

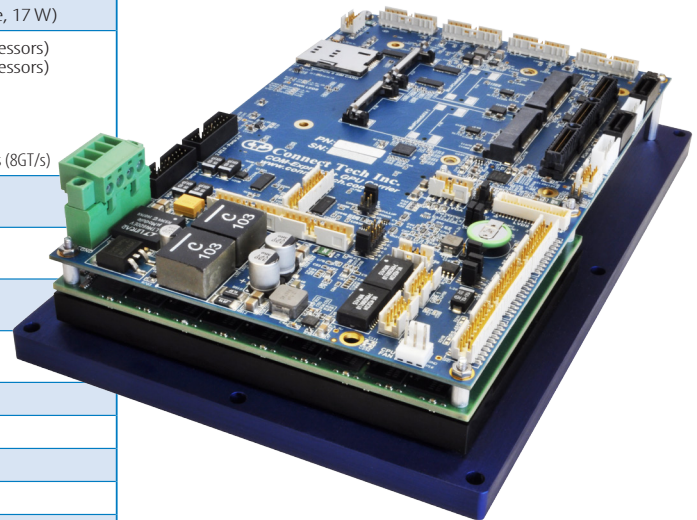
COM Express® + GPU Embedded System

The **COM Express + GPU Embedded System** System from Connect Tech combines the latest generation x86 processors with high-end Graphics Processing Units (GPU) all into a ruggedized small form factor embedded system. Choose from the latest Generation Intel® Core™ i7 or i5 x86 processors; and from either the AMD GPU (ideal for driving multiple displays) or the NVIDIA GPU (ideal for CUDA Core processing applications) lineup.

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 and eases the challenge of cooling multiple processors with the use of our Unified Thermal Extraction Baseplate which can be mounted directly into an enclosure or chassis for further thermal dissipation.

| Specifications | |
|---------------------------------------|--|
| COM Express CPU Module Options | <ul style="list-style-type: none"> Intel® Core™ i7-4700EQ (4 x 2.4 / 3.4 GHz, 6 MB L2 cache, 47 W) Intel® Core™ i5-4402E (2 x 1.6 GHz, 3MB L2 cache, 25 W) Extended Temperature Intel® Core™ i7-3517 (2 x 2.8 GHz, 4MB L2 cache, 17 W) |
| GPU Module Options | <ul style="list-style-type: none"> AMD Radeon E6760 (600MHz GPU, 1GB GDDR5, 41W, 480 Shader Processors) AMD Radeon E8860 (575MHz GPU, 2GB GDDR5, 37W, 640 Shader Processors) NVIDIA GT 745M (837MHz GPU, 1GB DDR3, 33W, 384 CUDA Cores) NVIDIA GTX 770M (797MHz GPU, 3GB GDDR5, 80W, 960 CUDA Cores) NVIDIA GTX 950M (1029MHz GPU, 2GB GDDR5, 30W, 512 CUDA Cores) NVIDIA GTX 970M (924MHz GPU, 6GB GDDR5, 91W, 1280 CUDA Cores) Host connection to Processor via PEG (PCI Express Graphics x16) Link with Gen 3.0 Speeds (8GT/s) |
| COM Express Compatibility | COM Express® Type 6 (PICMG COM Express® COM.0 R2.1) |
| MiniPCIe Expansion | 2 slots (with PCIe, USB and SATA connections) |
| PCIe/104 Expansion | 4 x PCIe x1 lanes 2 x SATA III (on PCIe/104 Type-2 Pins) |
| DisplayPort/HDMI/DVI | 6 total - 2 outputs from COM Express, 4 outputs from GPU (On-board Circuitry enables DisplayPort or HDMI or DVI) |
| VGA Video | 1 Analog CRT VGA Port |
| LVDS Video | 18-24-bit LVDS |
| Gigabit Ethernet | 2 x 10/100/1000 Ethernet Ports |
| USB 2.0 | 6 USB 2.0 Ports |
| USB 3.0 | 4 USB 3.0 Ports |
| HD Audio | 1 stereo input, 1 stereo output |
| RS-232 | 3 total - 2 from PCIe UART, 1 to COM Express console port |
| RS-485 | 2 Ports |
| GPIO | 8 -bits (Buffered 4in/4out, +3.3V or +5V selectable) |
| Ext SATA | 2 external SATA connectors (capable of SATA III) |
| mSATA | 2 mSATA slots (capable of SATA III) |
| SD Card | 1 micro SD Card slot (from USB Host controller, with bootable option) |
| System Interfaces | I2C, SMBus, S3 Power Level Output, Reset Output |
| I/O Connector Type | Rugged Locking Positive Latching 2mm Pitch Connectors |
| Input Power | Single wide input range +12V to +48V DC |
| Power Consumption | 40W typical, 100W max (see manual for detailed listing of consumption scenarios) |
| Dimensions | 219mm x 144.5mm x 45.5mm (Entire Assembly: Carrier + COMe Module + GPU + Thermal Plate) |
| Weight | 1455g (Entire Assembly: Carrier + COMe Module + GPU + Thermal Plate) |
| Thermals | Unified Thermal Extraction Baseplate - 9.525mm thick Anodized Aluminum Plate |
| Operating Temperature Range | (0°C to +60°C) and (-40°C to +85°C) options available |

