



Features

Industrial Carrier Board

- **Supports all interfaces on the WINSYSTEMS COMeT6 Modules**
- Form Factor: Micro-ATX
9.6 x 9.6 inches (243.84 x 243.84 mm)
- -40°C to +85°C with supporting cooling options
- Made in the USA
- ATX Mode: Standard ATX Power input
- AT Mode: 12VDC +/- 5%

Display and Graphics

- 3x DisplayPort++ Ports
- Support for Dual Channel LVDS and eDP, including backlight

Network

- 1x RJ45 supporting 2.5Gbps Ethernet from COMe

Connectivity and I/O

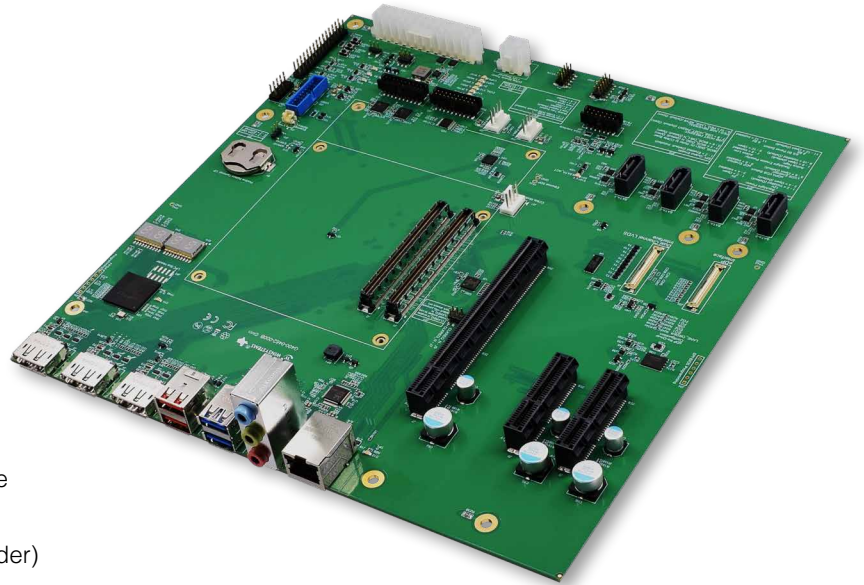
- 4x USB 3.2 Gen1 (2x Front Panel Type A, 2x Header)
- 4x USB 2.0 (2x Front Panel, 2x Header)
- PCI Express Expansion
 - 1x PCI Express Gen4 x16
 - 2x PCI Express Gen3 x4
- Serial UART
 - 2x RS 232 2pin (Tx/Rx) from COMe Module
 - 2x RS232/422/485 Multiprotocol Legacy mode

Storage/SATA Channels

- 4x SATA Type III (6Gbps) channels

Software

- Windows 10, Linux



Product Description

The ATX-M-CC462-T6 is a fully featured COM Express Type 6 carrier board designed to use industry standard COM Express Type 6 modules including the WINSYSTEMS COMeT6-TGLU Series of COM Express Type 6 modules featuring the Intel® Tiger Lake UP3 SOC.

