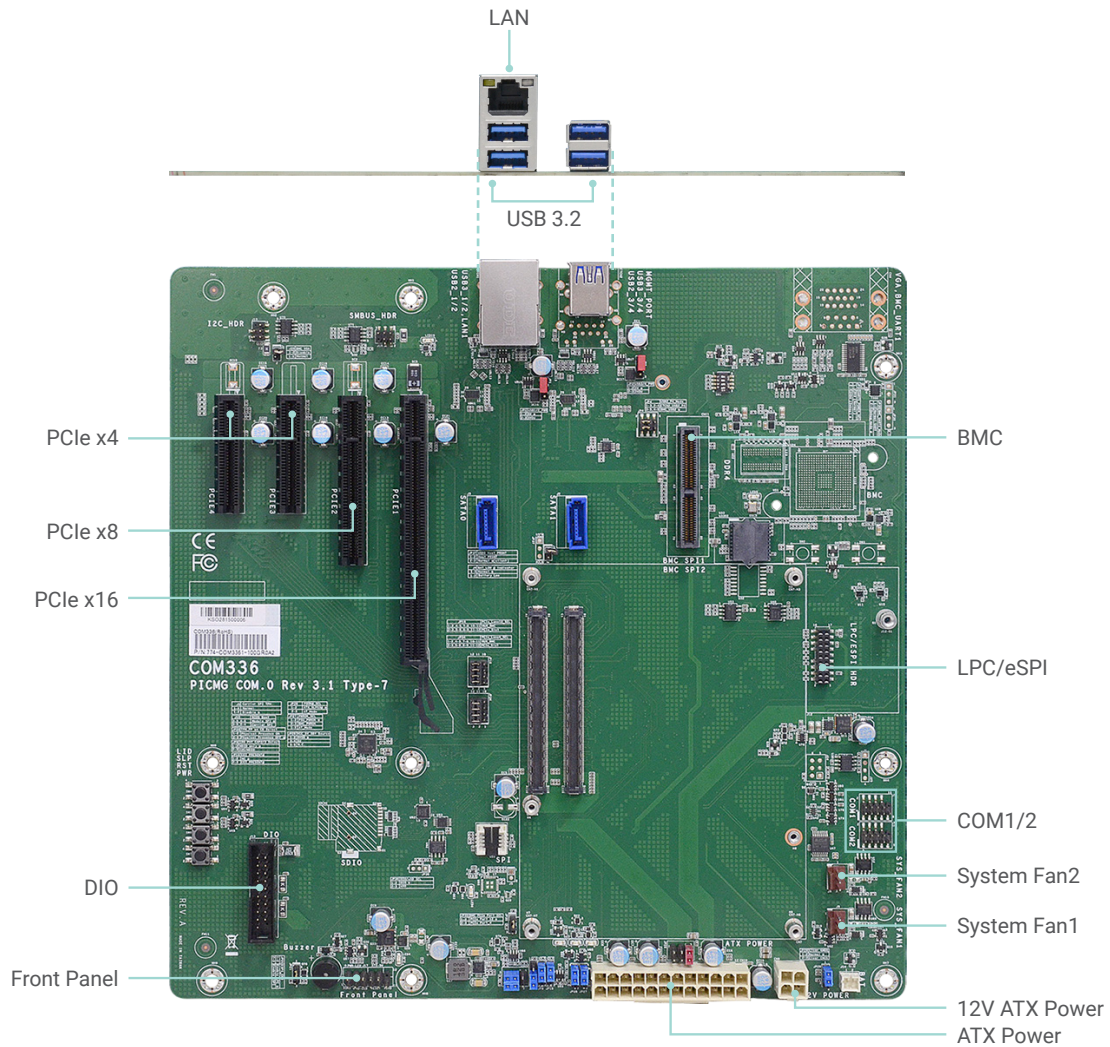


# COM336

COM Express® Carrier Board  
microATX form factor



## KEY FEATURES



### 10G LAN

1 CEI 10Gb LAN Mini  
