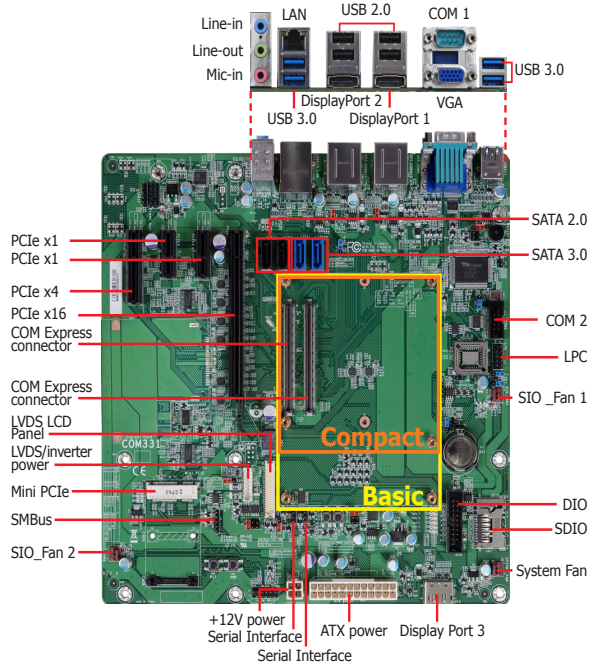




**COM Express Carrier Board**

**COM331-B**



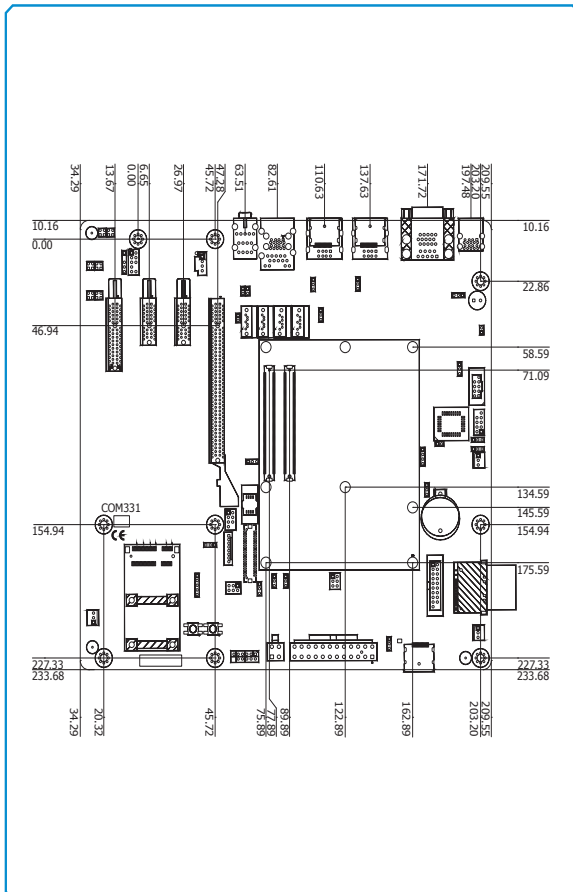
**Features**

EXPANSION	1 PCIe x16, 1 PCIe x4, 2 PCIe x1 1 Mini PCIe (PCIe signal only)
DISPLAY OUTPUTS	1 VGA, 3 DisplayPorts, 1 LVDS
LAN	1 LAN
COM	2 COM
USB	8 USB: 4 USB 3.0, 4 USB 2.0
STORAGE	4 SATA: 2 SATA 3.0, 2 SATA 2.0 1 SDIO
DIO	8-bit DIO
DIMENSIONS	244mm x 244mm (9.6" x 9.6")