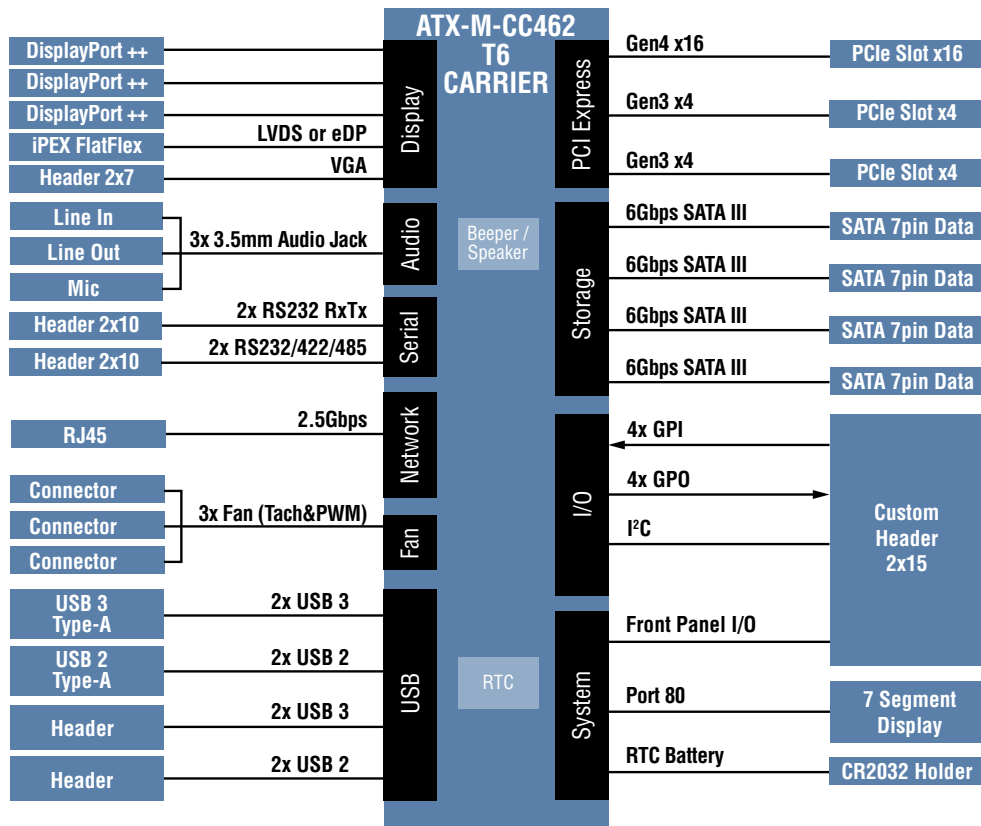
The carrier implements the full capabilities of the Type 6 connectors and is compliant with PICMG® COM Express Rev 3.0 Specifications. The ATX-M-CC462-T6 carrier board has multiple interface options including 3x PCIe slots, multiple Video options, 4x SATA devices, 8x USB ports (2 and 3), and high speed 2.5Gbps Ethernet that make it highly configurable for use in any application.

This is a production-ready reference board which can be taken directly into production for customer use, or available schematics and layout can be leveraged for customers working to design their own carrier.

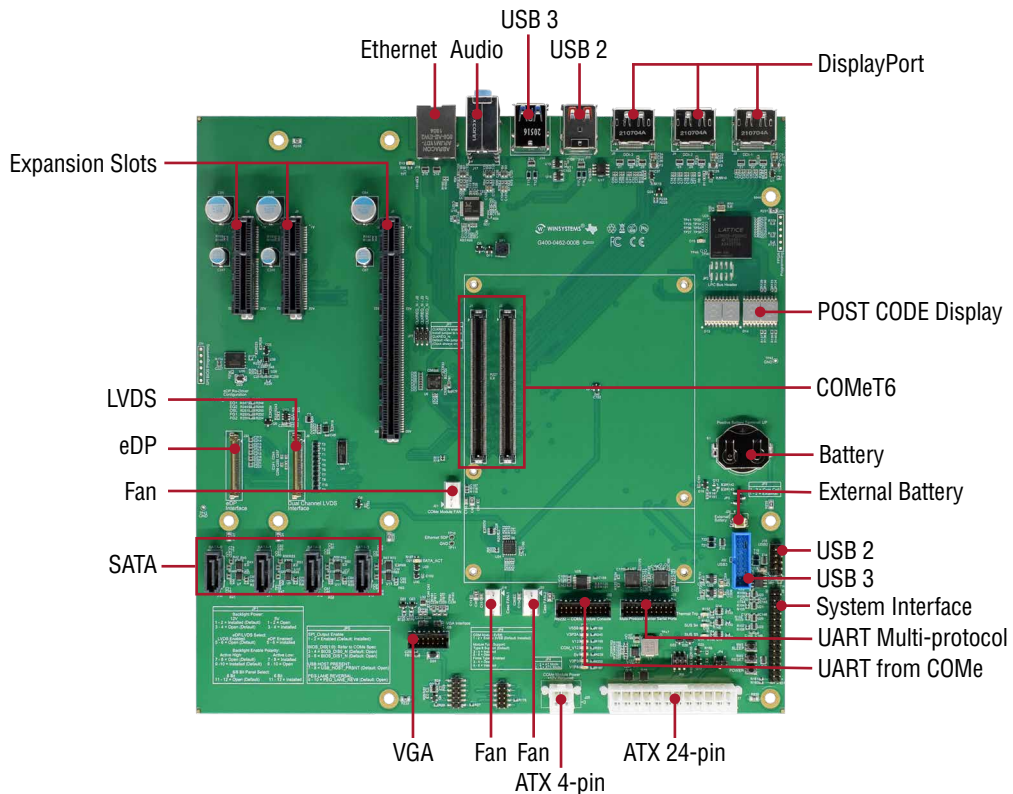
The carrier board is designed to support a wide range of commercial, industrial, and automotive applications across a wide temperature spectrum (-40°C to +85°C).

