MEMXPRO
Make it Possible

UAV Storage Applications

Unmanned Aerial Vehicles (UAV) have become a popular robotic device for a wide variety of uses. Without limits of terrain, UAV applications have opened up the market for exciting products and creative applications. There are so many new opportunities for Value Added Resellers (VAR) to introduce drones as part of an overall solution such as for remote-controlled inspection, measurements in high-risk locations, monitoring of endangered wildlife, delivery of blood and medical supplies, agriculture surveys, facility and utility inspections, and much more.

Growing Opportunities to Meet Soaring Demand

Prevents Data Loss with Rugged Design

UAV systems are always exposed to mechanical stresses like vibrations, falls, and drops. Storage devices with moving or spinning parts are not up to the task, that's why solid state SSD flash memory is used. MEMXPRO rugged SSD series with side fill is able to pass MIL-STD-810G tests and withstand high levels of shock and vibration. Conformal coatings are an option to add protection against moisture, dust and chemical contaminants. For harsh environments, MEMXPRO's flash storage devices and DRAM modules are able to support wide temperature ranges of -40 °C to +85 °C. With built-in thermal sensors and device monitoring tools, storage temperatures can be detected to avoid overheating in advance. Now MEMXPRO is actively working with UAV solution providers to meet their specific storage requirements.

Adds Extra Data Storage Space

Professional drone systems save images in RAW files which are very large, so SSD storage is a perfect solution, especially when multiple cameras are equipped for long flights and where it's difficult to upload files to a cloud server for processing and analysis. A UAV needs to have enough storage space so MEMPRO's wide temp. SSDs offer capacities ranging from 16GB to 4TB. The MLC series with 3,000 P/E cycles, and industrial TLC series with 10,000 P/E cycles provide high Total Bytes Written (TBW) capability for data management. After sorting, adjusting, image stitching, and saving, data is transferred to a database in the cloud for mining, processing, and utility.

High-Speed Data Transfer for Images

Geotagged imagery from a drone can be used to create accurate, high resolution maps and 3D models, as well as real-time 2D live maps for immediate analysis. Images need to be quickly synchronized to local or edge servers, or be able to broadcast live through multiple devices where users can check real-time images via their computers or mobile phones. Because drones have the potential to be easily damaged or lost, experienced aerial photographers tend to back up files constantly to higher speed storage. These days, many camera drones support 4K high-resolution video and 10 million pixel images. For these massive files, storage devices using SSD with SATA or PCIe 3.0 interfaces better facilitate high speed data transfers.

MEMXPRO
Make it Possible

Storage Device Features

NVMe SSD
U.2 and M.2 PCIe Gen3.0 x4 high-speed solutions

Terabytes of storage capacity
Up to 4TB MLC mass storage SSD for massive amounts of data

Rugged design
Shock & vibration resistance with MIL-STD-810G compliance

IP-6X Protection
Conformal coating for water and dust resistance

Military-grade data security
Military-grade data security levels including AES 256-bit encryption

Industrial-grade wide temperature
Operating at -40~85°C with temperature fluctuations

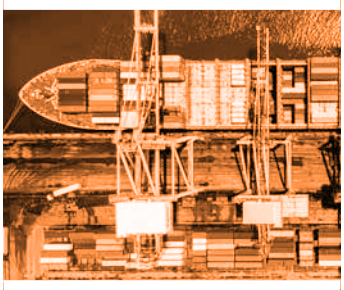
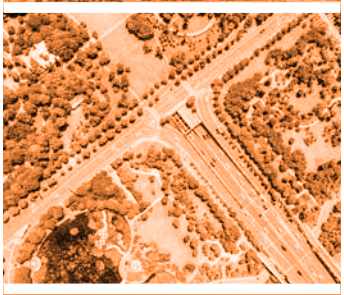
Power Plus Data Protection
Adds POSCAP design for data integrity during abrupt power loss events

Extended Lifespan
StrongMLC products with 20,000 P/E cycles and 7-year warranty Micron original industrial TLC series with 10,000 P/E cycles and 4-year warranty

Customized DIMMs
MEMXPRO can provide rugged customized industrial DRAM solutions

mSMART Storage Device Monitoring
Feedback to storage devices for real-time monitoring




Recommended Products

High-speed NVMe PCIe SSD Series
- PT33 Series – U.2 & M.2 2280 PCIe
- Smart upgrade with 3 times faster performance
- SMI 2263 Controller + Micron industrial 3D TLC
- Sequential read/write speeds of up to 2166/1578MB

High-reliability SATA SSD Series
- E231 Series - Terabyte MLC SATA SSD
- RM31 Series – Power Plus & AES encrypted SSD
- PB31/EB31 Series – Extended-endurance StrongMLC SSD
- PT30/ET30 Series – Industrial TLC SSD

Rugged and Wide-temp DRAM Modules
- DDR3/DDR4 Series
- UDIMM/SODIMM/RuggedDIMM
- Support -40~85°C system temperature operation
- 3”µ and 30”µ gold finger options

MEMXPRO Inc.
www.memxpro.com
mail: info@memxpro.com
Tel: +886-2-89788997
Add: 4F.,No.32, Xiwei St., Sanchong Dist., New Taipei City, 241,Taiwan