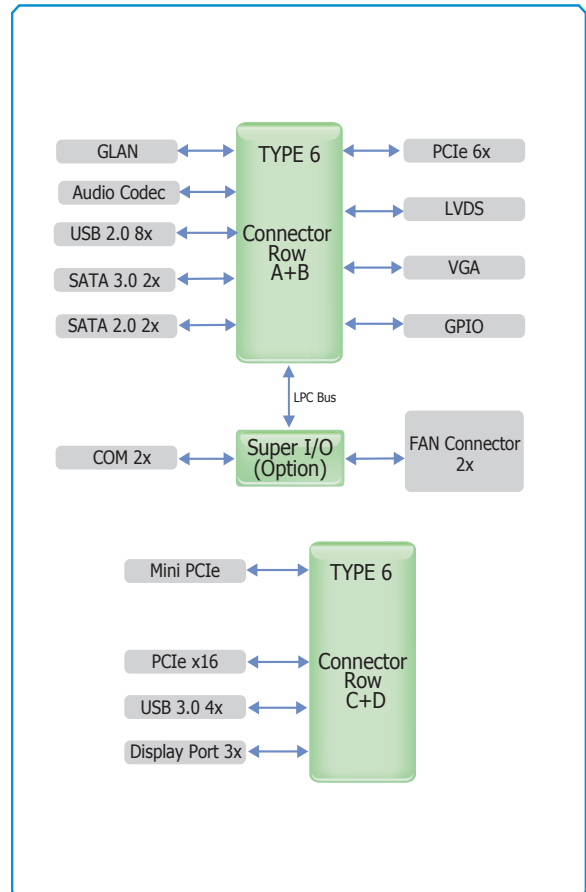
Supports Compact and Basic modules



**Mechanical Drawing**



**Block Diagram**





# COM331-B

**Specifications** \* Optional and is not supported in standard model. Please contact your sales representative for more information.

**ONBOARD AUDIO FEATURES**

- Realtek ALC886 5.1-channel High Definition Audio
- Audio outputs: Mic-in/Center+Subwoofer, line-in/surround and line out
- S/PDIF audio interface

**STORAGE**

- 4 Serial ATA ports
  - 2 SATA 3.0 ports with data transfer rate up to 6Gb/s
  - 2 SATA 2.0 ports with data transfer rate up to 3Gb/s

**DIGITAL I/O**

- 8-bit Digital I/O connector
  - 4-bit GPI (General Purpose Input)
  - 4-bit GPO (General Purpose Output)

**REAR PANEL I/O PORTS**

- 1 DB-9 RS232 serial port
- 1 DB-15 VGA port
- 2 DisplayPorts
- 1 RJ45 LAN port
- 4 USB 3.0 ports
- 4 USB 2.0 ports
- Line-in/Surround, Line out, Mic-in/Center+Subwoofer jacks

**I/O CONNECTORS**

- 1 connector for 1 external RS232 serial port
- 2 serial interface connectors (TX/RX)
- 1 SDIO slot
- 1 DisplayPort
- 1 LVDS LCD panel connector
- 1 LCD/inverter power connector
- 1 8-bit Digital I/O connector
- 1 front audio connector for line-out and mic-in jacks
- 1 S/PDIF connector
- 4 Serial ATA ports
- 1 LPC connector
- 1 I<sup>2</sup>C connector
- 1 SMBus connector
- 1 24-pin ATX power connector
- 1 4-pin 12V power connector
- 1 chassis intrusion connector
- 1 front panel connector
- 3 fan connectors

**EXPANSION SLOTS**

- 1 PCIe x16 Gen 3 slot
- 1 PCIe x4 Gen 2 slot
- 2 PCIe x1 slots (PCIe 2.0)
- 1 Mini PCIe slot (PCIe 2.0) (PCIe signal only)
  - USB signal: optional
  - Supports half/full size Mini PCIe card

**SUPPORTED COM EXPRESS MODULES**

- Basic
- Compact

**DAMAGE FREE INTELLIGENCE**

- Legacy Super I/O support\*
  - Monitors 5V/1.5V/12V/3.3V
  - Monitors SIO\_Fan 1/SIO\_Fan 2/System fan

**ROM INTERFACE**

- 1 SPI interface
  - Supports up to 64Mbit
- 1 LPC/FWH interface

**TEMPERATURE**

- Operating: 0°C to 60°C
- Storage: -20°C to 85°C

**HUMIDITY**

- 10% to 90%

**POWER OUTPUT**

- 12V, 5VSB, VCC\_RTC (ATX mode)
- 12V, 5V, VCC\_RTC (AT mode)
- 12V, VCC\_RTC (AT mode)

**PCB**

- Dimensions
  - microATX form factor
  - 244mm (9.6") x 244mm (9.6")
- Compliance
  - PICMG COM Express<sup>®</sup> R2.0, Type 6

**CERTIFICATION**

- CE
- FCC Class B
- RoHS

**Packing List**

• 1 COM331-B board
• 2 Serial ATA data cables
• 1 COM port cable (with bracket)
• 1 DVD

**Optional Items**

• Serial ATA data cable
• COM port cable
• I/O shield
• Serial ATA power cable
• QR (Quick Reference)

## Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

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