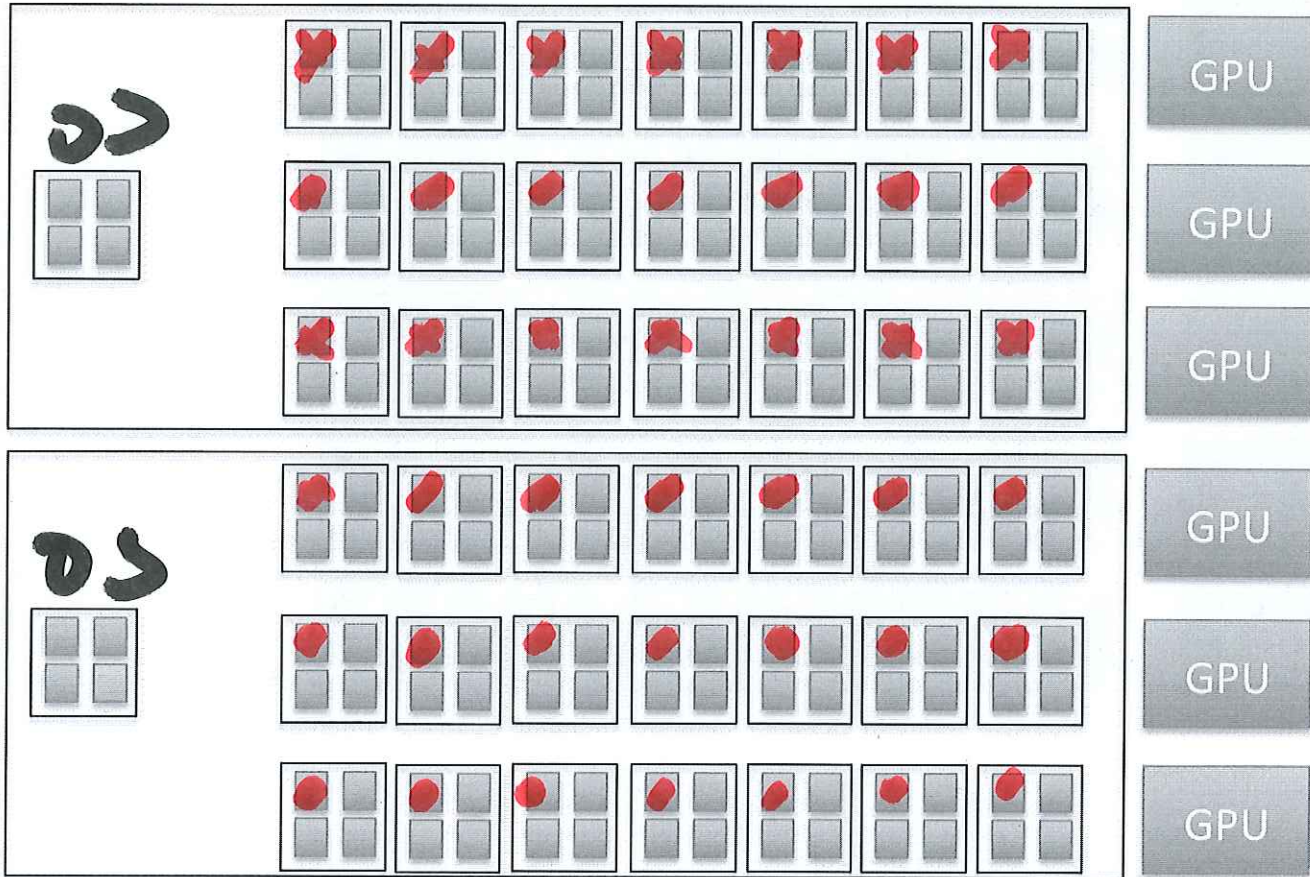


ACME - MULTICORE/CPU

✿ — MPI
✿ — OPENMP/Threads

Summit Node — SMT42

