

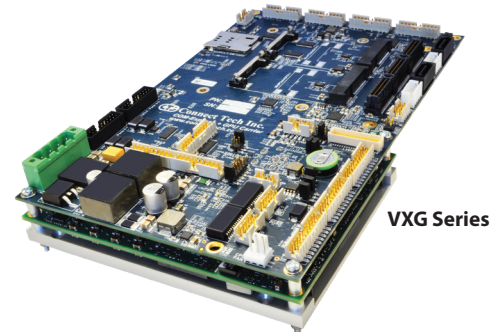


## COM Express® Type 6 + GPU Embedded System

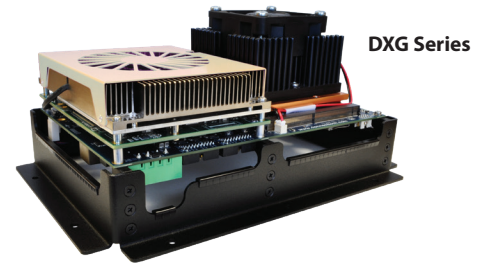
The **COM Express® Type 6 + GPU Embedded System** from Connect Tech combines Intel® x86 processors with high-end NVIDIA® Quadro® and RTX GPUs all into a ruggedized small form factor embedded system. Choose from highest-end, highest-performance models or from low-powered extended temperature models all ideal for high-end encode/decode video applications or GPGPU CUDA® processing applications.

This embedded system exposes all of the latest generation interconnect including: Gigabit Ethernet, USB 3.0 and 2.0, DisplayPort++, VGA, LVDS, SATA III, GPIO, I2C, mSATA, miniPCIe, PCIe/104 and SD Card Expansion. This embedded system uses all locking ruggedized positive latching connectors.

VXG part numbers have Passive Heat Spreaders that are to be installed into a Customer Designed End Thermal Solution. DXG part numbers have an Active Cooling Solution with Integrated Support Frame.



