

SEARCHING COMPRESSED DATA WITHOUT DE-COMPRESSION

SEARCHING METHODS STATUS QUO

- Historically when a search engine (i.e. Google) wants to find all relevant sites for a given search keyword the search engine must create an index of all their data across all platforms, datacenters, systems, servers, and storage drivers (i.e. HDD, SSD, etc.) to provide relevancy of their search engine algorithm to customers requested search keyword.
- To do this, first search engines need to bring chunks of their compressed data from storage devices into main memory (i.e. DRAM)
- Then the CPUs must perform de-compression and send smaller chunks of final data into CPUs for comparison with customer's search keyword and if there is a hit their search algorithm will note of location in a table and continue until all data stored in all storage devices is searched.
- The resultant matching index table will be shown to end customer as relevant hit.

XITORE SEARCH

- ❖ Another Xitore innovation is that it has developed technology that can search one or more storage devices in parallel without any intervention of main CPUs, without any moving compressed data into main memory (i.e. DRAM modules)
- ❖ As a matter of fact Xitore technology can successfully search one or more compressed data without decompression and build the resultant matching index table without de-compression and without moving compressed data to main memory, nor without moving any data into host main CPUs.
- ❖ Our innovative patented technology will perform all these task within our NVDIMM-X and iVDIMM and have the result available for request search engine or host application.
- ❖ Hence Searching Compressed Data without De-Compression.

Disclaimer:

Xitore, Inc. is not a member of either JEDEC or SNIA organizations since its inception in 2014. The company is a technology licensing company with a comprehensive patent portfolio in Persistent and Storage Class Memory space. For more information visit our website at: [Xitore IP Licensing](#)