~~AS~~



~~Not same for GPUs with MPIs~~

ACME - CPU+GPU

🌸 MPI
🌿 OpenMP/
Threads

Summit Node - SMT

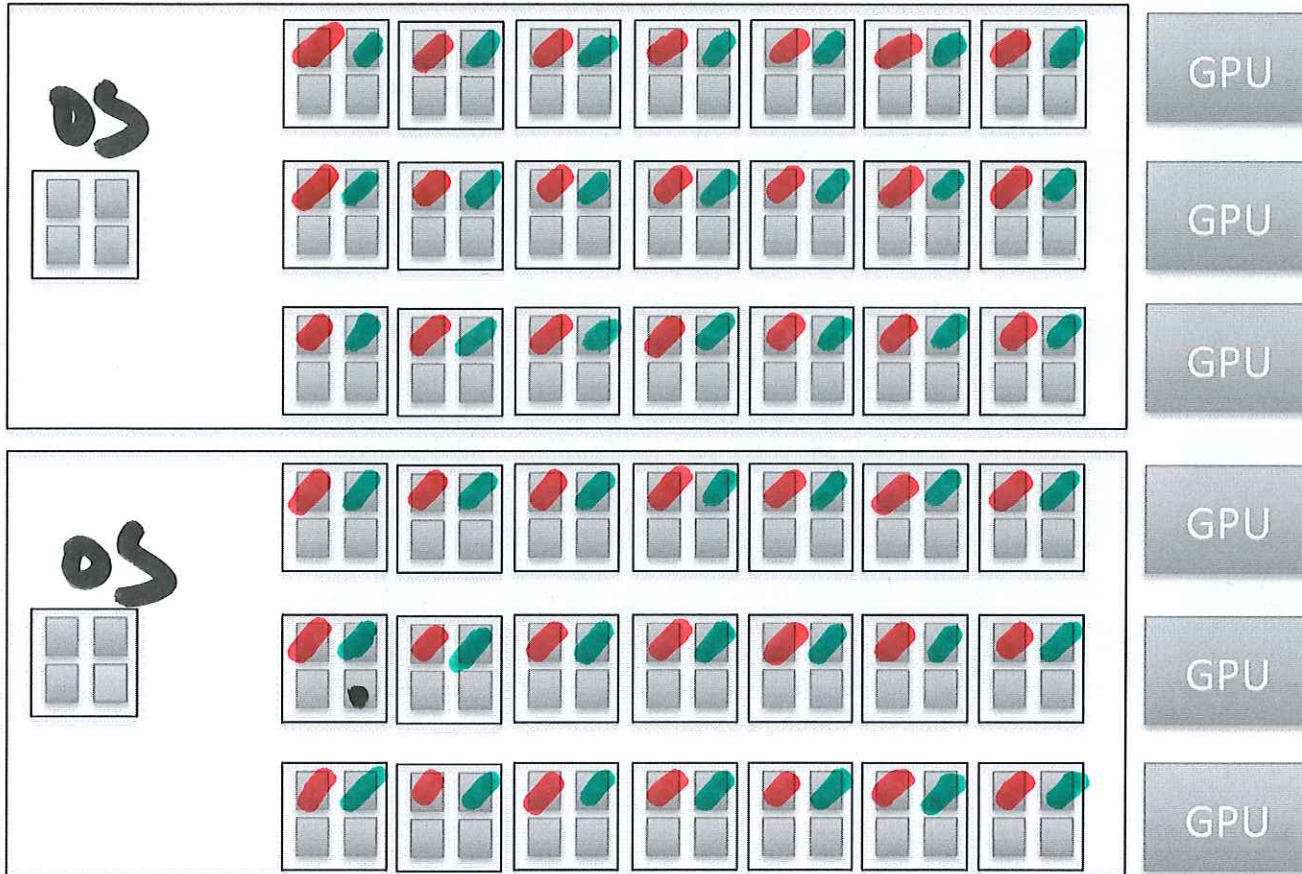


