

VXI C -SIZE HARDWARE KIT



VXI 4.0 MODULE HARDWARE KITS

DESCRIPTION

ICS's VXI4-Kits are complete hardware kits for assembling 1, 2 or 3-slot wide C-size VXI modules with the older 96-pin or the new 160-pin connectors in the VXI 4.0 Specification. 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. Complimentary CAD files and OR-CAD design templates are available to jump-start the PC board layout. The new VXI4-Kits are identical to ICS's older 11434x series kits except the connector shroud has been removed to accommodate the new 160-pin connectors and the VXI 4.0 compliant chassis.

Full RFI Shielding

The VXI module kit is designed for complete RFI/EMI emission control. The side shields have slots at the top and bottom of the module for passing cooling air through the module. The slot size was selected to attenuate RF signals up to 2 GHz. RFI gaskets seal the side shields to the PC board. Copper bushings ground the side shields to the adjacent module. There is a 0.050 inch gap between the shield and the DIN connector to prevent shorting the outer pins on the new 160-pin connector.

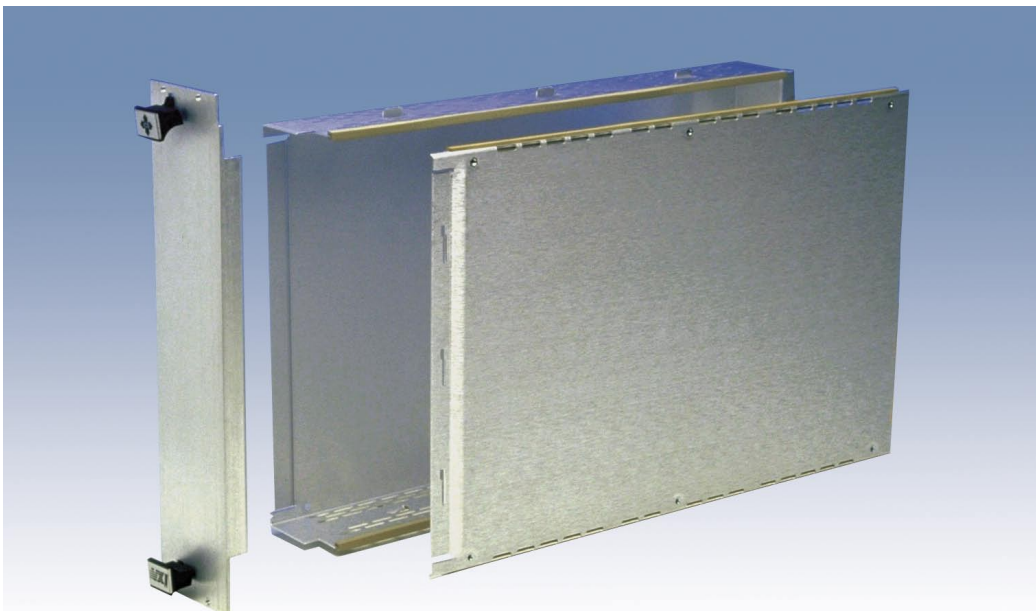
Construction Concept

Shield construction is essentially a clamshell type design with the shields surrounding the printed circuit board assembly. 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) chassis ground strip along the top and bottom edges of the PC 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 remains attached to the PC Board assembly when the side shields are removed.

Multiple Configurations

ICS's VXI-Kits are available in a variety of module widths from 1 to 3 slots. 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 VXI module and components mount to the right hand side. Single-wide modules can accommodate components up to 0.76 inches high.

- All kits include side shields, blank front panels, ejector handles, all hardware, and assembly instructions.
Complete package simplifies your module design.
- Wide range of 1, 2 and 3-slot wide module kits.
Encloses all C-size modules.
- Simple clam-shell design with full RFI shielding.
Easy to assemble case with good EMI/RFI shielding.
- 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.
- Complimentary layout files for designers includes PCB design templates and CAD files.
Provides a head start on your new PCB designs.
- Fits all VXI-1 rev 1.0-4.0 chassis.
Universal kit for all chassis.



C-Size Dual Wide VXI4-KIT



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VXI-KIT: DESCRIPTION

Module Configurations Cont'd

Dual-wide modules are available with the extra 1.2 inches of space on the component side of the printed circuit assembly. 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 triple-wide kit has 3.16 inches of inside space on the component side of the PCB. The PCB centerline stays by the left edge of the module.

The dual and triple-wide component side shields have tabs which slide into the second and third chassis card guides for increased module support.

Cover Screw Patterns

VXI4-Kits are available with ICS's standard screw mounting pattern and address switch opening location. Figure 1 shows the layout for these kits. ICS's standard screw pattern layout results in a cleaner component layout.

Custom variations of these kits are available with no address switch openings or without the PCB mounting holes.

Front Panel Kits

Front panel kits are available for single, dual and triple-wide modules. The front panel 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.

Custom Front Panels

ICS can provide kits with machined front panels finished to your specification. You get a complete kit from a single source. Send front panel layout drawings to custsvc@icselect.com for a quotation.

Customers with existing custom panels can use their custom panels on the new VXI4-Kits without any changes.

Upgrading to VXI4-Kits

Upgrading to ICS's new VXI4-Kits is required if the finished VXI module is to go into a new VXI 4.0 compliant chassis or if the VXI module is being built with the new 160-pin connectors. The new 160-pin connectors have extra pins for the new signals used with the 64-bit VME/VXI data buses. The 160-pin connectors are five row connectors with the two additional rows of pins added on the outside of the original 96-pin DIN connector. These extra outside rows of pins occupy the space formerly used by the connector shroud.