MEZZ slot, support  
10GBASE-KR Ethernet  
MAC Speed



### Multiple Expansion

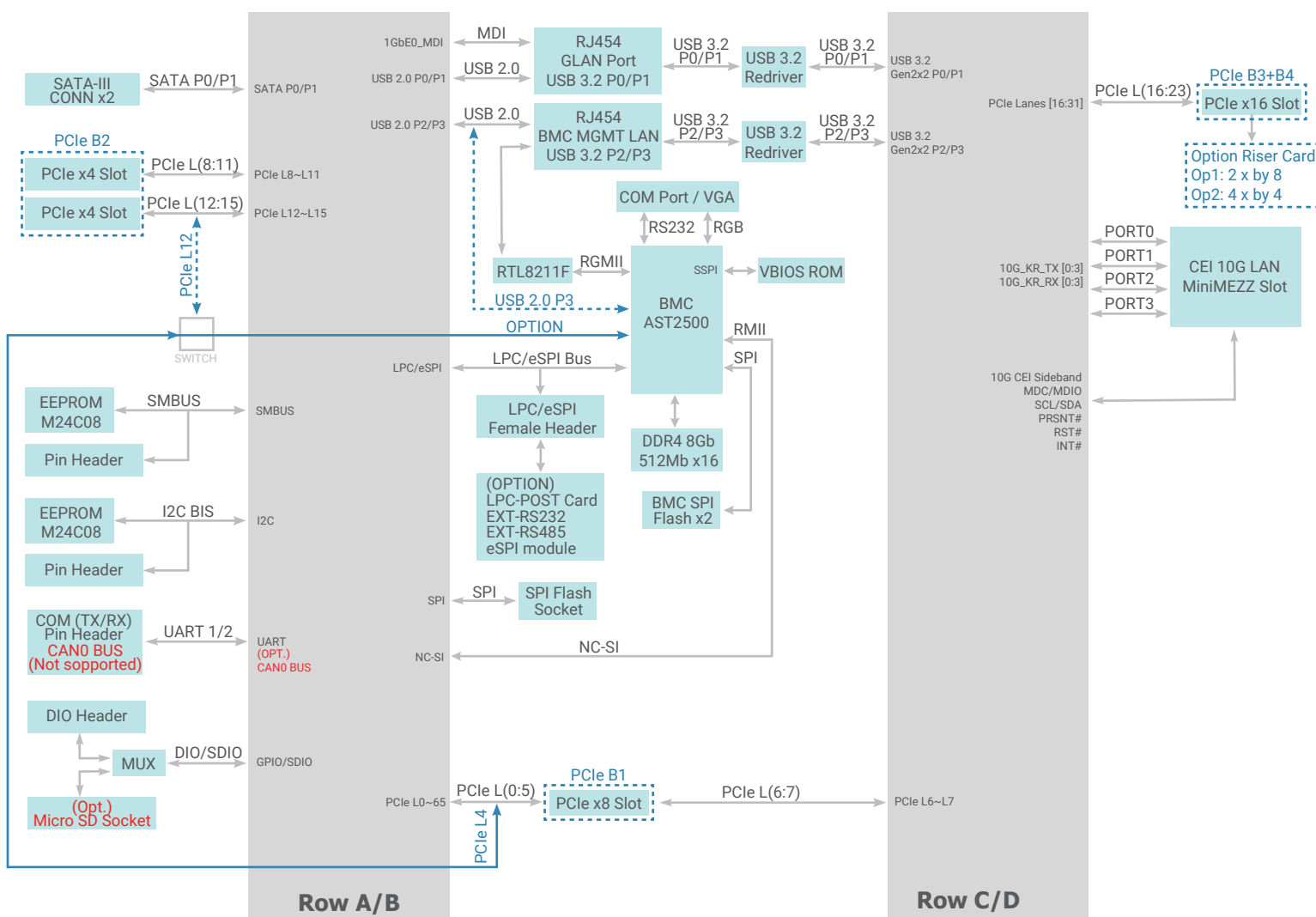
1 PCIe x8, 2 PCIe x4,  
1 PCIe x16, 1 SDIO



