# XPression Studio and BlueBox User Supplied Hardware Platform

This document describes the Ross recommended hardware configuration for XPression Studio and BlueBox systems in which a customer or business partner supplies hardware. Bundled hardware + software solutions are also available from Ross Video.

Supported hardware is updated regularly with the latest information on processors, I/O boards, Hard Disk Drives, and more. Please read the specifications below to select the appropriate hardware to best meet the specific needs of your application.

Ross provides these recommendations on a best-efforts basis and cannot guarantee specific hardware performance parameters. Hardware performance and functionality is the responsibility of the hardware vendor. Customers or business partners supplying hardware are responsible for hardware installation, configuration, setup, and support.

Please feel free to contact us with questions at solutions@rossvideo.com.

**Specifications**

<table>
<thead>
<tr>
<th>Component</th>
<th>Minimum</th>
<th>Recommended</th>
<th>Tested Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Supply</td>
<td>Select a power supply based on the power and connection requirements of the system components. It is recommended to operate most computer power supplies at 40% to 80% of their total capacity for optimal efficiency and overhead.</td>
<td>960W EPS 12V hot-swappable 1+1 redundant power supply</td>
<td></td>
</tr>
<tr>
<td>Memory</td>
<td>8GB</td>
<td>16GB</td>
<td>16GB (2x8GB) 2666MHz DDR4 UDIMM Non-ECC</td>
</tr>
<tr>
<td>GPU</td>
<td>6GB GDDR5 with PCI-E slot x16</td>
<td>8GB GDDR6 with PCI-E slot x16</td>
<td>NVIDIA® Quadro® RTX4000, 8GB GDDR6, 2304 CUDA® Cores, 3x Display Port 1.4 with PCI-E slot x16</td>
</tr>
<tr>
<td>Mainboard</td>
<td>Select a mainboard that can support the requirements of your system components.</td>
<td>ASUS® X299 SAGE/10G Motherboard</td>
<td></td>
</tr>
<tr>
<td>CPU</td>
<td>6 CPU Cores @ 2.8GHz (XPression is optimized for Intel® CPUs)</td>
<td>8 CPU Cores @ 3.6 GHz (XPression is optimized for Intel® CPUs)</td>
<td>Intel® Core™ i9-10900X Cascade Lake 10 Core 3.7 GHz LGA 2066 165W</td>
</tr>
</tbody>
</table>
| Output          | • Matrox® DSXLE4/4/100F (for HD-SDI or UHD)  
• Matrox® DSXLE5/D25/100 (for IP)  
• Matrox® XMIO3/12G/100 (for 12G)  
• AJA® Corvid88 (for HD-SDI or UHD)  
With PCI-E slot x8 or higher | • Matrox® DSXLE4L/44/100F (for HD-SDI or UHD)  
• Matrox® DSXLE4/E4/100F or DSXLE4/E/100F (for IP)  
• Matrox® XMIO3/12G/100 (for 12G)  
• AJA® Corvid88 (for HD-SDI or UHD)  
• AJA® Kona IP (for IP)  
• Blackmagic Design® DeckLink HD Extreme  
With PCI-E slot x8 or higher |
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</tr>
</thead>
</table>
| Storage            | 100GB   | • System Storage: 256GB SSD  
• System RAID: RAID 1 (Mirrored)  
• Media Storage: 1 TB SSD or HDD  
• Media RAID: RAID 1 or RAID 5 | • System Storage: 2x 256GB SSD RAID 1 (Mirrored)  
• Media Storage: 3x 1TB SSD RAID 5 |
| USB                |         | • 1 available USB port for XPression USB License  
• 1 available USB port for XPression Software Installer USB  
• 2 available USB ports for keyboard and mouse |                                                                                  |
| Keyboard / Mouse   |         | • Standard keyboard / 2 button mouse  
• Optional: XPression Custom Keyboard |                                                                                  |
| Operating System   |         | Microsoft® Windows® 10 Professional, 64 bit |                                                                                  |