



# Changing the Paradigm of Databases for SSDs.

RethinkDB and INDILINX,  
with support from OCZ.



**INDILINX** was founded in 2006 and is backed by venture capitals such as Softbank Ventures.

**Tinkerbell™**: High performance e.MMC 4.4x controller to meet the current and future demands in storage requirements for Consumer Mobile Devices aimed to fully utilize the maximum bandwidth allowed by e.MMC 4.4x specifications, which is 104MB/s.

**Barefoot™ and its Sequel**: The revised version of SATA 3Gbps Barefoot™ by INDILINX that will consume the maximum bandwidth allowed by SATA 3Gbps in both Sequential & Random operations!

**Thunderbolt™**: New controller with SATA 6Gbps solution. Thunderbolt™ will be the fastest SATA 6Gbps controller solution and will prove the need for higher SATA interface.

**Tube™**: Developed for MOSAID, Tube™ is a prototype controller that showcases the benefits of HLNAND™, and demonstrates how HLNAND™ technology is needed to develop GB/s-Class SSDs.



Founded in 2002, San Jose, CA-based OCZ Technology Group, Inc. ("OCZ"), is a leader in the design, manufacturing, and distribution of high performance and reliable Solid State Drives (SSDs) and premium computer components.

OCZ offers consumer SSD product lines such as Vertex Series SSDs and Enterprise Series SSDs such as Intrepid line.



# RethinkDB.

The database for solid-state drives.

# Solid-state is disruptive.

200 times faster for 3 times the price.

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Sudden, dramatic, and fundamental change.

# Solid-state has limitations.

Existing stack is designed for rotational drives.

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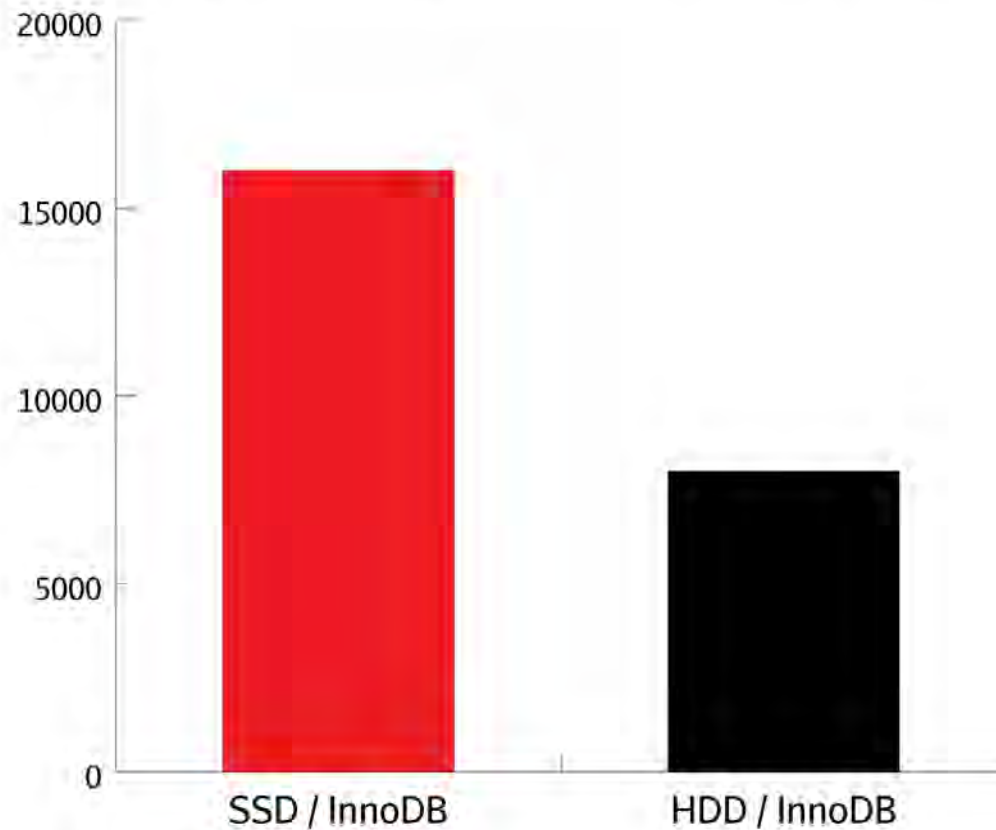
Unpredictable write performance over time.

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Benchmarks don't reflect real-world performance.

