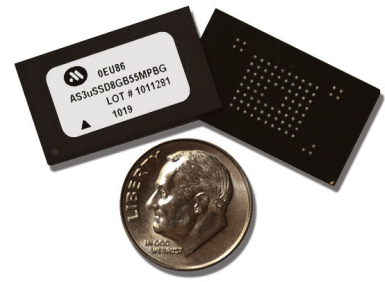


# microSSD™

ruggedized environment

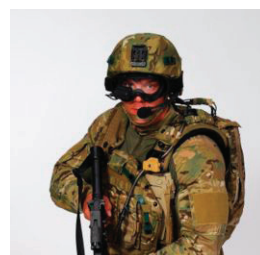
## FEATURES:

- **Extended Temp -20°C to +85°C Operation**
  - \*RoHS & Pb/Sn Ball Options
  - \*Future Versions: -40°C to +85°C and -40°C to +105°C
- **Industry's Smallest ATA Solid-state Drive (PBGA Package)**
  - 14 x 24 x 1.3mm (weighs <1 gram)
- **Industry Standard ATA/IDE Bus Interface**
  - Host Interface: 8- or 16-bit access
  - Supports up to PIO Mode-6
  - Supports up to multi-word DMA Mode-4
  - Supports up to ultra DMA Mode-6
- **Standard Memory Bus Interface**
  - Host Interface: 8- or 16-bit access
  - Supports up to PIO Mode-6
- **Multi-tasking Technology Increases Performance**
  - Fast, Sustained Read Performance (Flash to Host), up to 55 MB/sec
  - Fast, Sustained Write Performance (Host to Flash), up to 12 MB/sec
- **Pre-programmed Firmware in Embedded Flash**
  - Implements advanced wear leveling algorithms that maximize product lifespan
  - Executes industry standard ATA/IDE commands
  - Embedded flash file system for seamless capacity upgrade with no change to host software
  - SLC & MLC NAND Flash
  - \*Cost vs performance options
- **Extreme Low Power**
  - Active Mode: 125mA typical
  - Sleep Mode: 0.7mA typical
- **Expanded Data Protection**
  - WP#/PD# pin configurable by firmware for prevention of data overwrites
  - Added data security through user-selectable protection zones
- **Smart Commands**
  - Enables alerts indicating the remaining product life
- **Built-in ECC**
  - Up to 7 million write cycles (100 million on SLC)
- **Multiple Densities with the Same Ball-Print**
  - 4GB, 8GB
  - Higher density versions planned in the future

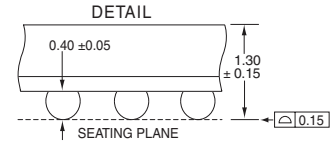
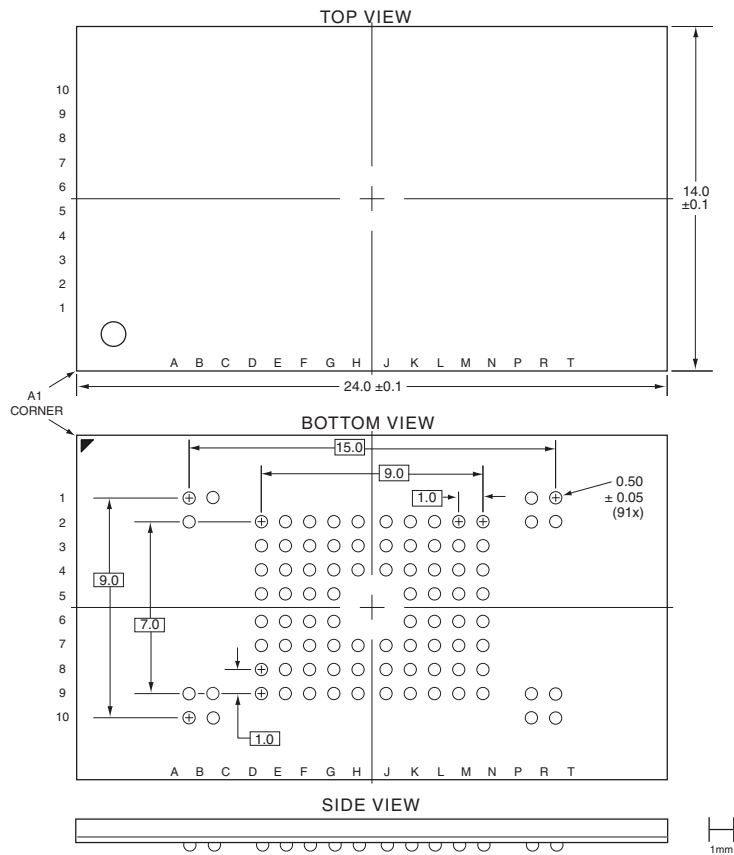


