



Performance Test report

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Overview

Areca Test Configuration

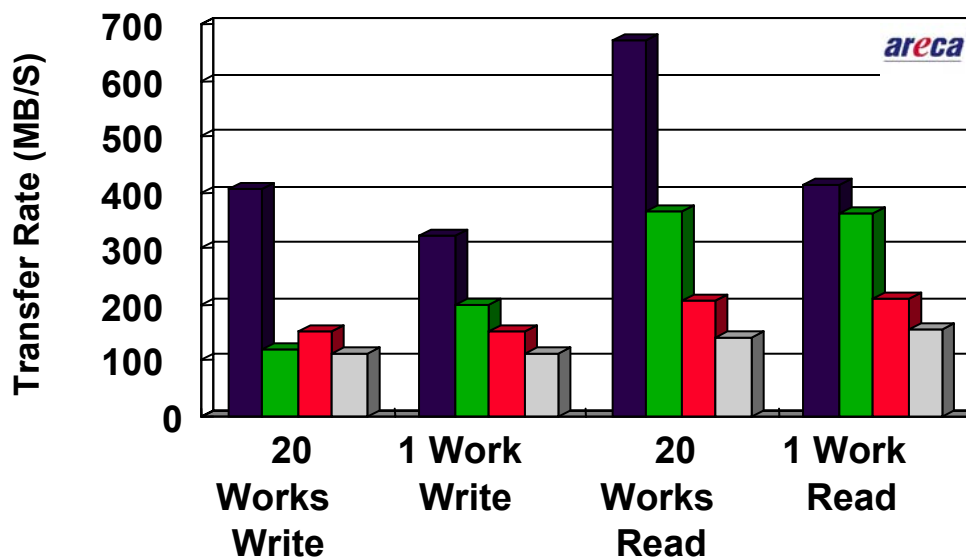
Processor	
Socket 604	Single Intel Xeon, 2.0 GHz, 512 kB Cache, FSB400
System Components	
DDR-SDRAM	2x 512 MB PC1600 Infineon, ECC, Registered
Motherboard	Tyan S2722, Intel E7500 Chipset
Graphics Card	ATI RAGE XL, 8 MB
Hard Drives	System Drive: Seagate ST360020A Test Drives: RAID 5 array consisting of 8x Western Digital WD360 Raptor, 36 GB, 10,000 rpm, 8 MB Cache
Controller I	Areca ARC-1120 ,8-Port, 128 MB ECC Cache (F/W Version:1.35)
Controller II	3Ware 9500-12S,12-Port, 128 MB ECC Cache (F/W:FE(X 2.02.00.012)
Software	
BIOS	V1.03
OS	Windows 2000 , Service Pack 3
Benchmarks & Settings	
I/O Performance	IOMeter 2003.05.10 # of Outstanding I/Os: 16 Per target Burst length: 16 I/Os



Sequential Reads/Writes (R0)

Performance Comparison

ARECA ARC-1120, 3Ware 9500S-8, 3Ware 8506-8, and Adaptec 2810SA
64K Sequential Writes/Reads (RAID 0)



■ ARC-1120	404.76	321.26	672.45	412.55
■ 3Ware 9500S-8	120.66	192.82	367.14	363.49
■ 3Ware 8506-8	151.51	151.92	206.85	210.07
■ Adaptec 2810SA	112.58	113.27	142.45	156.78