1 MPI per GPU

ACME - CPU + GPU

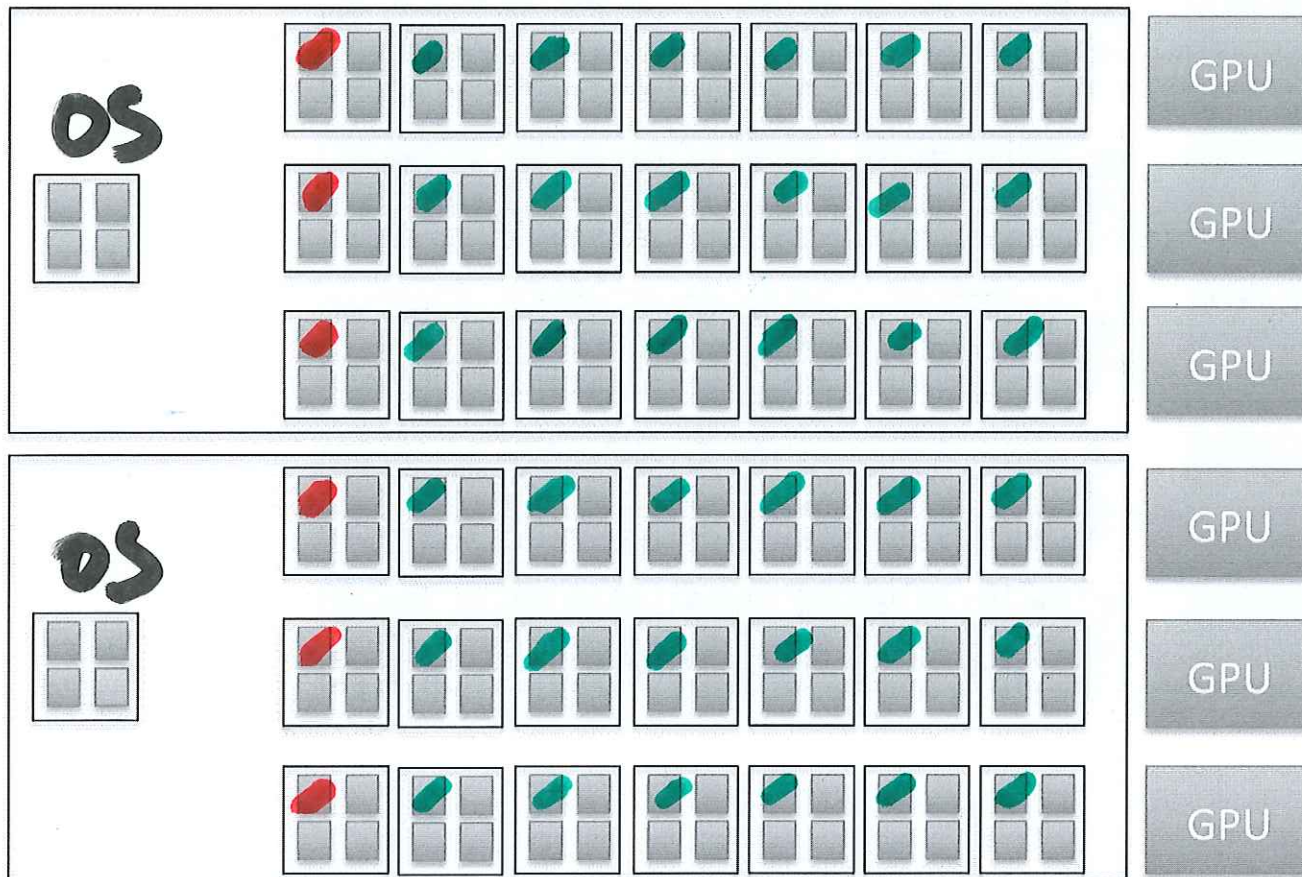
Summit Node - SMT ~~4~~ 2

