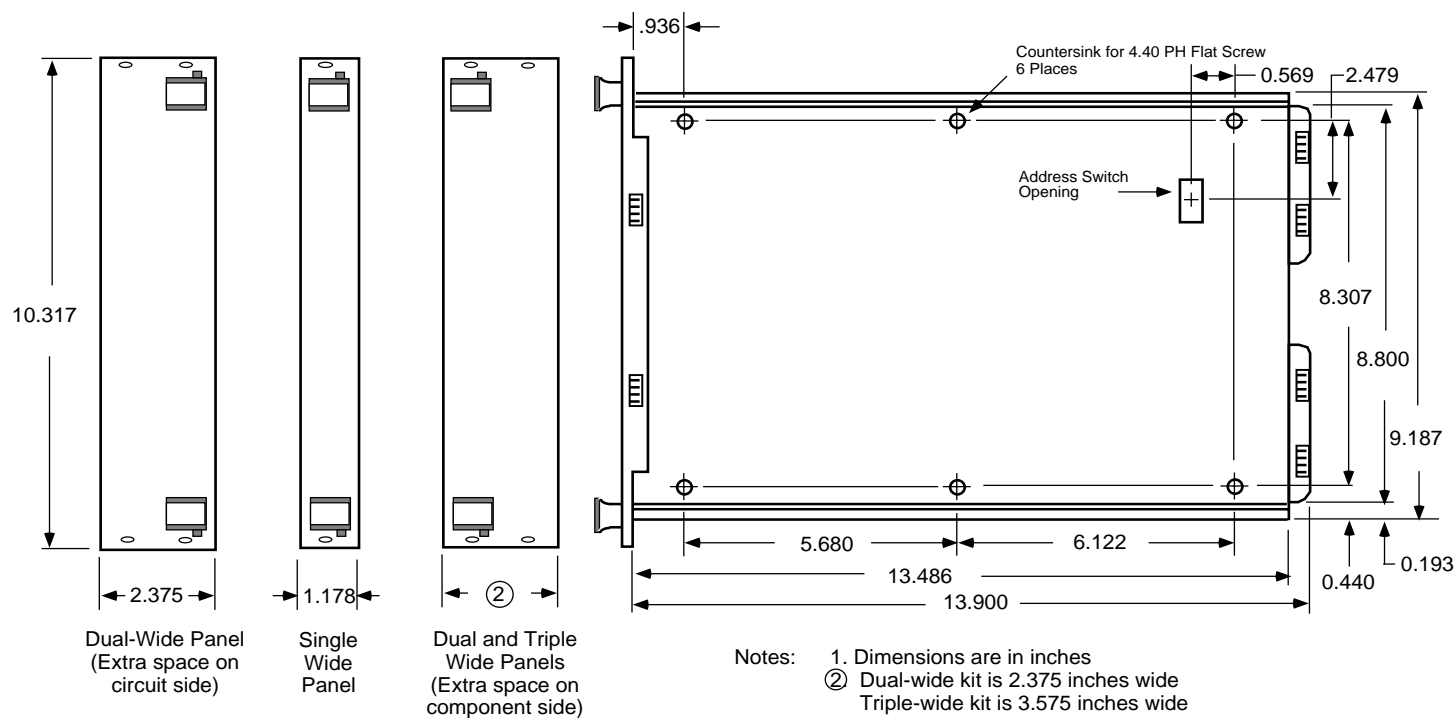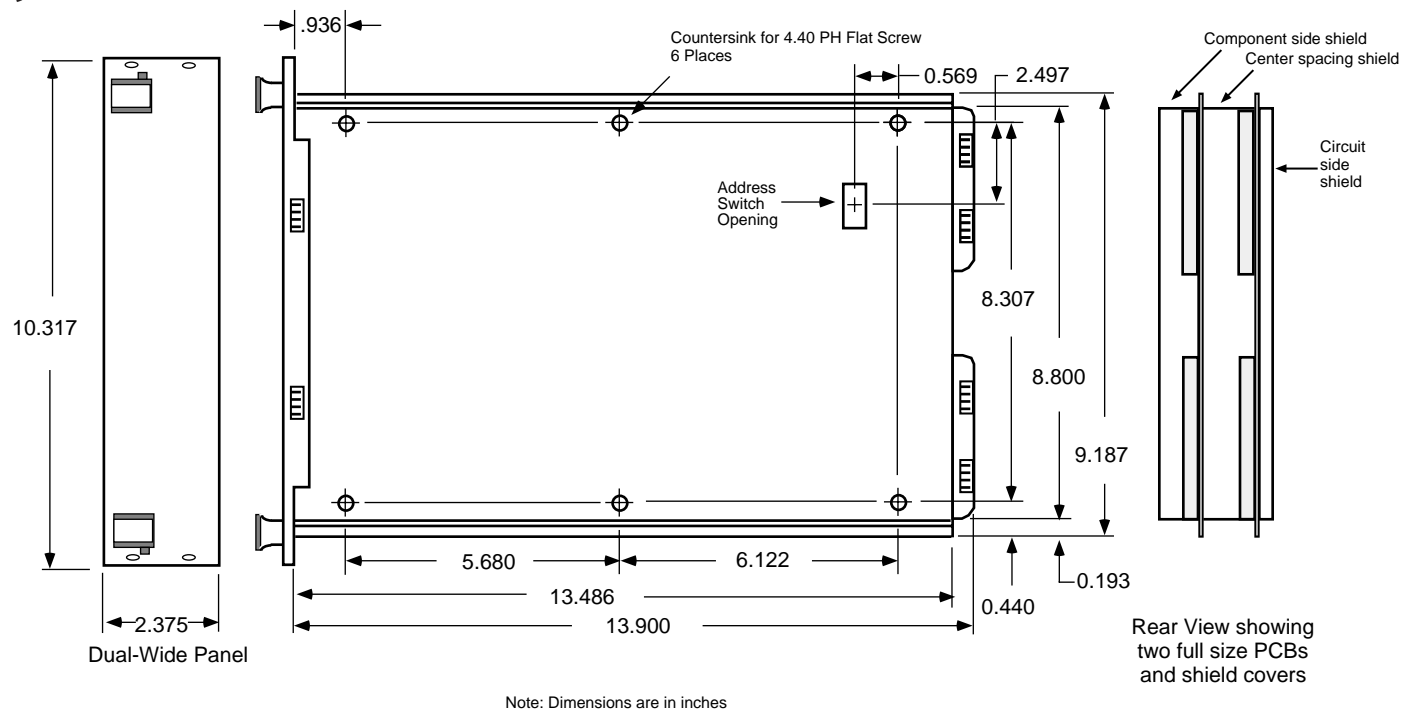

Figure 1   C-Size VXI Kit with Original Mounting Hole Pattern

.936

Countersink for 4.40 PH Flat Screw
6 Places

0.569   2.479

Address Switch
Opening

10.317

8.307

8.800

9.187

0.193

5.680   6.122

13.486

0.440

13.900

2.375

Dual-Wide Panel
(Extra space on
circuit side)

1.178

Single
Wide
Panel

②

Dual and Triple
Wide Panels
(Extra space on
component side)

Notes: 1. Dimensions are in inches
② Dual-wide kit is 2.375 inches wide
Triple-wide kit is 3.575 inches wide

Figure 2   C-Size VXI Kits with the New Mounting Hole Pattern

NEW!

.936

Countersink for 4.40 PH Flat Screw
6 Places

0.569   2.497

Address
Switch
Opening

Component side shield
Center spacing shield

Circuit
side
shield

10.317

8.307

8.800

9.187

0.193

5.680   6.122

13.486

0.440

13.900

2.375

Dual-Wide Panel

Note: Dimensions are in inches

Rear View showing
two full size PCBs
and shield covers

Figure 3   C-Size, dual-wide VXI Kit for two full-size PC boards

VXI-KIT: SPECIFICATIONS

Physical

Size, W x H x D
Single-Slot:
29.92 x 233.35 x 353.06 mm
(1.178 x 9.187 x 13.900 inches)

Dual-Slot:
60.32 x 233.35 x 353.06 mm
(2.375 x 9.187 x 13.900 inches)

Triple-Slot:
90.81 x 233.35 x 353.06 mm
(3.575 x 9.187 x 13.900 inches)

Weight
Single-Slot Kit: 0.93 kg. (2.0 lbs.)
Dual-Slot Kit: 1.09 kg. (2.4 lbs.)
Triple-Slot Kit: 1.36 kg. (3.0 lbs.)

Material
Front Panel -   Aluminum panel
Side Shields - . 050 inch aluminum
RFI Gaskets -   Conductive rubber
Ejectors - Plastic with slide in alumi
   num faces. One face has VXI logo,
   second face is blank for user's logo.

Finish
Clear alodine

Address Switch Opening

Opening provided on component side shield for an 8 position dip rocker switch that can be used to set the module's logical address or control other functions. Supplied address switch label identifies rocker switch bit weights and logical 1/0 positions as shown in the following figure.