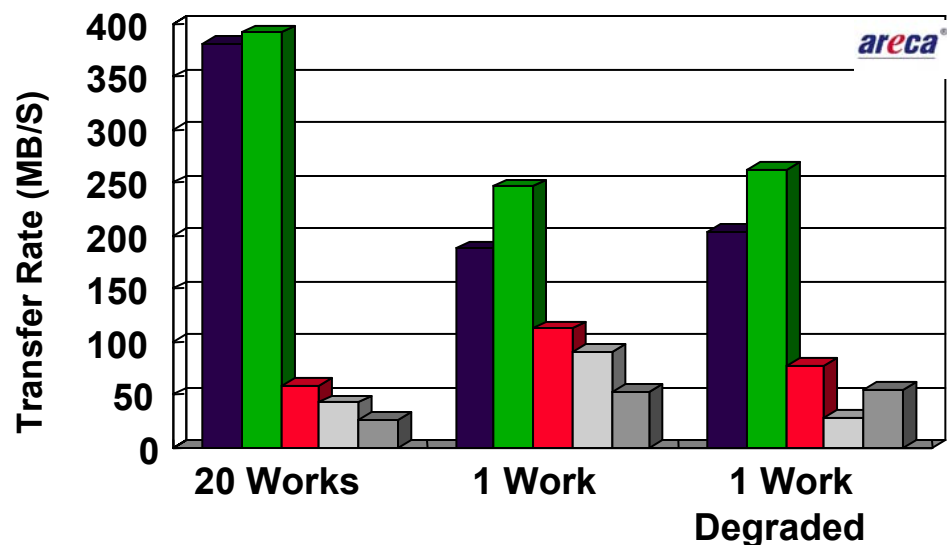


Sequential Writes (R5/R6)

Performance Comparison

ARECA ARC-1120,, 3Ware 9500S-8, 3Ware 8506-8, and Adaptec 2810SA

64K Sequential Writes (RAID 5)



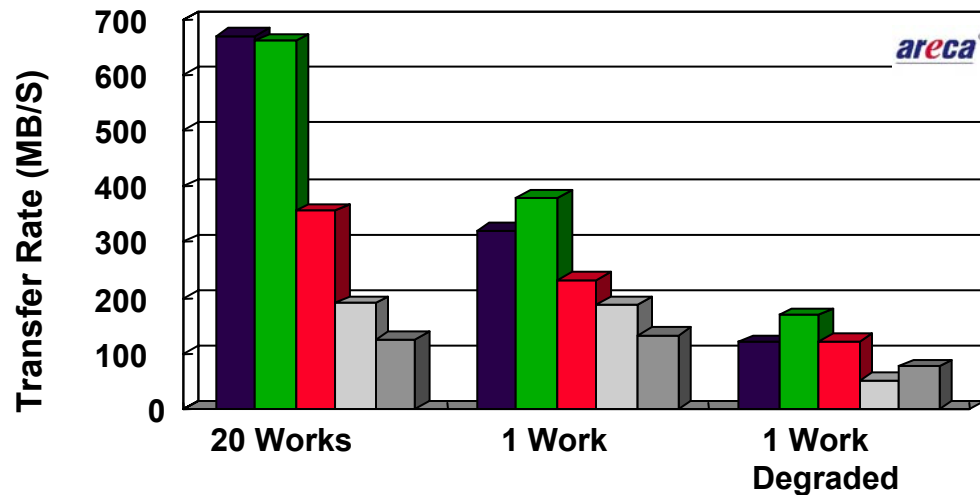
■ ARC-1120 RAID6	381.25	187.87	203.28
■ ARC-1120 RAID 5	391.36	246.04	262.11
■ 3Ware 9500S-8	58.74	112.28	77.11
■ 3Ware 8506-8	42.44	91.04	28.29
■ Adaptec 2810SA	25.95	52.37	54.59



Sequential Reads (R5/R6)

Performance Comparison

ARECA ARC-1120, 3Ware 9500S-8, 3Ware 8506-8, and Adaptec 2810SA
64K Sequential Reads (RAID 5)

