

# ASD19-SLC/MLC Series

1.8" SATA SSD with SLC/MLC  
NAND Flash



## Features

- Sustained read up to 480 MB/s
- Sustained write up to 400 MB/s
- Capacity:
  - SLC: 32, 64, 128 GB
  - MLC: 128, 256, 512 GB
- SATA 6 Gb/s interface
- Toshiba 24nm MLC/Micron 25nm SLC NAND flash
- Shock and vibration resistant
- High IOPS (ASD19-MLC)

## Specifications

### Physical

|                  |                                                                         |
|------------------|-------------------------------------------------------------------------|
| Capacity         | SLC: 32, 64, 128 GB<br>MLC: 128, 256, 512 GB                            |
| Flash Components | Single-Level Cell NAND (ASD19-SLC)<br>Multi-Level Cell NAND (ASD19-MLC) |
| Interface        | SATA 6 Gb/s (ASD19-MLC)<br>SATA 3 Gb/s (ASD19-SLC)                      |
| Form Factor      | 1.8" form factor                                                        |
| Dimensions       | 78.5 x 54 x 5 mm (L x W x H)                                            |
| Weight           | 36 g (without case)                                                     |

### Performance

|                     |                                                                                                                                                                                                                                                                                                                                                                                |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Bandwidth           | <b>SLC</b><br>32 GB: Sustained read/write up to 260/190 MB/s<br>64 GB: Sustained read/write up to 260/215 MB/s<br>128 GB: Sustained read/write up to 250/170 MB/s<br><b>MLC</b><br>128 GB: Sustained read/write up to 480/170 MB/s<br>256 GB: Sustained read/write up to 480/340 MB/s<br>512 GB: Random 4KB read/write up to 4,500/10,000 IOPS                                 |
| Read and Write IOPS | <b>SLC</b><br>32 GB: Random 4KB read/write up to 4,500/10,000 IOPS<br>64 GB: Random 4KB read/write up to 4,500/10,000 IOPS<br>128 GB: Random 4KB read/write up to 4,500/10,000 IOPS<br><b>MLC</b><br>128 GB: Random 4KB read/write up to 68,000/45,000 IOPS<br>256 GB: Random 4KB read/write up to 44,000/20,000 IOPS<br>512 GB: Random 4KB read/write up to 4,500/10,000 IOPS |
| Power on to ready   | <1.0 sec                                                                                                                                                                                                                                                                                                                                                                       |

### Environmental

|                       |                                                                       |
|-----------------------|-----------------------------------------------------------------------|
| Operating Temperature | Commercial: 0°C to +70°C<br>Extreme Rugged: -40°C to +85°C (SLC only) |
| Storage Temperature   | -40°C to +85°C                                                        |
| Shock                 | 1,500 G, 0.5 ms                                                       |
| Vibration             | Operating: 7~800 Hz, 2.17 Grms<br>Non-operating: 7~800 Hz, 3.08 Grms  |
| Certifications        | UL, CE, RoHS                                                          |

### Compatibility

|      |                                                                                                                                                                                                                                                                                                                 |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SATA | SATA Revision 3.0 compliant: compatible with SATA 1.5 Gb/s, 3 Gb/s & 6 Gb/s interface<br>SATA Revision 2.0 compliant: compatible with SATA 1.5 Gb/s, 3 Gb/s interface (ASD19-SLC)<br>ATA/ATAPI- 8 compliant<br>SSD enhanced SMART ATA feature set<br>Native Command Queuing (NCQ) command set<br>TRIM supported |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Note: All specifications are subject to change without further notice.

### Power Requirements

|            |                                                                                 |
|------------|---------------------------------------------------------------------------------|
| Management | 3.3V micro SATA<br>SATA interface power management<br>OS-aware hot plug/removal |
| Connector  | 9-pin SATA connector for DC 3.3V input                                          |

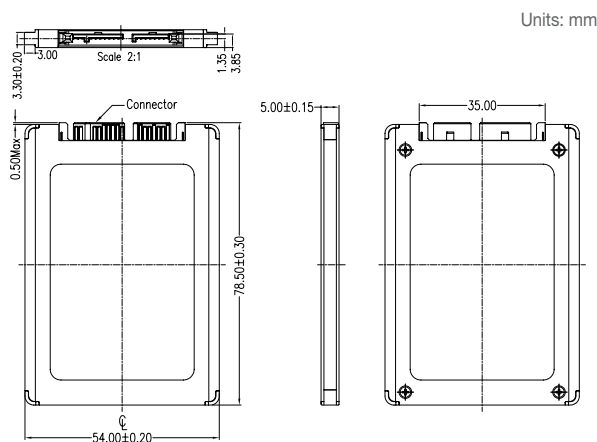
### Reliability

|            |                                |
|------------|--------------------------------|
| MTBF       | SLC 2M hours, MLC 1.5M hours   |
| Life Cycle | Minimum of 3 years useful life |

## Ordering Information

| Model Number            | Description/Configuration                                  |
|-------------------------|------------------------------------------------------------|
| <b>ASD19-SLC32G-ET</b>  | 1.8" Micro SATA 3 Gb/s SSD 32 GB, SLC type, (-40°C~+85°C)  |
| <b>ASD19-SLC64G-ET</b>  | 1.8" Micro SATA 3 Gb/s SSD 64 GB, SLC type, (-40°C~+85°C)  |
| <b>ASD19-SLC128G-ET</b> | 1.8" Micro SATA 3 Gb/s SSD 128 GB, SLC type, (-40°C~+85°C) |
| <b>ASD19-MLC128G-CT</b> | 1.8" Micro SATA 6 Gb/s SSD 128 GB, MLC type, (0°C~+70°C)   |
| <b>ASD19-MLC256G-CT</b> | 1.8" Micro SATA 6 Gb/s SSD 256 GB, MLC type, (0°C~+70°C)   |
| <b>ASD19-MLC512G-CT</b> | 1.8" Micro SATA 6 Gb/s SSD 512 GB, MLC type, (0°C~+70°C)   |

## Dimensions



# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[ADLINK Technology:](#)

[ASD19-SLC32G-ET](#) [ASD19-SLC64G-ET](#) [ASD19-SLC128G-ET](#) [ASD19-MLC64G-CT](#) [ASD19-MLC256G-CT](#) [ASD19-MLC128G-CT](#)