

Industrial-Grade Memory Manufacturing

ASC Global provides high-reliability MicroSD manufacturing solutions engineered for industrial, security, embedded, automotive, telecom, and IoT applications. We focus on delivering stable long-term supply, competitive pricing, and consistent quality, shielding your production from global memory market volatility.

Core Manufacturing Capabilities

- **Production Capacity:** Up to 1.5 Million units per month
- **Lead Time:** 3 weeks for first order
- **Samples:** Free samples for all projects
- **Lifecycle Stability:** Fixed BOM lifecycle support
- **Warranty:** 36-Month manufacturer warranty

Technical Specifications

- **NAND Flash Architecture:** True Industrial SLC (Single-Level Cell), pSLC, and high-endurance MLC options built for millions of write cycles.
- **Operating Temperature:** Extreme industrial range of -40°C to +85°C.
- **Power Profile:** Stable operation between 2.7V–3.6V.
- **Physical Ruggedization:** Rated for 10,000 insertion/removal cycles; rigorously tested against ESD (Electrostatic Discharge), shock, vibration, moisture, corrosion, and bending.
- **Performance Architecture:** Optimized U1 / Class 10 / UHS-I / SPI & SD mode compatibility for rock-solid stability during continuous overwrite loops.



Capacity Options

Capacity Range	Flash Architecture	Primary Recommended Applications
4GB / 8GB	SLC / pSLC	Boot loaders, small OS footprints, simple PLC configurations, alarm logs.
16GB / 32GB	MLC / High-Endurance	Standard industrial data logging, HMI applications, embedded Linux, automation systems.
64GB / 128GB	Advanced Flash	Edge computing, machine vision systems, industrial gateways, high-density surveillance.
256GB / 512GB / 1TB	High-Density Industrial	AI-enabled edge devices, 4K/8K continuous video recording, predictive maintenance datasets, autonomous robotics.



Target Applications & Industries



Industrial PCs & PLCs: Reliable boot drives and non-volatile storage for machine logic.



Alarm & Security Systems: Continuous, high-endurance event logging for mission-critical security monitors.



HMIs (Human-Machine Interfaces): Flawless display performance and uninterrupted local data buffering.



IoT & Edge AI Devices: Rugged storage for remote firmware updates, sensor arrays, and real-time inference data.



Automotive & Telecom: Robust performance under heavy vibration and severe thermal