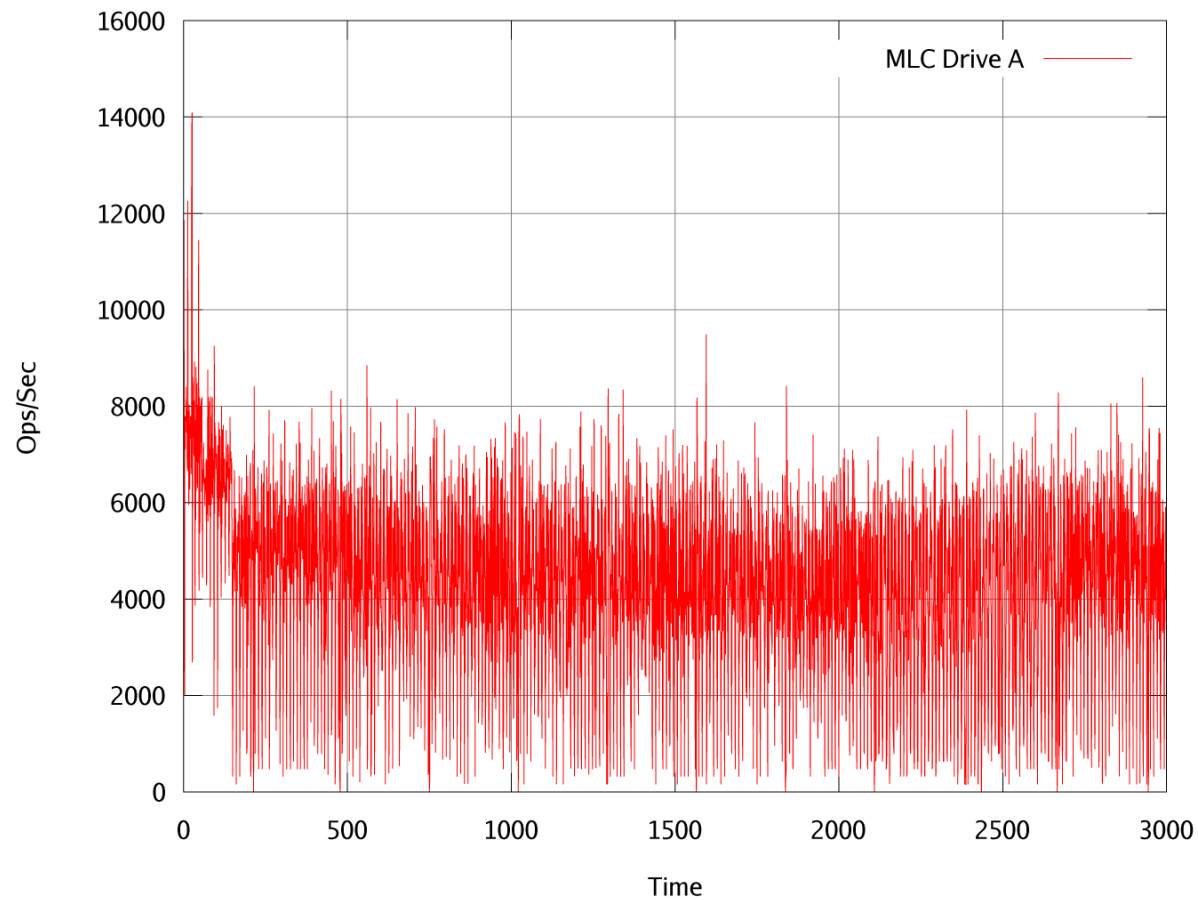
# Benchmarks don't reflect reality.

Operations per second on insertion.



# Consistency is key.

Random write workload





# RethinkDB is designed for SSDs.

Designed from the ground-up for SSDs.

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Unlocks the performance potential of SSDs.

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Performance doesn't deteriorate over time.

# The power of designing for SSDs.

OCZ Intrepid 2.5" SLC SATA  
with an INDILINX controller.



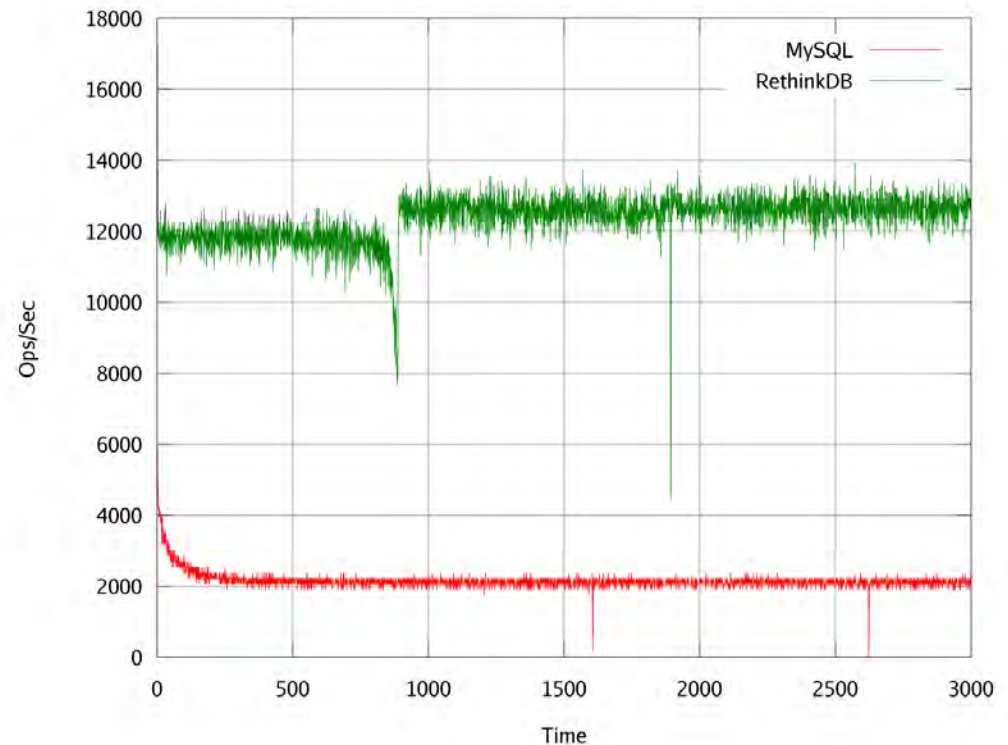
Bandwidth:

- Max write: up to 180 MB/s
- Max read: up to 250 MB/s
- Sustained write: up to 100MB/s

IOPS:

- Rand reads: up to 6600 IOPS
- Rand writes: up to 2200 IOPS

RethinkDB workload vs. MySQL workload



# Our Storage Partner Program.

We're tuning RethinkDB for our storage partners.

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Advancing the state of software for solid-state.

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Defining SSD solutions for customers.

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