## APPLICATIONS:

- Military / Aerospace
- Micro UAV's
- Future Combat Soldier
- Heads-up Display
- Targeting Systems
- Surveillance
- Security Monitoring Devices
- Transportation
- Industrial / Ruggedized PC's
- Netbook / Mobile Computing
- Automation / Control
- Test / Measurement
- Medical Equipment

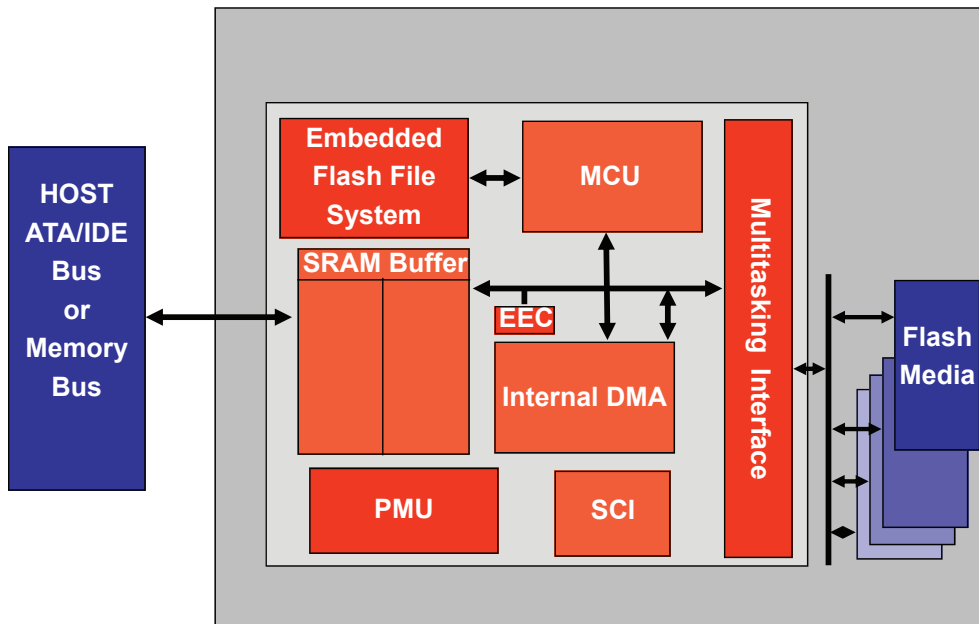


# PACKAGE DIAGRAMS (mm)



- Note: 1. All linear dimensions are in millimeters.  
 2. Untoleranced dimensions are nominal target values.  
 3. Coplanarity: 0.15 mm.  
 4. Ball opening size is 0.40 mm ( $\pm 0.05$  mm).

# BLOCK DIAGRAM



Capacity	Part Number	Package	
4 GB	AS3uSSD4GB28MPBG	Pb/Sn Ball Version	14 x 24 x 1.3mm
	AS3uSSD4GB28MPBGR	RoHS Compliant	PBGA
8 GB	AS3uSSD8GB55MPBG	Pb/Sn Ball Version	14 x 24 x 1.3mm
	AS3uSSD8GB55MPBGR	RoHS Compliant	PBGA



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