ATX-M-CC462-T6

Block Diagram



Connectors



ATX-M-CC462-T6

Technical Specifications

FORM FACTOR	<ul style="list-style-type: none">• Micro-ATX 9.6 x 9.6 inches (244 x 244mm)
STORAGE	<ul style="list-style-type: none">• 4x SATA Type III (6Gb/s) channels
DISPLAY	<ul style="list-style-type: none">• Quad Simultaneous Displays• 3x DisplayPort++• Support for Dual Channel LVDS and eDP including backlight• VGA
NETWORK INTERFACE	<ul style="list-style-type: none">• 1x 2.5Gbps Ethernet
ONBOARD I/O	<ul style="list-style-type: none">• 4x USB 3 (2x Front Panel Type A, 2x Header)• 4x USB 2 (2x Front Panel Type A, 2x Header)• 2x RS-232 2pin (Tx/Rx) from COMe Module• 2x RS-232/422/485 Multiprotocol Legacy mode• 1x PCIe Gen4 x16 slot• 2x PCIe Gen3 x4 slot• 1x EEPROM socket• 1x LPC header• 3x Fan Header• 1x GPIO/Feature connector
FRONT PANEL CONNECTORS	<ul style="list-style-type: none">• 1x 2.5 Gbps Ethernet RJ45 port• 1x Audio with separate 3.5mm jacks for MIC, LINE-OUT, LINE-IN• 3x Standard DisplayPort connectors• 2x USB 3 Type A connector• 2x USB 2 Type A connector
POWER	<ul style="list-style-type: none">• ATX Mode: Standard ATX Power input• AT Mode: 12VDC +/- 5%
ENVIRONMENTAL	<ul style="list-style-type: none">• Operating Temperature -40°C to +85°C• Storage Temperature -40°C to +85°C• Thermal Shock Operational Temperature limit exposures in <1 minute• Shock IAW IEC60068-2-27 Half Sine Wave, 50g/11ms• Vibration IAW IEC60068-2-27 Random waveform, 10Hz-2KHz, 7g• CE Compliant• CISPR A and FCC Class A• ESD (Human body) – JEDEC Standard JA114/JS-001• MTBF (hours): 242,555
MECHANICAL	Dimensions: 9.6 in x 9.6 in (mITX) (243.84 mm x 243.84 mm) Weight: 8.0 oz (225 gm) without COMe Module PC Board thickness: 0.078 inches (2.0 mm)

Order Information

CARRIER BOARD PART NUMBER	ATX-M-CC462-T6	
COM EXPRESS TYPE 6 REFERENCE MODULES	COMET6-1185GRE-32IL	Intel Core-i7,32GB LPDDR4,LVDS,VPRO, INDUSTRIAL TEMP
	COMET6-1145GRE-16IL	Intel Core-i5,16GB LPDDR4, LVDS,VPRO, INDUSTRIAL TEMP
	COMET6-1115GRE-8IL	Intel Core-i3,16GB LPDDR4, LVDS, INDUSTRIAL TEMP
CABLES AND ACCESSORIES	CBL-SET-462-1	Cable Set includes: 1X DisplayPort TCBL-DP-6A 1X VGA CBL-234-G-1-1.375B 1X SATA CBL-SATA-701-20 2X COM/SERIAL CBL-SER2-202-12A 1X USB3 (Dual) CBL-USB2-U03-08A 1X USB2 (Dual) CBL-USB2-U12-11A 1x RJ45 Patch Cable CBL-ENET-060A

Expansion and Customization Options

WINSYSTEMS provides customization options for OEMs with minimum order quantities. Please contact an Application Engineer for details. Additional cables, expansion cards, power supplies, and solid-state drives to complete your embedded computing solution including data acquisition, communications, location, and other features are available. Our Application Engineers are available to guide you through product selection and customized options.

**NOW ACCEPTING RFQs
FOR DELIVERY IN Q3 | 2023**

Contact us for more information about this new product.

Email: comet6-rfi@winsystems.com
Phone: Sales: +1 817.274.7629
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**Contact an Application Engineer
or visit our website
for more information.**



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