BAE Systems has extensive experience working with common architectures such as VPX, Open VPX, MicroTCA, advanced telecommunications computing architecture (ATCA), cPCI, and VME. Our team has a thorough understanding of network infrastructure and switching, video architecture, storage, I/O, and general purpose processing. Our unique form factor servers allow for scalability and flexibility while remaining compliant to open architecture standards. BAE Systems is active in the working groups developing FACE, OMS and VICTORY open standards and continues to invest in multi-level security solutions.

ATCA in our enterprise servers was developed for high-capacity mission processing on board U.S Navy maritime patrol platforms and on 737 airborne early warning and control platforms. This solution can be used for rotary-wing, ground, and unmanned airborne vehicle platforms to encompass all probable environments.
Key features and benefits

- Fully integrated with our ATCA open system architecture, our enterprise servers utilize modified COTS solutions to support mission-critical functions.
- Tested in rigorous environments, our enterprise servers surpassed temperature, acceleration, pressure, vibration, and shock testing, making them the most reliable, high processing servers on the market.
- The enterprise servers have additional mission-redundant functions to increase reliability of the system in critical conditions.
- Expandable and upgradeable features allow customers to add more capabilities as requirements evolve.
- Applicable for various platforms, including aircraft, boat, or vehicle, our software integrated enterprise servers communicate within the platform, enhancing mission success.

Enterprise server module components

- **Network switches**
  - Ideal for broadband media servers requiring the versatile 40GbE switch with 100GbE uplink
  - Single switch for base and fabric interfaces
  - 16 of SFP+ ports on the front panel

- **I/O Advanced Mezzanine Card modules**
  - Offers the industry’s broadest range of I/O AMC modules to meet demand
  - MIL-STD 1553
  - Discrete modules
  - Irig B
  - RS 232/485
  - PrAMC processors
  - TADIL-A

- **Rugged enterprise server**
  - High capacity mission processing
  - PICMG 3.0 EMI hardened military
  - Leverage maximum use of COTS advance mezzanine cards (AMCs) to minimize system cost
  - Design flexibility and HW/SW re-use
  - Versatile enterprise servers designed to meet all mission requirements

- **Firewall**
  - Next generation COTS security firewall delivers high performance threat protection
  - Multi high-speed interfaces
  - Prevent and detects against attacks
  - Deep inspection and granular policy enforcement

- **Processing blade**
  - ATCA processing carrier with standard PCIe edge module
  - Quad core @ 2.3 Ghz
  - X16 standard PCIe Gen 3 slot
  - 32GB ECC memory

- **Processing graphics blade**
  - PCIe Gen3 carrier module with shelf manager and graphics module
  - Quad Core @ 2.3 Ghz
  - X16 standard PCIe Gen 3 slot
  - 32GB ECC memory
  - Dual DP in with DP to DVI-D converter
  - Dual DVI-D output