Product Name:
COM Express® + GPU Embedded System
Part Number: VXG###

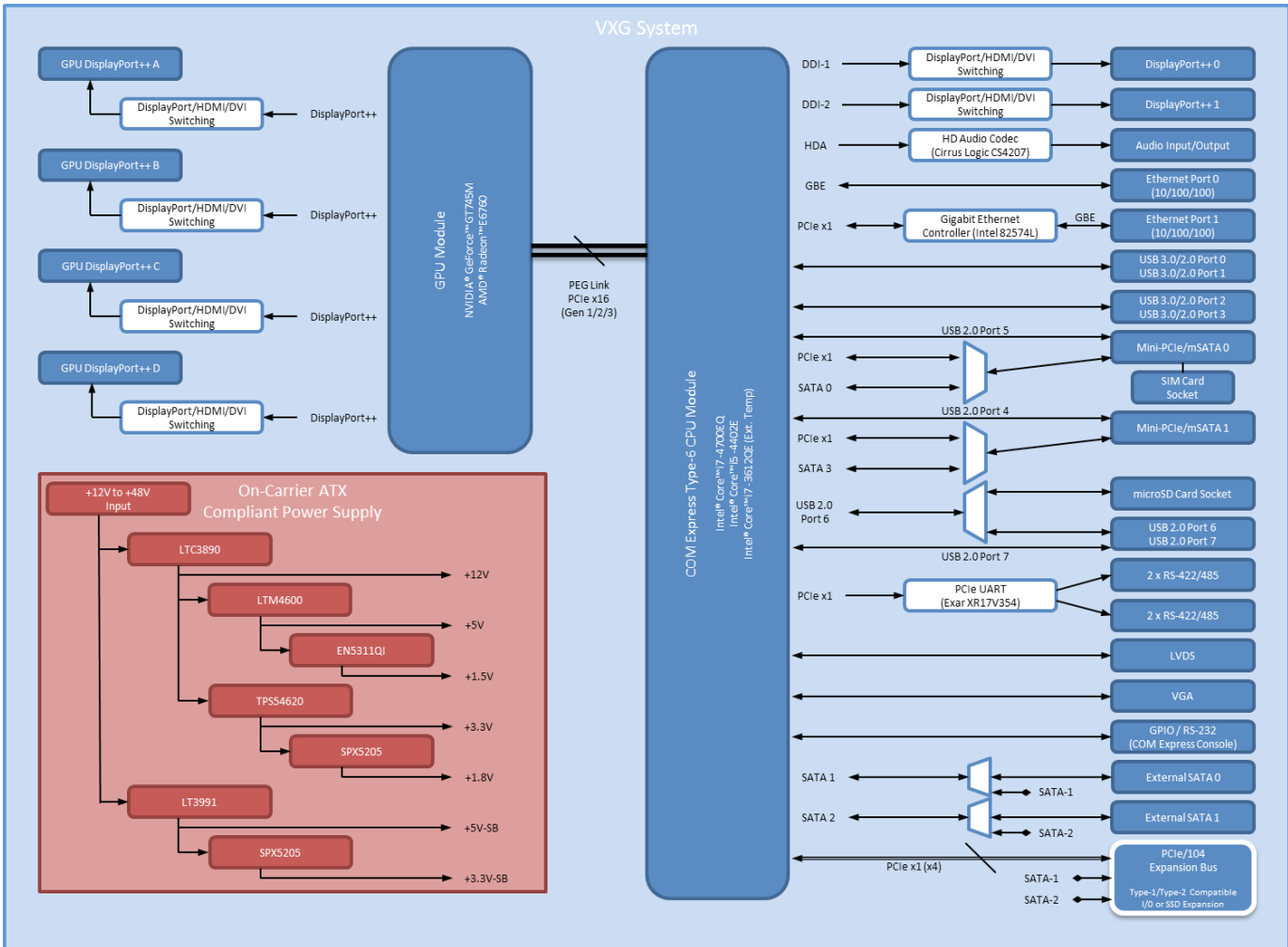
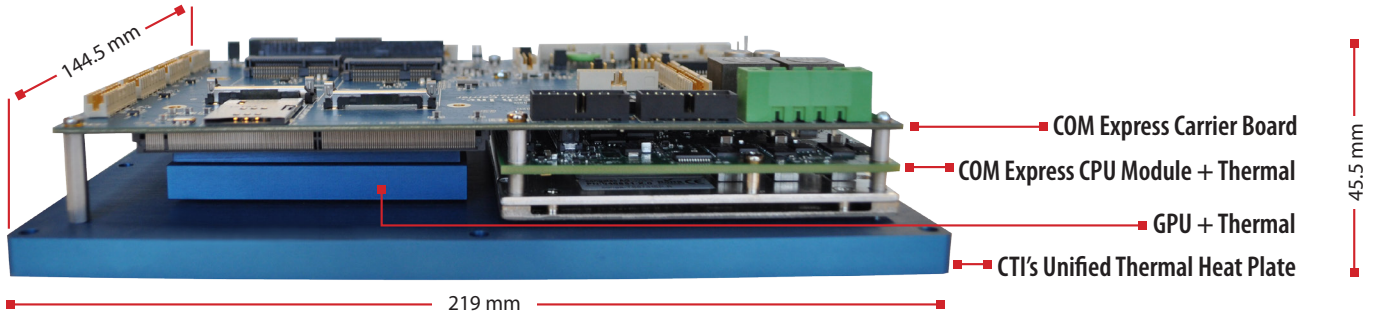