Table 1 is an upgrade table that lists the original 11434x series kits and their new VXI4 equivalent module shield kit.

TABLE 1 VXI4-KIT UPGRADE TABLE

Shrouded 96-Pin VXI-Kits	Description	New VXI4-Kit
114341	Single-slot C-size kit	115880
114343	Dual-slot, C-size kit	115881
114750	Triple-slot, C-size kit	115882

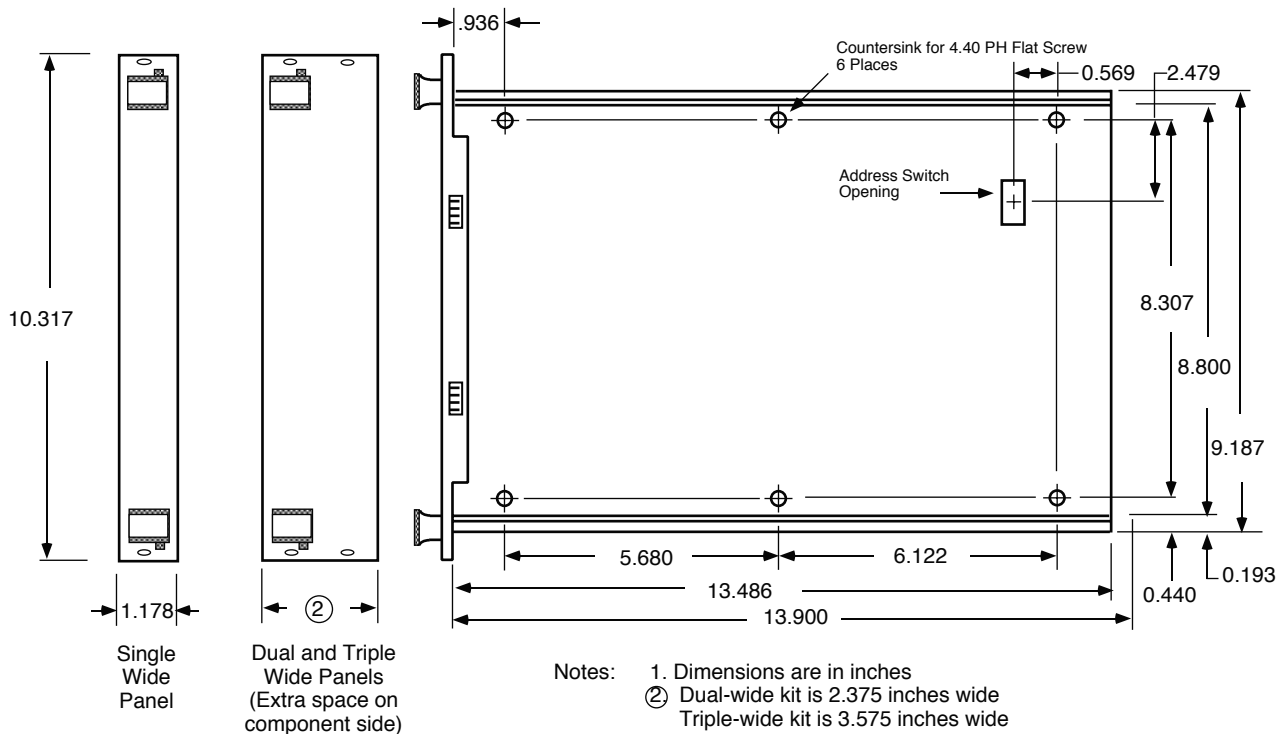


Figure 1 C-Size VXI4 Kits with Mounting Hole Pattern
(Available in one, two and three slot wide versions)

VXI-KIT: SPECIFICATIONS

Specifications

ICS's VXI4-Kits meet the mechanical module shield requirements of the VXI-1 Specification, revision 4.0. New shroudless design accommodates 96-pin and 160-pin connectors.

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

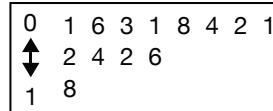
Front Panel - Aluminum panel
Side Shields - .050 inch aluminum
RFI Gaskets - Conductive rubber
Ejectors - Plastic with slide in aluminum faces. One face has a VXI logo, the second face is blank for the user's logo.

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 I/O positions as shown in the following figure. Single-slot 115131 Module Kits available with no address switch opening.



Address Switch Label

Air Vents

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

TABLE 1 - MODULE AIR VENTS

Module P/N	Width (# slots)	Vent Opening in sq.-in.
115880	1	5.40
115881	2	13.62
115882	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 files are not included with ICS VXI products but are supplied at no charge to qualified VXI Kit designers. Call or email ICS sales department at sales@icselect.com for your copy.



Single-wide, Front Panel Kit

ORDERING INFORMATION

VXI-KIT Description

VXI-KIT Description	Part Number
C-Size, Single-Slot Kit, standard screw pattern	115880
C-Size, Dual-Slot Kit with standard screw pattern, extra space on PCB component side	115881
C-Size, Triple-Slot Kit, standard screw pattern, with two extra spaces on PCB component side	115882

Front Panel Kit Part Number

Front Panel Kit Part Number	Part Number
C-Size, Single Wide Front Panel kit <input type="checkbox"/> 114300	
C-Size, Dual-Slot Wide Front Panel Kit for PCB in the left hand slot	114304
C-Size, Triple-Slot Wide Front Panel Kit for PCB in the left hand slot	114305