The MPU-COMx is a high-density blade server solution in an ultra-compact modular rugged package.

Using the Commercial-Off-The-Shelf (COTS) industry de facto COMExpress (Computer-On-Module) architecture, the MPU-COMx conduction cooled chassis delivers extreme performance with minimal size, power consumption and thermal impact.

The rack-mount configuration supports seven fully independent hot swappable computing modules that host the latest Intel or AMD processors, and two rugged ultra-compact TranzPak 2 (TP2) removable hard drives.

For PCI expansion, a double wide module is available; for easy mission-specific customization and graphic intensive applications.

Along with field-replaceable: fans, redundant power supplies, and the system control module; the MPU-COMx allows unprecedented on-the-fly component-level upgrades and swap-outs.

The MPU-COMx provides program leaders with seven independent hot-swappable computer systems, with boundless operational life, and an extremely cost effective upgrade path in the military’s long-term program cycles.

**Highlights**

- PICMG COMExpress standard architecture
- Supports latest Intel processors up to 2.2 GHz
- Up to 4GB RAM
- On-board dual head graphics
- Hosts up to seven hot-swappable processor modules
- Optional PCI Express module with enhanced graphics
- Mix and match processor and PCI expansion modules

- I/O includes: PCIExpress x4, (4) USB, dual RS232, dual GigE, dual video out (DVI-I), audio in/out + mic
- Sealed hot-swappable TP2 disk modules
- Front dual hot-swappable load sharing AC or DC power supplies
- Under 4U high & only 17.25 inches deep
- Rugged lightweight sealed chassis
- Field-replaceable fans
- 19” rack mountable
**MPU COMx**

**Physical**
- **Size:** 6.59”H x 17.01”W x 16.37”D
- **Weight:** 65 lbs. for standard 7X configuration
- **Storage Options:** Single or dual SATA (to 260GB each)

**Power Supply**
- **Total Output Power:** 600 W per supply (two fully redundant)
- **AC Input Range:** 90-264 VAC Full range
- **DC Input Range:** 16-36 VDC
- **AC Input Frequency:** 47-63Hz, 400Hz (AC module)

* (DC P/S designed to meet MIL-STD 1275D) With the exception of starting disturbance

**Environmental**
- **Operating Temp:** 0º to + 50º Celsius
- **Non-op Temp:** -40º to + 71º Celsius
- **Operating Humidity:** 5% to 95% Non-condensing
- **Non-op Altitude:** Up to 40,000 ft.
- **Operating Altitude:** Up to 10,000 ft.
- **Vibration:** MIL-STD-167
- **Shock:** MIL-STD-810E (Method 516), 30g’s, Saw-tooth, 11ms
- **Fungus:** Non Nutrients/contaminants

*(Extended operating temp. Available with heaters: Consult factory)*

**Reliability**
- **Operating Life:** 10 years
- **Maintainability:** Less than <20 minutes @ Line-Replaceable Unit (LRU)

**Regulatory**
- **Safety:** UL60950 (used as a guideline)
- **EMI:** MIL-STD-461E (call factory to discuss)

**Quality/Workmanship**
- **IPC / ISO 9001:2000 and applicable section of MIL-HDBK-454**

**MIL-SPEC**
- Additional extended range environmental military specifications can be met with optional enhancements. See your Z Micro representative for details.

*Units are designed and built to meet the following specifications. Results of 3.45 tests pending.*