```
0   1 6 3 1 8 4 2 1
↑     2 4 2 6
↓     8
1
```

Address Switch Label

Air Vents

0.1 x 0.6 oval slots in patterns over shassis air vents. Table lists module total air vent openings.

TABLE 1 - MODULE AIR VENTS

Module P/N	Width in slots	Vent Opening in sq. in.
113991	1	3.66
113992	2	10.00
114341	1	5.40
114342	2	11.70
114343	2	13.62
114753	2	12.00
114750	3	20.34

Supplied Items

Each VXI-Kit includes the following items:

   Front Panel
   Side shields
   Ejector handles
   Ejector face with VXI logo
   Ejector face blank
   Ejector mounting hardware
   Assembly screws
   Address switch label
   Assembly and layout instructions

Each Front Panel Kit includes the following items:

   Front Panel
   Ejector handles
   Ejector face with VXI logo
   Ejector face blank
   Ejector mounting hardware
   Assembly screws

Optional Items

123153 Layout Template CD-ROMs are not included with ICS VXI products but are supplied at no charge to qualified VXI Kit designers. Call or email sales@icselect.com for your copy.

ORDERING INFORMATION

VXI-KIT Description	Part Number
C-Size, Single-Slot Kit	113991
C-Size, Dual-Slot Kit with extra space on PCB circuit side	113992
C-Size, Single-Slot Kit, New Cover Screw Pattern	114341
C-Size, Dual-Slot Kit, New Cover Screw Pattern, with extra space on PCB circuit side	114342
C-Size, Dual-Slot Kit. New Cover Screw Pattern, with extra space on PCB component side	114343
C-Size, Triple-Slot Kit, New Cover Screw Pattern, with two extra spaces on PCB component side	114750
C-Size, Dual-Slot Kit, New Cover Screw Pattern, with spacing shield for two full-size PCBs.	114753

Front Panel Kit Part Number	
C-Size, Single Wide Front Panel kit	114300
C-Size, Dual-Slot Wide Front Panel Kit for PCB in the right hand slot	114301
C-Size, Dual-Slot Wide Front Panel Kit for PCB in the left hand slot	114304