

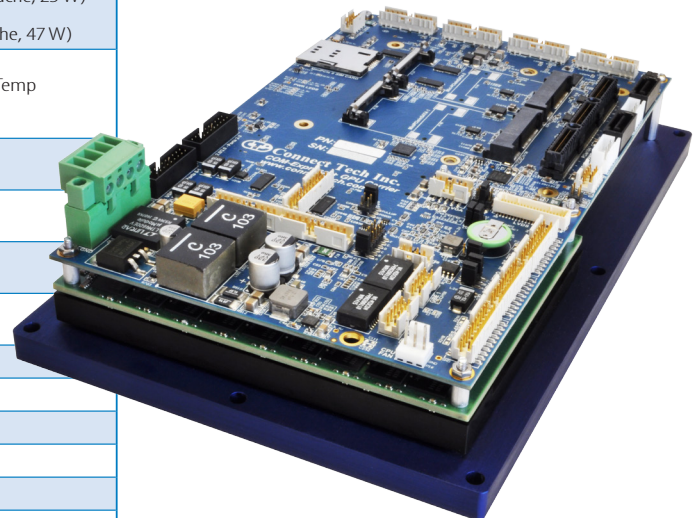
COM Express® + GPU Embedded System

The **COM Express + GPU Embedded System** from Connect Tech combines Intel® Skylake x86 processors with high-end NVIDIA® Pascal™ Graphics Processing Units (GPU) 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 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® Xeon® E3-1515M V5 (“Skylake” 6th Gen, 4 x 2.8 / 3.7 GHz, 8MB cache, 45 W) • Intel® Xeon™ E3-1505L V5 (“Skylake” 6th Gen, 4 x 2.0 / 2.8 GHz, 8MB cache, 25 W) * Ext Temp • Intel® Core™ i7-4700EQ (“Haswell” 4th Gen, 4 x 2.4 / 3.4 GHz, 6 MB cache, 47 W)
GPU Module Options	<ul style="list-style-type: none"> • NVIDIA® GeForce™ GTX 1080 — (Pascal, 2560 CUDA Cores, 150W) • NVIDIA® GeForce™ GTX 1050Ti — (Pascal, 768 CUDA Cores, 60W) * Ext Temp • NVIDIA® GeForce™ GTX 970 — (Maxwell, 1280 CUDA Cores, 80W) • NVIDIA® GeForce™ GTX 950 — (Maxwell, 640 CUDA Cores, 55W)
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	Varies per VXG SKU with different CPU and GPU models
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