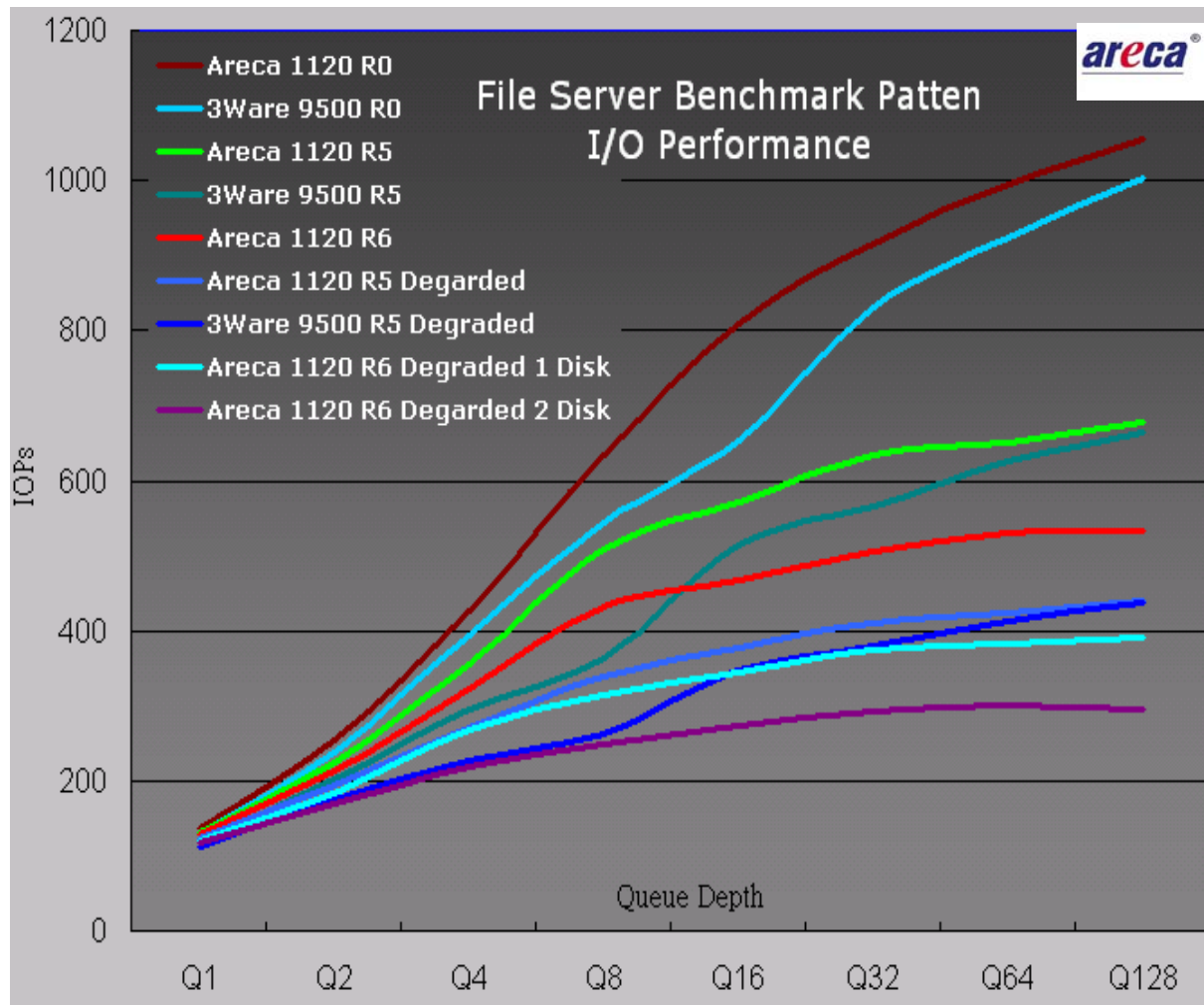


■ ARC-1120 RAID6	668.83	319.77	120.41
■ ARC-1120 RAID 5	661.03	379.65	168.72
■ 3Ware 9500S-8	355.49	231.64	121.26
■ 3Ware 8506-8	189.98	188.93	52.45
■ Adaptec 2810SA	126.54	132.59	75.98



