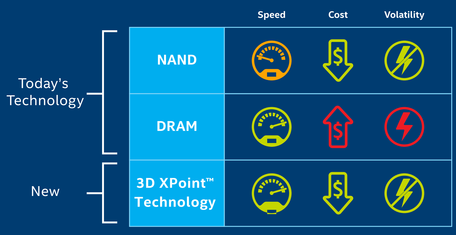
THE WAIT IS OVER!

3D XPOINT™ TECHNOLOGY

Intel disrupts the industry with better storage memory that is fast, inexpensive and non-volatile. Now your processor can work much faster, rather than at a fraction of its potential.

Memory Technologies Today = Tradeoffs



With today's memory technologies, you can get incredible performance, but only if you spend a lot per MB and you don't mind your data going away when the power does.

Or, you can keep costs reasonable if you're willing to sacrifice speed.

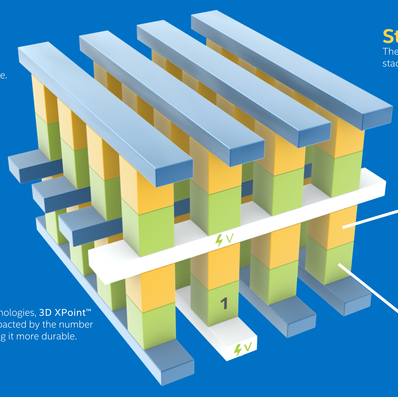
Ideally, you want memory that's fast, inexpensive and non-volatile.

3D XPoint™ Technology: An Innovative, High-Density Design

Cross Point Structure
Perpendicular wires connect submicroscopic columns. An individual memory cell can be addressed by selecting its top and bottom wire.

Non-Volatile
3D XPoint™ Technology is non-volatile—which means your data doesn't go away when your power goes away—making it a great choice for storage.

High Endurance
Unlike other storage memory technologies, **3D XPoint™ Technology** is not significantly impacted by the number of write cycles it can endure, making it more durable.



Stackable
These thin layers of memory can be stacked to further boost density.

Selector
Whereas DRAM requires a transistor at each memory cell—making it big and expensive—the amount of voltage sent to each **3D XPoint™ Technology** selector enables its memory cell to be written to or read without requiring a transistor.

Memory Cell
Each memory cell can store a single bit of data.

Transforming the Memory Hierarchy

For the first time, there is a fast, inexpensive and non-volatile memory technology that can serve as system memory and storage.

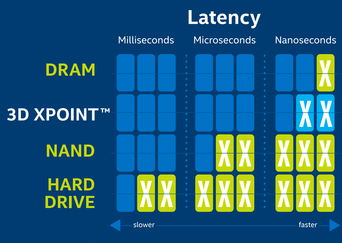


~8x to 10x Greater Density than DRAM[1]

3D XPoint™ Technology's simple, stackable, transistor-less design packs more memory into less space, which is critical to reducing cost.



Unprecedented Storage Performance



Latency measurements by technology[1]

1000x Faster[1]
3D XPoint™ Technology is up to 100s of times faster than NAND.

1300x Faster[1]
NAND memory provides state-of-the-art storage performance today and is up to 1300x faster than hard drives.

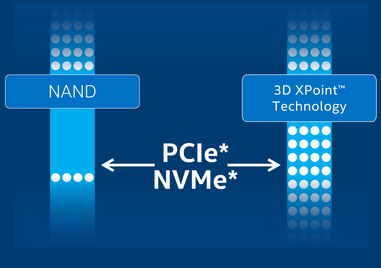
If storage devices were sprinters...

In the time it takes a hard drive to sprint the length of a basketball court...

...NAND could finish a marathon...

...and 3D XPoint™ Technology could circle the globe!





10x More Performance[1]
3D XPoint™ Technology delivers up to 10x more performance than NAND across a PCIe* NVMe* interface.

INTEL INSIDE.

ENDLESS POSSIBILITIES OUTSIDE.

intel experience what's inside™

1 Technology claims are based on comparisons of latency, density and write cycling metrics amongst memory technologies recorded on published specifications of in-market memory products against internal Intel specifications.

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