COM Express® Type 7 Carrier Board

Connect Tech’s COM Express® Type 7 Carrier Board is based on the PICMG COM Express® COM.0 R3.0 specification. It includes 2x 10G ethernet from SFP+ modules, 2x GbE ports, M.2 NVMe Storage, 4x USB 3.0, full and half size Mini PCIe expansion slots, 8x 3.3V buffered GPIO, and a Console connection via Micro USB.

The carrier board is ideal for high-compute, enterprise level applications that have a need for a small form factor rugged solution providing access to high-end Xeon D class processors.

### Specifications

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| **COM Express Module Compatibility**         | • COM Express Type 7 Modules  
• PICMG COM Express® COM.0 R3.0  
• Support for current and next-gen Xeon-D (Broadwell DE) processor modules |
| **10 Gigabit Ethernet**                      | • 2 x 10GbE (via SFP+ cages)  
• Integrated Extended Temperature 10Gbps PHY located directly on the carrier board  
• Capable of 10GBASE-SR, 10GBASE-LR or 10GBASE-T using when using the appropriate SFP+ transceiver module. |
| **Gigabit Ethernet**                         | 2 x GbE Ports (via RJ-45)  
1000BASE-T (10/100/1000Mbps) Capable |
| **Storage**                                  | • 1 x M.2 2280 M-Key Slot (Dual function PCIe + SATA)  
- NVMe (PCIe x4 Gen3) Capable  
- SATA III (6Gbps) Capable  
• 1 x Standard SATA Port (7-Pin) |
| **USB**                                      | 4x USB 3.0 ports |
| **Expansion**                                | 1x mini PCIe slot full size (USB + PCIe)  
1x mini PCIe slot half size (USB + PCIe) |
| **Serial**                                   | 1x CPU Console UART (via Micro USB)  
1x General Purpose UART (via 2mm header) |
| **GPIO**                                     | 8x 3.3V buffered GPIO |
| **Input Power**                              | +12V DC only |
| **Display Output**                           | None (Headless System)  
Initial Setup/Debug can be achieved via MiniPCIe graphics module |
| **Misc.**                                    | Reset Button, Power Button, Sys Ctrl |
| **Dimensions**                               | 125mm x 95mm (4.921" x 3.74") |
| **Weight**                                   | 124g (0.27lbs) |
| **Operating Temperature**                    | -40°C to 85°C (-40°F to 185°F) |

**FEATURES**

✓ COM Express Type 7 Module Support
✓ Dual 10GbE Ethernet
✓ Ultra High Speed Storage with M.2 NVMe SSD support
✓ Extremely Small Form Factor: 125 x 95mm
✓ Extended Temperature Range -40°C to +85°C