## 1 introduction

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### 2 Hardware

The program have been tested on a server with the following hardware.

Motherboard: Supermicro X11DPU-Z+

CPU: Intel(R) Xeon(R) Gold 6130 CPU @ 2.10GHz, 32 core

DRAM: Samsung RDIMM, 2666 MT/s.

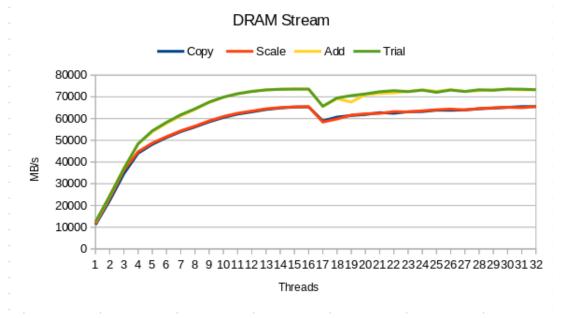
NVDIMM: Micron Technology NV-DIMM , 2933 MT/s

## 3 Benchmarks

There are four different benchmarks.

#### 3.1 STREAM DRAM

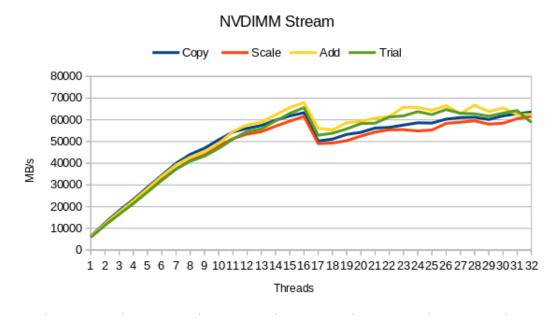
The stream DRAM benchmark measure the memory speed of the DRAM. The benchmark uses the STREAM benchmark without any changes in order to measure how fast the memory speed is. The benchmark tests all with all cores.



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#### 3.2 STREAM NVDIMM

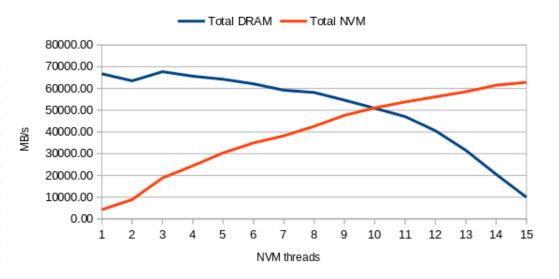
The stream NVDIMM benchmark measure the memory speed of the NVDIMM. This benchmark is the same as the STREAM DRAM benchmark mention above. The different is that



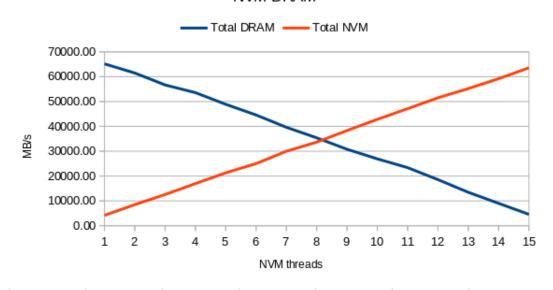
#### 3.3 benchmark 3

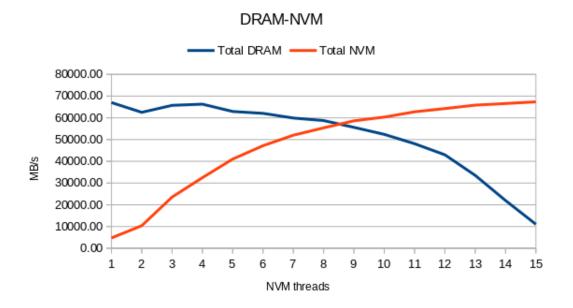
Graph below show the speed of a certain amount of NVDIMM threads while the rest of the threads are from DRAM to DRAM.

#### NVN-NVM



#### **NVM-DRAM**





# 3.4 benchmark 4