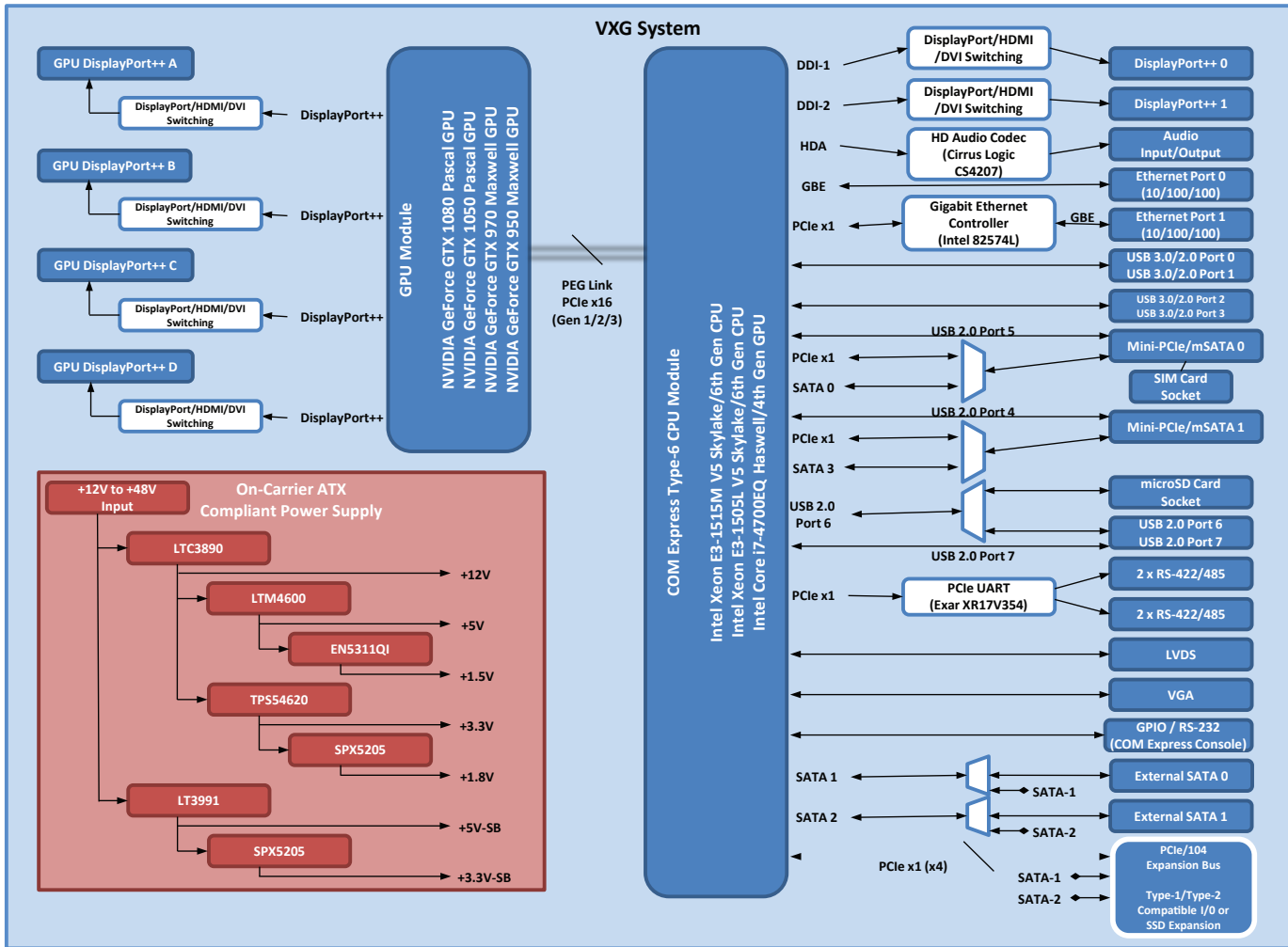
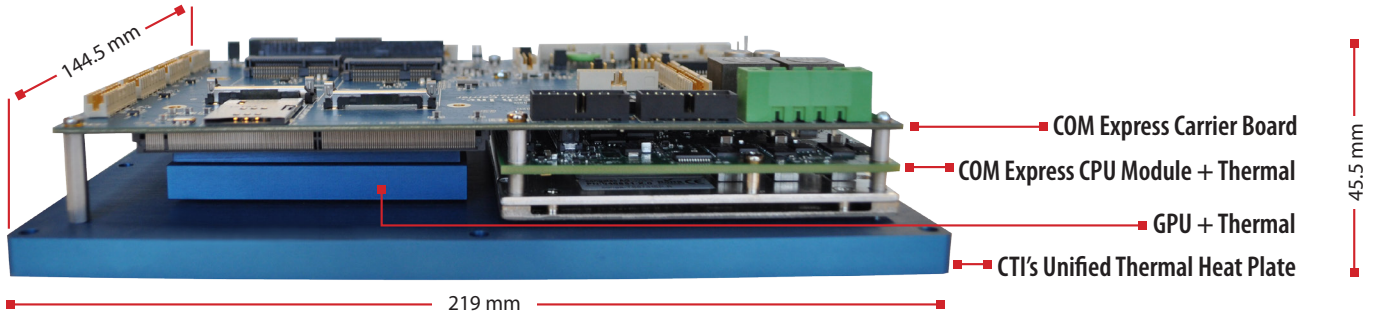
- ✓ Combines High-End GPUs with Latest Generation x86 Processors in a ruggedized small form factor
- ✓ GPUs can be targeted for 4 independent display outputs OR for a headless GPU processing system utilizing CUDA cores
- ✓ All thermal extraction points from COM Express and GPU are brought out to a single unified plane

RoHS

Specifications subject to change without notice.
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COM Express + GPU

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



Ordering Information

Part Number	CPU	GPU	Temperature Range
VXG102	Intel® Xeon® E3-1515M V5, 32GB DDR4	NVIDIA® GeForce™ GTX 1080	0°C to +60°C (+32°F to +140°F)
VXG101	Intel® Xeon® E3-1505L V5, 32GB DDR4	NVIDIA® GeForce™ GTX 1050	-40°C to +85°C (-40°F to +185°F)
VXG017	Intel® Core™ i7-4700EQ, 8GB DDR3	NVIDIA® GeForce™ GTX 970	0°C to +60°C (+32°F to +140°F)
VXG016	Intel® Core™ i7-4700EQ, 8GB DDR3	NVIDIA® GeForce™ GTX 950	0°C to +60°C (+32°F to +140°F)

Note: Other CPU and memory options available upon request

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