4 Slot, 6U VPX Development System
Type 39 E-Frame

Features
• 4-slot test & development platform for 6U VPX and OpenVPX™ boards
• 4-slot VPX power and ground backplane
• Each slot can be configured independently for power requirements
• 1.6” slot pitch accommodates wider modules compatible with VITA 48.5 (air flow-through), and provides easy access to components on either side of boards
• Enables use of standard VPX RTM modules and access to J1 high speed signals
• Chassis power input: 97-264 VAC autoranging, total power 580 watts
• High performance cooling via fans
• Aluminum construction with scratch-resistant black painted finish
• Built-in voltage monitor with green LEDs for bus voltages compliance
• Top handle for ease of portability, feet on bottom

Scope of Supply
The 4-slot VPX Test Platform is unique in that it lets VPX card developers and system integrators power up one or more VPX boards and interconnect their J1 fabric connections as they would in the target application. Signals can be passed from one slot to the next with high speed cables, or signals can be introduced or accessed through the J1 fabric connector using specific VPX connector compatible cables. Each slot can be configured independently for power requirements. The wider slot pitch allows the user to insert boards compatible with VITA 48.5 (air flow-through), as well as easier access to components on the boards.

By interconnecting multiple test backplanes via cabling, one can efficiently simulate various fabric topologies without going to the expense of a custom backplane. Elma’s 4-slot VPX Test Platform is also useful in bringing the J1 signals from a board under test to and from an external device such as test equipment or a host PC.

The backplane brings the J1 fabric signals out to the side of the backplane so Rear Transition Modules can be plugged in without disabling access to the signals. Most VPX boards use RTMs to bring I/O signals out the rear of the backplane.

Environmental

<table>
<thead>
<tr>
<th></th>
<th>Operating</th>
<th>Storage/Transit</th>
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<tbody>
<tr>
<td>Temperature:</td>
<td>0°C to +50°C</td>
<td>20°C to +70°C</td>
</tr>
<tr>
<td>Altitude:</td>
<td>6000 ft. (1,829m)</td>
<td>50,000 ft. (15,240m)</td>
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<tr>
<td>Humidity:</td>
<td>5% to 95% Non condensing</td>
<td>5% to 95% Non condensing</td>
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<tr>
<td>Shock:</td>
<td>10 Gs @ 11ms</td>
<td>15 Gs @ 11ms (per ASTM 0775)</td>
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<tr>
<td>Vibration:</td>
<td>1.0 Gs @ 10 to 330 Hz</td>
<td>1.2 Gs @ 5 to 330 Hz</td>
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<tr>
<td>Agencies:</td>
<td>Designed to meet UL 1950, FCC, CE</td>
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<tr>
<td>Weight:</td>
<td>Approx: 18 lbs</td>
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Applications and Related Products
Type 39 E-Frames enable easy access for embedded system development and demonstration in critical defense and industrial applications including
• Mission control
• Secure communications
• Surveillance
• Data and image processing
• Weapons control
• Target tracking and display
• Navigational control
• Threat detection
• Process monitoring
• Environmental monitoring

- Load boards and extender boards
- Rear transition modules
- Backplane interconnect cabling
- Pluggable power supplies
- Complete line of payload boards
- Application ready integrated systems
4 Slot, 6U VPX Development System
Type 39 E-Frame

Line Drawing

Custom Configurations

Number of Slots
- 00-21: Single BP, AY-YA: Split
- Example 7 slot = 07
- Example 12 + 9 = 1L

BP Bare Board
- A = oVPX, 6U, 1" (VITA 65)
- B = oVPX, 3U, 1" (VITA 65)
- C = oVPX, 6U, 8" (VITA 65)
- D = oVPX, 3U, 8" (VITA 65)
- H = oVPX, 6U, 1" + .8" (VITA 65)
- I = oVPX, 3U, 1" + .8" (VITA 65)
- L = VXS Dual Star
- M = V64, J12 mono, 3 row
- N = VME64x, 6U
- O = VME64x, 7U
- P = VPX, 6U (VITA 46)
- W = VPX, 3U (VITA 46)
- S = VXS Star
- T = VXS (Mesh)
- X = No BP Installed
- Z = Custom

BP Connector
- (Configuration J1/J2/PO)
- L = 5 row, RT-2 PO & SW
- M = 3 row, J1 flush, J2 13mm
- O = 5 row, w/o PO
- P = 5 row, w/o PO
- S = RT-2 [J0] 6U
- U = RT-2 [J0] 3U
- V = RT-2 [J0] 6U, RTM
- W = RT-2 [J0] 3U, RTM
- X = No Connectors
- Y = Hybrid
- Z = Custom

Height
- 9 = 9U

Width
- 4 = 49 T
- 8 = 84 T

Rear I/O
- Y = Yes

Depth
- 2 = 200mm - 299mm

Card Orientation
- V = Vertical

PSU Input
- A = 110/220VAC (Plug-in)
- C = 90-230VAC (Fixed)
- E = 110/220VAC (2 x HS, N + 1)
- G = 90-230VAC (Plug-in)
- H = 48VDC (Plug-in)
- K = 48VDC (Fixed)
- M = 48VDC (2 x HS, N + 1)
- N = 28VDC (Fixed)
- O = 28VDC (2 x HS, N+1)
- P = 90-230VAC (2 x HS, N + 1)
- X = No PSU

PSU Output
- (NOT ALL PSU COMBINATIONS AVAILABLE)
- 1 = 100 - 199 watts (w/o 3.3V)
- 3 = 300 - 399 watts (w/o 3.3V)
- 4 = 400 - 499 watts (w/o 3.3V)
- 5 = 500 - 599 watts (w/o 3.3V)
- 6 = 600 - 699 watts (w/o 3.3V)
- 7 = 700 - 799 watts (w/o 3.3V)
- A = 100 - 199 watts (w 3.3V)
- B = 200 - 299 watts (w 3.3V)
- C = 300 - 399 watts (w 3.3V)
- D = 400 - 499 watts (w 3.3V)
- E = 500 - 599 watts (w 3.3V)
- F = 600 - 699 watts (w 3.3V)
- G = 700 - 799 watts (w 3.3V)

Shielding Level
- X = Not Installed

Order Information

Description
- 12U high x 84HP wide x 12" deep
- Vertical front mount 6U x 160mm cards
- Rear I/O 6U x 80mm cards
- 4-slot power and ground VPX backplane
- Backplane part number 101VPX704P-1X40R
- 685W; fixed PSU
- 90-264V AC input voltage

Order Number
- 39E04ASXC8Y2VCF0

Front View (84T)
Right Side View
Rear View (84T)