

# Premier Pro microSDHC UHS-1 U Memory Card Product Reviewer's Guide

May 2012

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#### Introduction

This performance guide contains information on the new ADATA Premiere Pro microSDHC UHS-1 U1 memory cards, including product features, descriptions, and benchmark results.

Product images can be downloaded from <a href="http://www.adata-group.com/index.php?">http://www.adata-group.com/index.php?</a>
<a href="mailto:action=bs">action=bs</a> main&page=bs</a> content product

Please refer to this guide prior to and during testing, and feel free to use this content when composing review articles.

If you encounter any problems during the testing process, or if you have questions regarding the test results, please contact us via email using the contact information found at the end of the guide.

# **Product Background**

ADATA offers ideal flash memory card solutions to mobile phones and tablets. The new ADATA Premier Pro microSDHC UHS-1 U1 product serial features Ultra High Speed 1 (UHS-1) technology from the latest released SD 3.0 specification, and achieves read/write speeds up to 45/40 MB per second for 16 and 32 Gigabyte capacity cards. (The read/write speeds of 8 Gigabyte capacity card can reach up to 45/20 MB per second). The latest addition to the company's flash storage lineup brings breakthrough performance in speed and capacity.

## **Product Positioning**

With ADATA Premier Pro's remarkable transfer performance up to 45/40 MB per second for 16 and 32 Gigabyte capacity memory cards, ADATA offers smartphone and tablet users ideal solutions to capture high-resolution images, fast-moving action shots and HD videos recording. It also provides users fast speed to transfer data from the card to a PC.

Featuring an automatic error-code correction (ECC) engine and write-switch protection function, along with X-ray proof, magnet proof and resistance to extreme temperature functions, the ADATA Premier Pro products offer a long-term reliability and durability for users, and eliminates worries about data safety.

## **Product Highlights**

#### More speed

- Supports latest SD 3.0 and UHS50 standards
- Offers up to 1400/150 IOPs random Read/Write speed to ensure high performance while running multiple applications

#### **Better Capacity**

Capacities up to 32GB

#### **Specifications**

- 1. Speed:
- 16/32 GB: Read/Write speed up to 45/40 (MB/s)
- 8GB: Read/Write speed up to 45/20 (MB/s)
- Random Read/Write: 1400/150 IOPs

(NOTE: Read/write speed based on ADATA internal testing; performance may be lower depending on host device.)

- 2. Capacity: 8GB/16GB/32GB
- 3. Compatibility: Smartphones, tablet computers
- 4. Dimensions (L x W x H): 15 x 11 x 1.0mm
- 5. Weight: Approx 0.25g
- 6. Operating voltage: 2.7~3.6 Volts
- 7. Operating temperature: -13° F to 185° F (-25° C to 85° C)
- 8. Warranty: Lifetime warranty
- 9. Certifications: FCC, CE, BSMI, VCCI

## **Points of Interests**

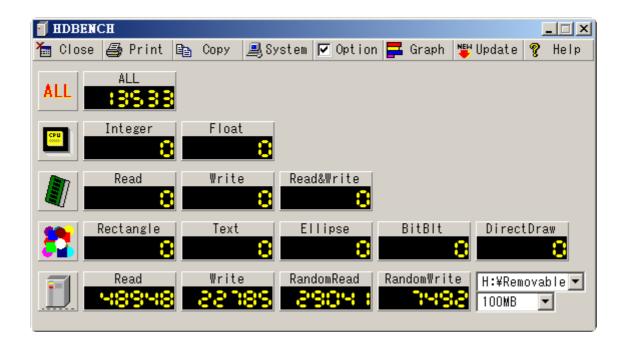
To test the real world data transfer performance, 2 test programs: (1) read/write speed, and (2) deleting a folder with 1000 pictures under view mode of a mobile phone are investigated in this reviewer's guide. The benchmarking performance is tested based on the following hardware device and test platform. Actual performance may vary depending on hardware and software testing environment.

Sample configuration	ADATA Premier Pro microSDHC UHS-1 32GB
Class	UHS-1
Capacity	32GB
Testing device (card reader)	Transcend TS-RDF8K
Test equipment	Samsung Galaxy SII

# Program 1 - Sequential and random read/write speed

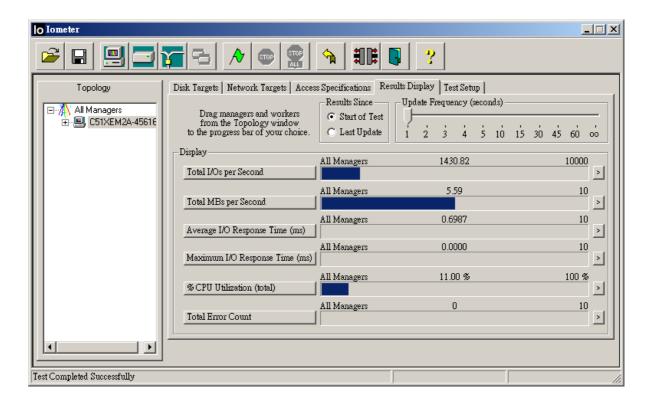
**Software: HdBench** 

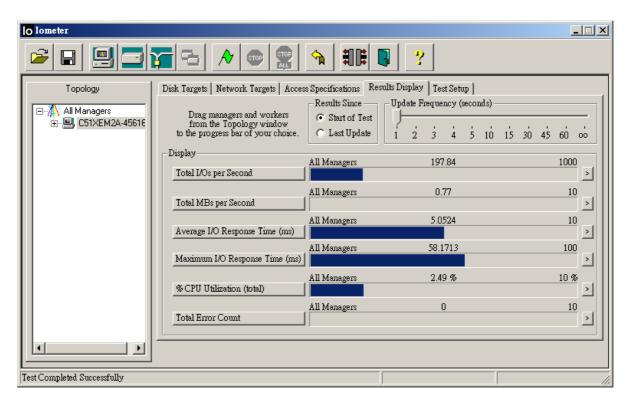
Sample	HdBench Performance (IOPs)			
ADATA Premier Pro	Sequential Read	Sequential Write	Random Read	Random Write
microSDHC UHS-1	-	-		
32GB	48948	22785	29041	7492



## **Software: IO Meter**

Sample	IO Meter Performance (IOPs)		
ADATA Premier Pro microSDHC UHS-1 32GB	Random Read	Random Write	
	1430.82	197.84	





**Program 2 -** deleting a folder with 1000 pictures under view mode of a Samsung Galaxy SII mobile phone

Start calculating the time needed from clicking on the "Delete" icon to complete the deleting action of 1000 pictures to return to the previous view mode.

## Program: deleting 1000 pictures

Time Needed

Sample 1: ADATA Premier Pro microSDHC UHS-1 32GB

16.4 seconds

Sample 2: ADATA microSDHC CL1032GB

22.4 seconds

## 37% less time needed to delete 1000 pictures



