

## New Product Introduction

# UC Series

## Consumer Plus 3D TLC NAND SDHC/SDXC Memory Cards



### Panasonic's New 3D TLC NAND Flash Technology Ensures High Reliability And Lower Cost Per GB!

Panasonic, a worldwide leader in Storage Media Products, is pleased to introduce the **NEW UC Series SDHC/SDXC Memory Cards** utilizing Panasonic's newest 3D NAND Flash technology to ensure reliability, very low risk of BOM changes and lower overall cost per GB compared to 2D NAND Flash technology. The **NEW 3D NAND-based UC Series SDHC/SDXC Memory Cards** use Panasonic's proprietary SD Controller and firmware increasing write efficiency and card lifetime as well as allowing lifetime simulations and card analysis. The **NEW 3D NAND-based UC Series SD Cards** also feature a UHS-I interface and outstanding performance with Class 10, UHS-I U1 speeds. A Static Wear Leveling algorithm ensures erase blocks within the NAND flash have evenly distributed wear. Bad Block Management efficiently handles physical erase blocks that become unusable over time (due to hitting their program threshold). The result is a higher overall card endurance. Quality is maintained with 100% product screening before shipment to achieve low failure rate.

#### Features

- Panasonic 3D TLC NAND Flash Technology
- Class 10, UHS-I Performance
- Static Wear Leveling
- Bad Block Management
- Panasonic Proprietary Controller And Firmware
- Available in 16GB, 32GB, 64GB, 128GB and 256GB Capacities
- RoHS And REACH Compliant

#### Benefits

- Newest TLC 3D Flash Allows Higher Limit Of Program Cycles Over The Older Technology Of 2D MLC NAND. This Is Rated For An Overall Endurance Of 3,000 Program/Erase Cycles (dependent upon use case). Also, Overall Cost Per GB Is Much Lower Due To Higher Market Availability Of 3D NAND.
- Read Speeds Up To 95 MB/s To Keep Up With Modern Demands Of Loading Data From The SD Card
- The Panasonic SD Controller Adopts The Feature Of Static Wear Leveling Where Once A Data Block Exceeds A Certain Program Count, Written Data Is Swapped To A Static (Less Worn) Data Block. This Vital Feature Ensures That There Will Be No Premature Card Failure.
- Over A Long Period Of Writing Data To Solid State Memory, Physical Data Blocks Inherently Go Bad Due To High Program Counts. The Panasonic SD Controller Manages These Bad Blocks In Such A Way That Pools Them As "Unusable" And In Turn, Only Writes To Healthy Physical Blocks. This Prevents The User From Experiencing Future Data Corruption And Read Errors.
- Panasonic Proprietary Memory Controller Provides Increased Customer Support And Allows For Changes To Controller Firmware By Customer Request

#### Industries

- Medical
- Building Automation And Security
- Office Telecommunications
- Commercial Cooking
- Test & Measurement

## **Applications**

- CPAP Machine, ECG Monitor, Pacemaker Monitor, Medication Dispensing
- HVAC Controls, Security Cameras (On-Board Storage), Access Control Systems, Fire Alarm Systems
- Teleconferencing Systems (Tablets, Remotes, Displays)
- Kitchen Dispensing Equipment, Commercial Cooking Ovens
- Gas Meter, Thermal Camera, Water Flow Metering