MPS



QMC Pack

Summit Node – SMT4 |

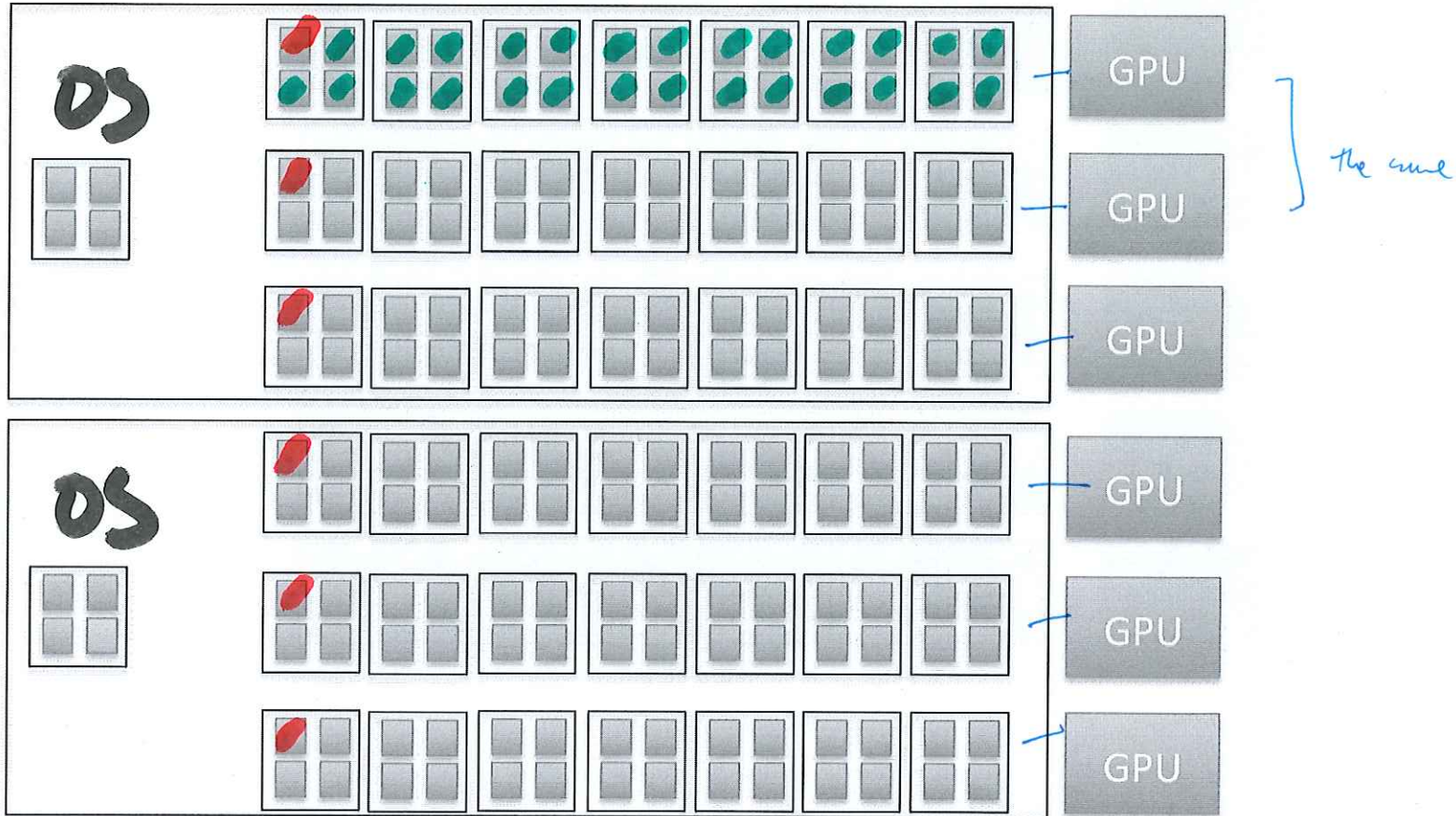


MPS

all devices
seen
by all
MPS