FEATURES

- ✓ *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*
- ✓ *All thermal extraction points from COM Express and GPU are brought out to a single unified plane*

COM Express + GPU

Product Name: COM Express® + GPU Embedded System
Part Number: VXG###



Ordering Information

| Part Number | CPU | GPU | Temperature Range |
|-------------|------------------------------------|------------------|--|
| VXG001 | Intel® Core™ i7-4700EQ, 8GB DDR3L | AMD Radeon E6760 | 0°C to +60°C |
| VXG002 | Intel® Core™ i7-4700EQ, 8GB DDR3L | NVIDIA GT745M | 0°C to +60°C |
| VXG003 | Intel® Core™ i5-4402E, 8GB DDR3L | AMD Radeon E6760 | 0°C to +60°C |
| VXG004 | Intel® Core™ i5-4402E, 8GB DDR3L | NVIDIA GT745M | 0°C to +60°C |
| VXG005 | Intel® Core™ i7-3517, 8GB DDR3 | AMD Radeon E6760 | CPU -40°C to +85°C GPU -10°C to +70°C |
| VXG006 | Intel® Core™ i7-3517, 8GB DDR3 | NVIDIA GT745M | CPU -40°C to +85°C GPU -10°C to +70°C |
| VXG016 | Intel® Core™ i7-4700EQ, 8GB DDR3L | NVIDIA GTX 950M | CPU -40°C to +85°C GPU -10°C to +70°C |
| VXG017 | Intel® Core™ i7-4700EQ, 16GB DDR3L | NVIDIA GTX 970M | CPU -40°C to +85°C GPU -10°C to +70°C |

Note: Other CPU and memory options available upon request

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