This product family is part of the industry-leading Atrenne Computing Solutions product line of high performance chassis and backplanes.

**Features**

- VITA 65 OpenVPX-compliant backplanes
- VITA 46/VITA 48 VPX REDI™-compliant
- VITA 46.10 RTM connectors
- Multiple backplane profiles available, including backplanes with routed fabric connections, as well as both 3U and 6U pass-thru backplane versions which can be used with high speed RTM cables
- Provisions for mechanical stops to prevent misinsertion of payload cards
- Stiffeners placed every other slot to ensure backplane rigidity
- Designed to stringent Atrenne Computing Solutions Gen-3 signal integrity design rules; signal integrity-compliant above and beyond VITA 68, up to 10.3 Gbaud with extremely low insertion loss. Innovative signal integrity methods used to minimize return loss, crosstalk, and mode conversion (patent pending).
- High performance Gen-3 backplanes compatible with 40 GbE (40 GBase-KR4), InfiniBand® QDR (10 Gbaud), Infiniband FDR10 (10.3 Gbaud), and PCI Express® (PCIe) Gen-3 (8 Gbaud) on OpenVPX data plane and expansion plane fabrics
- Optional rear transition connectors
- Optional conformal coating
- Keying and alignment per VITA 65 and VITA 46
- Durability: mate-unmate for 200 cycles
- Non-Volatile Memory Read Only (NVMRO) signal (jumper selectable)
- Optional battery backup input, jumperable to +3.3V
- SYSCON selectable - set to 1st VPX slot as default
- Contact factory for RF feed-thru backplanes per VITA 67.x or fiber optic feed-thru backplanes per VITA 66.x
- Contact factory for alternate connectors such as RT2-R

**Overview**

Atrenne Computing Solutions offers a wide range of high performance backplanes, with 6U, 3U and hybrid 3U/6U models available. Our Gen-3 OpenVPX backplanes are part of an innovative product family that makes up the industry’s first end-to-end solution for 40 Gigabit systems.

Designed to the demanding signal integrity requirements of the VITA 68 VPX™ compliance channel draft standard, these high performance Gen-3 backplanes offer the highest signal integrity in the industry and are typically used in air-cooled or conduction-cooled development chassis. Atrenne Computing Solutions can also design application-specific configurations to meet your individual requirements.
<table>
<thead>
<tr>
<th>Part Number</th>
<th>Backplane Description</th>
<th>Backplane Profile</th>
<th>Payload Slot Profile</th>
<th>Payload Module Profile</th>
<th>Switch Slot Profile</th>
<th>Switch Module Profile</th>
</tr>
</thead>
<tbody>
<tr>
<td>024-901-06-X1G3-01</td>
<td>3U, VPX REDI 1” pitch (7 slots wide), no data plane, control plane, or expansion plane</td>
<td>N/A open for user</td>
<td>All</td>
<td>All</td>
<td>All</td>
<td>All</td>
</tr>
<tr>
<td></td>
<td>fabric connectivity, all fabric signals pass through to RTM connectors for users, 10.3 Gbaud optimized</td>
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</tr>
<tr>
<td>024-901-06-C2G3-01</td>
<td>3U, 6-slot VPX REDI 1” pitch (7 slots wide), 5 payload slots, 1 data and control switch slot, star fabric topology, no expansion plane, 10.3 Gbaud</td>
<td>BKP3-CEN06-15.2.18-4</td>
<td>SLT3-PAY-1F2F2U-14.2.2</td>
<td>MOD3-PAY-1F2F2U-16.2.2-(all)</td>
<td>SLT3-SWH-6F6U-14.4.1</td>
<td>MOD3-SWH-6F6U-16.4.1-(all)</td>
</tr>
<tr>
<td>024-900-06-X1G3-01</td>
<td>6U, 6-slot VPX REDI 1” pitch (7 slots wide), no data plane, control plane, or expansion plane</td>
<td>N/A open for user</td>
<td>All</td>
<td>All</td>
<td>All</td>
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</tr>
<tr>
<td>024-900-06-C1G3-01</td>
<td>6U, 16-slot VPX REDI 1” pitch (16 slots wide), no data plane, control plane, or expansion plane</td>
<td>BKP6-CEN16-11.2.2-4</td>
<td>SLT6-PAY-4F1Q2U2T-10.2.1</td>
<td>MOD6-PAY-4F1Q2U2T-12.2.1-(all)</td>
<td>SLT6-SWH-16U20F-10.4.2</td>
<td>MOD6-SWH-16U20F-12.4.2-(1-13,15)</td>
</tr>
<tr>
<td>024-900-06-C2G3-01</td>
<td>6U, 16-slot VPX REDI 1” pitch (16 slots wide), 14 payload slots, 2 data &amp; control switch slots, star fabric topology, expansion plane, 10.3 Gbaud</td>
<td>BKP6-CEN16-11.2.2-4</td>
<td>SLT6-PAY-4F1Q2U2T-10.2.1</td>
<td>MOD6-PAY-4F1Q2U2T-12.2.1-(all)</td>
<td>SLT6-SWH-20U19F-10.4.1</td>
<td>MOD6-SWH-20U19F-2.4.1-(1-13,15)</td>
</tr>
<tr>
<td>024-900-06-C3G3-01</td>
<td>6U, 16-slot VPX REDI 1” pitch (16 slots wide), 5 payload slots, 1 data and control switch slot, star fabric topology, no expansion plane, 10.3 Gbaud</td>
<td>BKP6-CEN06-11.2.23-4</td>
<td>SLT6-PAY-4F1Q2U2T-10.2.1</td>
<td>MOD6-PAY-4F1Q2U2T-12.2.1-(all)</td>
<td>SLT6-SWH-16U20F-10.4.2</td>
<td>MOD6-SWH-16U20F-12.4.2-(1-13,15)</td>
</tr>
<tr>
<td>024-900-06-C3G3-01</td>
<td>6U, 16-slot VPX REDI 1” pitch (16 slots wide), 8 payload slots, 2 data &amp; control switch slots,</td>
<td>BKP6-CEN06-11.2.24-4</td>
<td>SLT6-PAY-4F1Q2U2T-10.2.1</td>
<td>MOD6-PAY-4F1Q2U2T-12.2.1-(all)</td>
<td>SLT6-SWH-16U20F-10.4.2</td>
<td>MOD6-SWH-16U20F-12.4.2-(1-13,15)</td>
</tr>
</tbody>
</table>
Note that this topology is identical to 024-900-16-CEN1-01; the only difference is that this backplane is rated to 10.3 Gbaud.

Note that this topology is a new profile that is proposed for the next revision of VITA 65.
Figure 4: 024-900-16-X1G3-01

Figure 5: 024-900-16-C2G3-01

Note that this topology is a new profile that is proposed for the next revision of VITA 65.
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Warranty

This product has a one year warranty.

Contact Information

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508-588-6110 or 800-926-8722

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