VXG Series



DXG Series

### Specifications

<b>COM Express CPU Module Options</b>	<ul style="list-style-type: none"> <li>Intel® Xeon® W-11155MLE (Tiger Lake / 11th Gen, 4 x 1.8 / 3.1 GHz, 8MB cache, 25 W)</li> <li>Intel® Xeon® W-11555MLE (Tiger Lake / 11th Gen, 6 x 1.9 / 4.4 GHz, 12MB cache, 25 W)</li> <li>Intel® Xeon® W-11865MLE (Tiger Lake / 11th Gen, 8 x 1.5 / 4.5 GHz, 24MB cache, 25 W)</li> <li>Intel® Xeon® W-11155MRE (Tiger Lake / 11th Gen, 4 x 1.9 / 4.4 GHz, 8MB cache, 35 W)</li> <li>Intel® Xeon® W-11555MRE (Tiger Lake / 11th Gen, 6 x 2.1 / 4.5 GHz, 12MB cache, 35 W)</li> <li>Intel® Xeon® W-11865MRE (Tiger Lake / 11th Gen, 8 x 2.1 / 4.7 GHz, 24MB cache, 35 W)</li> <li>Intel® Celeron® 6600HE (Tiger Lake / 11th Gen, 2 x 2.6 / 2.6 GHz, 8MB cache, 35 W)</li> <li>Intel® Core™ i3-11100HE (Tiger Lake / 11th Gen, 4 x 1.9 / 4.4 GHz, 8MB cache, 35 W)</li> <li>Intel® Core™ i5-11500HE (Tiger Lake / 11th Gen, 6 x 2.1 / 4.5 GHz, 12MB cache, 45 W)</li> <li>Intel® Core™ i7-11850HE (Tiger Lake / 11th Gen, 8 x 2.1 / 4.7 GHz, 24MB cache, 35 W)</li> <li>Intel® Xeon® E3-1505M V6 ("Kaby Lake" 7th Gen, 4 x 3.0 / 4.0 GHz, 8MB cache, 45 W)</li> <li>Intel® Xeon® E3-1505L V6 ("Kaby Lake" 7th Gen, 4 x 2.2 / 3.0 GHz, 8MB cache, 25 W)</li> <li>Intel® Xeon® E3-1515M V5 ("Skylake" 6th Gen, 4 x 2.8 / 3.7 GHz, 8MB cache, 35 W)</li> <li>Intel® Xeon® E3-1505L V5 ("Skylake" 6th Gen, 4 x 2.0 / 2.8 GHz, 8MB cache, 25 W)</li> </ul>
<b>GPU Module Options</b>	<ul style="list-style-type: none"> <li>NVIDIA® Quadro® RTX™ 5000 – (Turing, 3072 CUDA Cores, 110W)</li> <li>NVIDIA® Quadro® RTX™ 3000 – (Turing, 1920 CUDA Cores, 80W)</li> <li>NVIDIA® Quadro® T1000 – (Turing, 896 CUDA Cores, 50W)</li> <li>NVIDIA® RTX™ A4500 – (Ampere, 5888 CUDA Cores, 115W)</li> <li>NVIDIA® RTX™ A2000 – (Ampere, 2560 CUDA Cores, 60W)</li> <li>NVIDIA® RTX™ A1000 – (Ampere, 2048 CUDA Cores, 60W)</li> <li>NVIDIA® RTX™ A500 – (Ampere, 2048 CUDA Cores, 35W)</li> </ul>
<b>COM Express Compatibility</b>	COM Express® Type 6 (PICMG COM Express® COM.0 R2.1)
<b>MiniPCIe Expansion</b>	2 slots (with PCIe, USB and SATA connections)
<b>PCIe/104 Expansion</b>	4 x PCIe x1 lanes 2 x SATA III (on PCIe/104 Type-2 Pins)
<b>DisplayPort/HDMI/DVI</b>	6 total - 2 outputs from COM Express, 4 outputs from GPU (On-board Circuitry enables DisplayPort or HDMI or DVI)
<b>VGA Video</b>	1 Analog CRT VGA Port
<b>LVDS Video</b>	18-24-bit LVDS
<b>Gigabit Ethernet</b>	2 x 10/100/1000 Ethernet Ports
<b>USB 2.0</b>	6 USB 2.0 Ports
<b>USB 3.0</b>	4 USB 3.0 Ports
<b>HD Audio</b>	1 stereo input, 1 stereo output
<b>RS-232</b>	3 total - 2 from PCIe UART, 1 to COM Express console port
<b>RS-485</b>	2 Ports
<b>GPIO</b>	8-bits (Buffered 4in/4out, +3.3V or +5V selectable)
<b>Ext SATA</b>	2 external SATA connectors (capable of SATA III)
<b>mSATA</b>	2 mSATA slots (capable of SATA III)
<b>SD Card</b>	1 micro SD Card slot (from USB Host controller, with bootable option)
<b>System Interfaces</b>	I2C, SMBus, S3 Power Level Output, Reset Output

### FEATURES

✓ *Combines High-End GPUs with Latest Generation x86 Processors in a ruggedized small form factor*

✓ *GPUs can be targeted for 4 independent display outputs OR for a headless GPU processing system utilizing CUDA cores*

✓ *System uses a building block approach: Mix and match Intel® CPUs with NVIDIA® Quadro® and RTX GPUs*

✓ *Choose from:*

- *VXG part number with Passive Heat Spreaders to install into a Customer Designed End Thermal Solution*
- *DXG part number with an Active Cooling Solution with Integrated Support Frame*

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## Specifications

<b>I/O Connector Type</b>	Rugged Locking Positive Latching 2mm Pitch Connectors
<b>Input Power</b>	Single wide input range +16V to +48V DC**
<b>Power Consumption</b>	Varies per VXG/DXG SKU with different CPU and GPU models
<b>Dimensions</b>	See online 3D Models
<b>Operating Temperature Range</b>	0°C to +55°C and -40°C to +85°C options available

\*\* +12V DC input supported in some applications

**Product Name:** COM Express® + GPU Embedded System

**Part Number:** VXG###, DXG###