### Rich I/O

1 10G LAN, 2 1G LAN,  
4 USB 3.2 type A,  
4 USB 2.0, 2 SATA 3.0

## BLOCK DIAGRAM



## SPECIFICATION

|                |                   |                                                                                                                                                          |
|----------------|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| BMC FUNCTION   | Processor         | AST2500 (non-BMC sku optional by request)                                                                                                                |
|                | SDRAM             | 8Gb memory down<br>DDR4 2400 512M x16 SDRAM                                                                                                              |
|                | Display Interface | Through BMC to convert VGA signal<br>VGA display resolution up to 1920x1200                                                                              |
|                | Ethernet          | RTL8211F LAN PHY<br>Support 10/100/1000M Ethernet MAC Speed<br>RJ45 x1                                                                                   |
|                | UART              | COM port protocol: RS232<br>Connector type: DB9                                                                                                          |
|                | SMBus (for slave) | From COMe BTB connector reserve pin                                                                                                                      |
| EXPANSION      | Interface         | 1 x PCIe x8<br>2 x PCIe x4<br>1 x PCIe x16<br>1 x SDIO                                                                                                   |
| I/O            | Ethernet          | 1 x CEI 10Gb LAN Mini MEZZ slot, support 10GBASE-KR Ethernet MAC Speed<br>2 x 1GbE LAN (RJ-45) (one from module; another from BMC for remote management) |
|                | USB               | 4 x USB 3.2 type A<br>4 x USB 2.0                                                                                                                        |
| INTERNAL I/O   | Serial            | 1 x Serial Interface Connector (TX/RX)                                                                                                                   |
|                | Display           | 1 x VGA from BMC                                                                                                                                         |
|                | SATA              | 2 x SATA 3.0                                                                                                                                             |
|                | DIO               | 1 x 8-bit DIO                                                                                                                                            |
|                | LPC               | 1 x LPC                                                                                                                                                  |
|                | SMBus             | 1 x SMBus                                                                                                                                                |
|                | I2C               | 1 x I2C                                                                                                                                                  |
| POWER          | Type              | 12V, 5VSB, VCC_RTC (ATX mode)<br>12V, VCC_RTC (AT mode)                                                                                                  |
|                | Connector         | 4-pin ATX 12V power<br>24-pin ATX power                                                                                                                  |
|                | RTC Battery       | CR2032 Coin Cell                                                                                                                                         |
| ENVIRONMENT    | Temperature       | <b>Operating:</b> -20 to 70°C<br><b>Storage:</b> -40 to 85°C                                                                                             |
|                | Humidity          | <b>Operating:</b> 5 to 90% RH<br><b>Storage:</b> 5 to 90% RH                                                                                             |
|                | MTBF              | TBD                                                                                                                                                      |
| MECHANICAL     | Dimensions        | microATX Form Factor<br>244mm (9.6") x 244mm (9.6")                                                                                                      |
|                | Compliance        | PICMG COM Express® R3.1, Type 7 basic & compact modules                                                                                                  |
| CERTIFICATIONS | Certifications    | CE, FCC, RoHS                                                                                                                                            |

## ORDERING INFORMATION

| Model Name | Part Number     | BMC | 10G | GbE | USB 3.2 | USB 2.0 | Power  | Thermal | OP Temp.    |
|------------|-----------------|-----|-----|-----|---------|---------|--------|---------|-------------|
| COM336     | 770-CM3361-000G | Yes | Yes | 2   | 4       | 4       | ATX/AT | Active  | -20 to 70°C |
| COM336     | 770-CM3361-100G | N/A |     |     |         |         |        |         | -40 to 85°C |

| Model Name   | Part Number      | LAN PHY                 | LAN connector |
|--------------|------------------|-------------------------|---------------|
| MMZ10G-X5574 | 770-MMZ10G1-000G | X557-AT4                | RJ45 x4       |
| MMZ10G-NSFP  | 770-MMZ10G1-200G | Native SFP+ from module | SFP+ x4       |

## PACKING LIST

|                                           |                 |
|-------------------------------------------|-----------------|
| • 1 COM336 board                          |                 |
| • 1 Serial ATA data cable (Length: 500mm) | 332-553001-005G |
| • Standoff (M2.5*12)                      | A33-525019-A20G |

## OPTIONAL ITEMS

|                                          |                 |
|------------------------------------------|-----------------|
| • Serial ATA data cable (Length: 500mm)  | 332-553001-005G |
| • LPC EXT-RS232 module (4 x RS232 ports) | 770-EXTRS1-000G |