File Server Benchmark

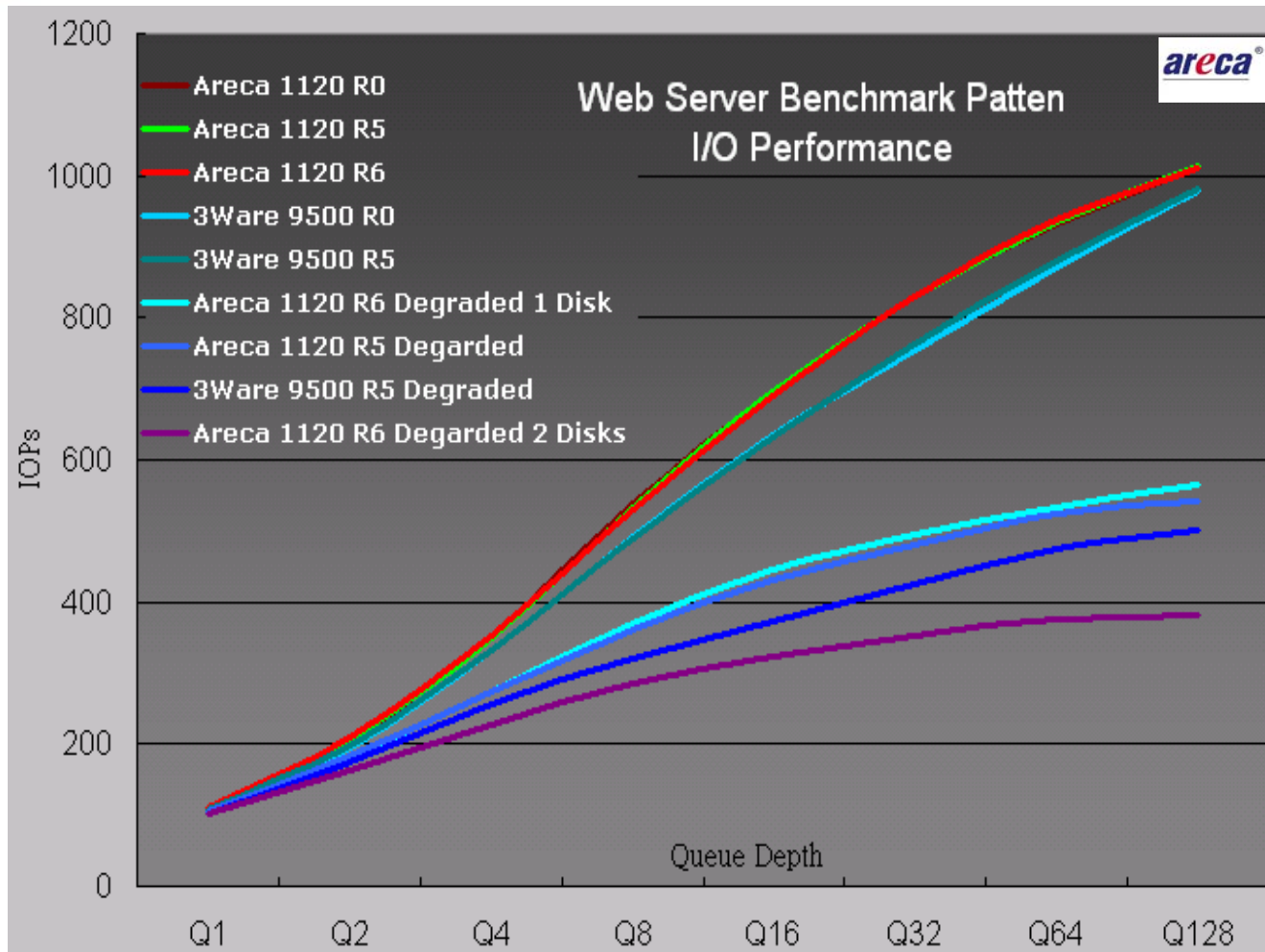
Performance Comparison (F/W1.35)





