



ADATA Industrial & Embedded Solutions

Memory Card

The ADATA IDC3B industrial-grade SD cards feature high performance, low power consumption, high reliability and superb transfer rates. The card is suitable for removable storage applications that require security, convenience, performance and capacity. The industrial-grade extended temperature range of -40°C to 85°C is suitable for demanding industrial environments that require high reliability. ADATA's industrial-grade SD cards support a range of technology, including error correcting code (ECC), which ensures the integrity of data transfers by automatically detecting and correcting errors, and wear leveling technology, which ensures data is written evenly across all sectors, extending the life of the memory card.

Key Features

- Industrial operating temperature: -40°C to 85°C
- Wide range of capacities from 8GB to 256GB
- Supports ECC and Wear Leveling
- S.M.A.R.T. feature supported
- Hardware Power Detector and Flash Protection
- Supports SD and SPI modes
- Low power consumption: 0.95W



Target Applications

GPS, Handheld device, Video recorder, High-end digital camera, Road monitoring system

| 30μ Golden Finger | Anti-Sulfur Resistor | Conformal Coating | Wide Temperature | EDS & EMI Safe | Shock & Vibration Resistant | Power Fail Protection & Recovery | Wear Leveling | Secure Erase | TRIM | Low Power Consumption |
|-------------------|----------------------|-------------------|------------------|----------------|-----------------------------|----------------------------------|---------------|--------------|------|-----------------------|
| — | — | — | ● | ● | ● | ● | ● | ● | — | ● |

● Supported — Not available

Specifications

| Model | IDC3B |
|------------------------------------|-------------------------------------------------------------------------|
| Interface | SD 3.0 |
| Compatibility | SD 1.1 / 2.0 / 3.0 |
| Dimensions (L x W x H) | 32 x 24 x 2.1mm |
| Flash Type | MLC |
| Capacity | 8GB – 256GB |
| Sequential Read (Max.) | 80MB/s |
| Sequential Write (Max.) | 50MB/s |
| Operating Temperature (Commercial) | -25°C to 85°C |
| Operating Temperature (Industrial) | -40°C to 85°C |
| Operating Voltage | DC 2.7V – 3.6V |
| Operating Humidity | 5%-95% RH non-condensing |
| Power Consumption (Max.) | 0.95W |
| MTBF (Est.) | >1,000,000 hours |
| Shock Resistance | 1500G/0.5ms, Half Sine Wave |
| Vibration Resistance | 20G (10-2000Hz) |
| Technologies | ECC, S.M.A.R.T., Wear Leveling, H/W Power Detector and Flash Protection |

Ordering Information

| Capacity | Commercial (-25°C to 85°C) | Industrial (-40°C to 85°C) |
|----------|-------------------------------|-------------------------------|
| 8GB | IDC3B-008GM | IDC3B-008GT |
| 16GB | IDC3B-016GM | IDC3B-016GT |
| 32GB | IDC3B-032GM | IDC3B-032GT |
| 64GB | IDC3B-064GM | IDC3B-064GT |
| 128GB | IDC3B-128GM | IDC3B-128GT |
| 256GB | IDC3B-256GM | IDC3B-256GT |



Dimensions