File Server Benchmark

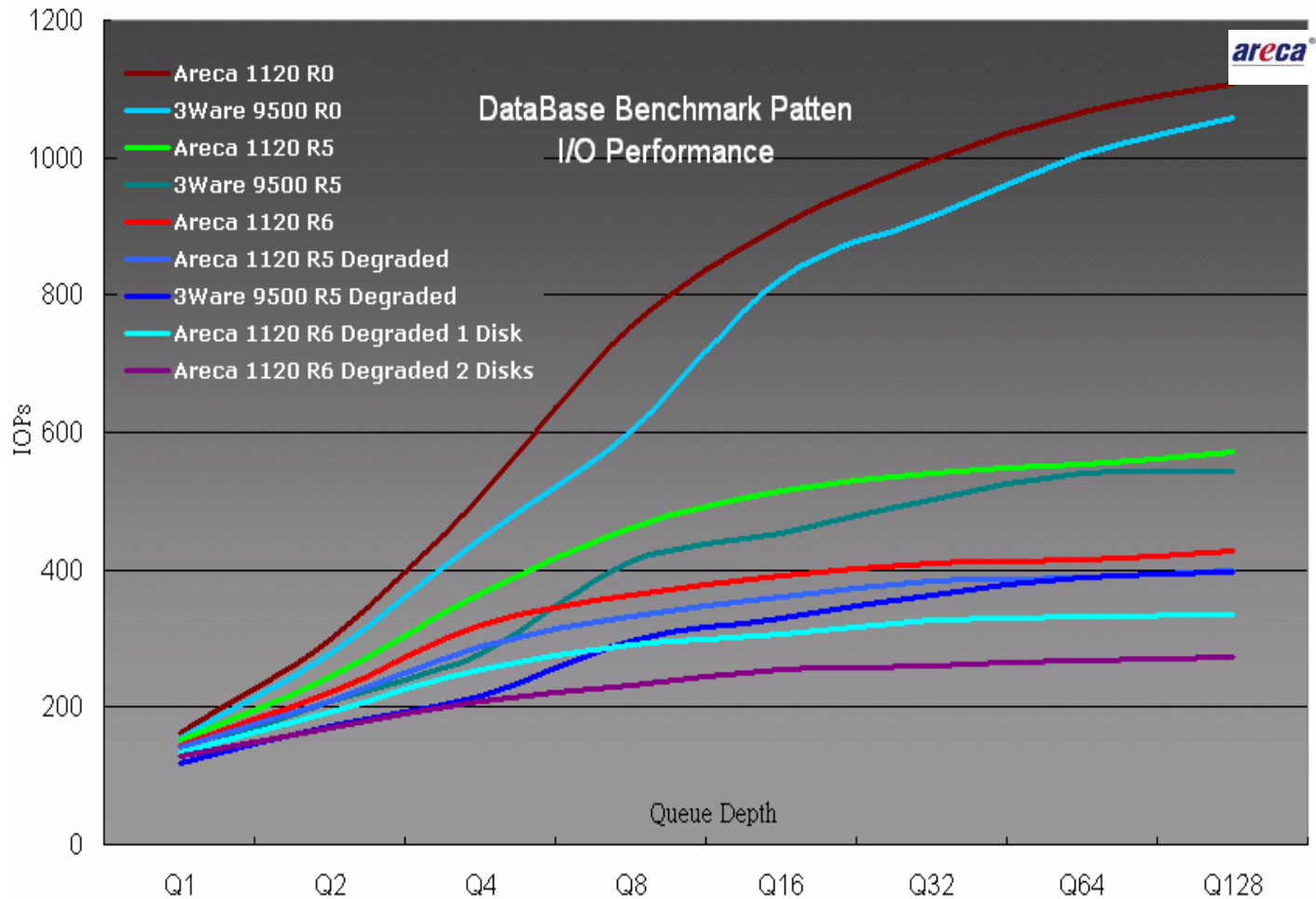
Performance Comparison (F/W 1.35)





Database Benchmark

Performance Comparison (F/W From 1.34 to 1.35)

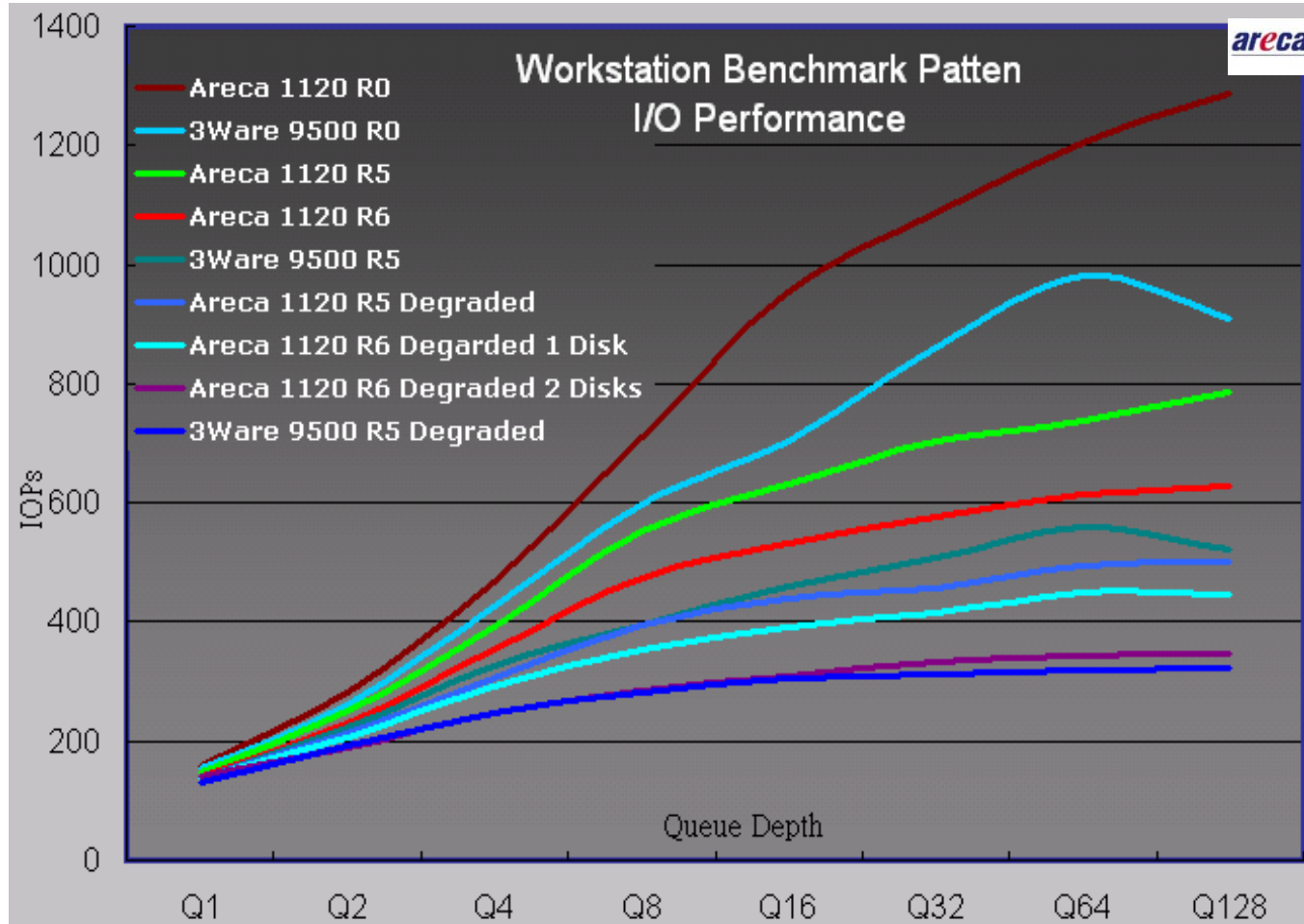


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Workstation Benchmark

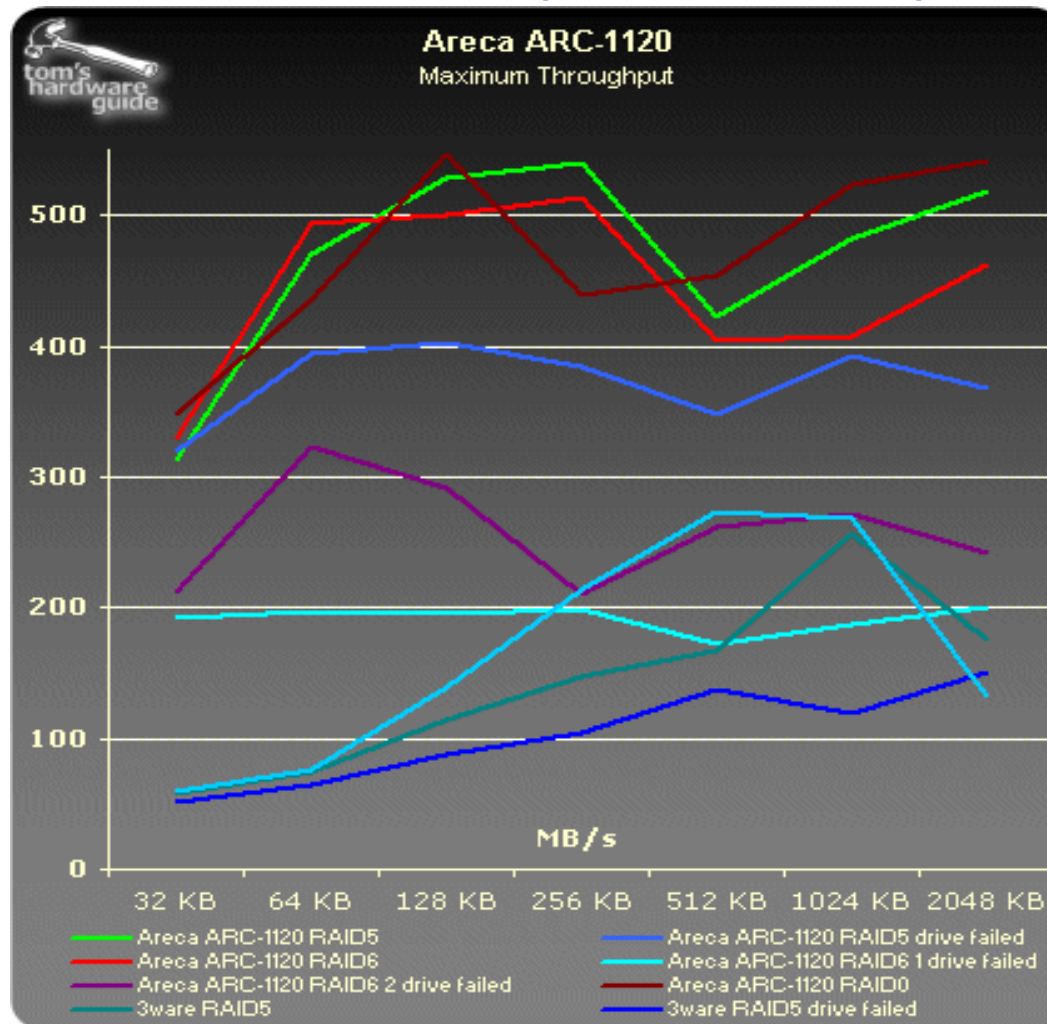
Performance Comparison (F/W From 1.34 to 1.35)





Maximum Throughput

Performance Comparison (F/W From 1.34)





Areca Test Result

Test New Firmware Version (F/W version 1.35)

Summary from Areca: Secure, and Always Fast

In the I/O-sensitive benchmarks, Areca new firmware version 1.35 can compare directly with 3Ware or more efficiently in major I/O-sensitive benchmarks.

While the transfer rates of the ARC-1120 are high and beat those of 3Ware in all block sizes