Diva C, GTC, HACC, NWChem

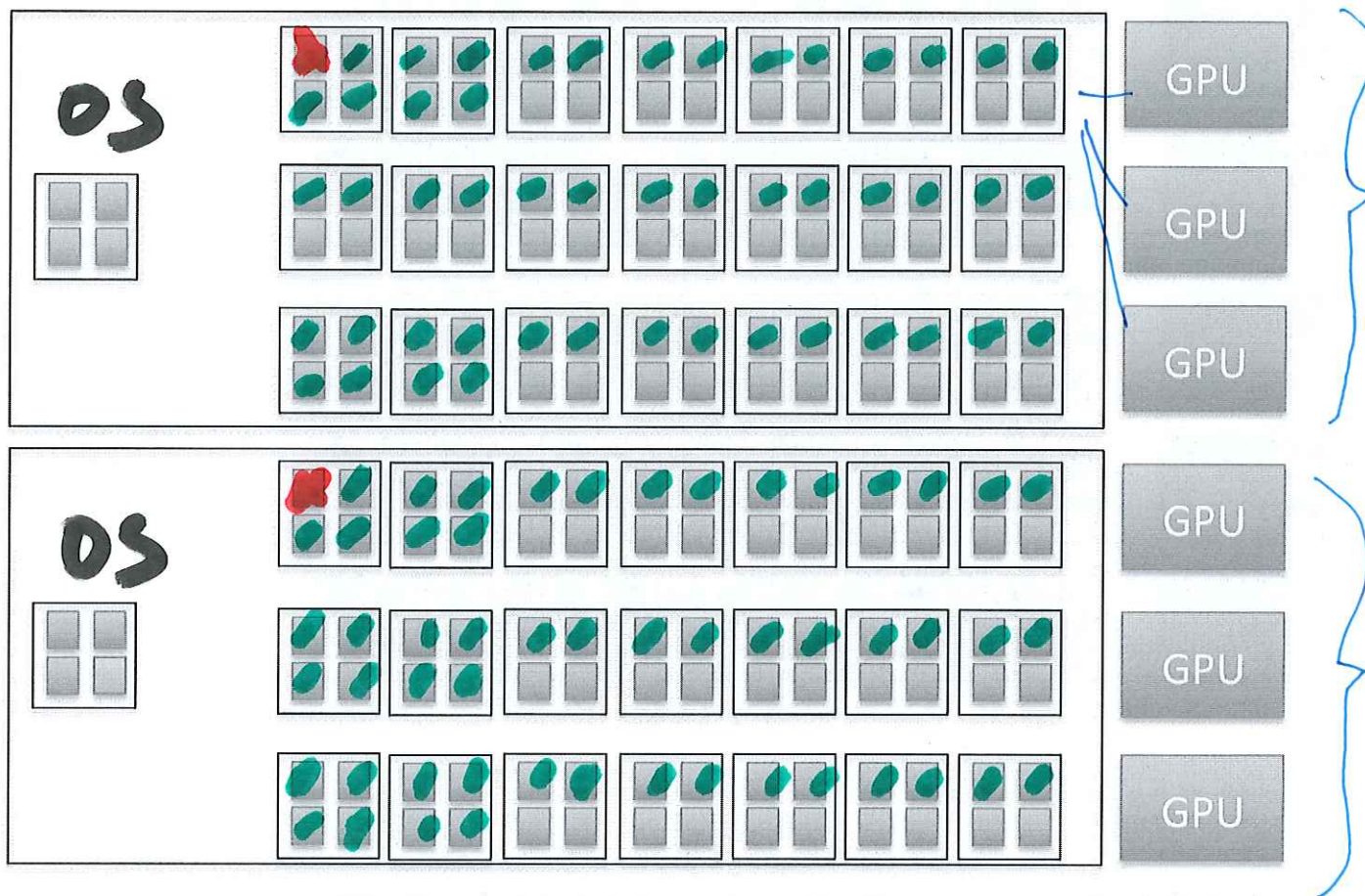
Summit Node – SMT4



Direct

Summit Node – SMT4

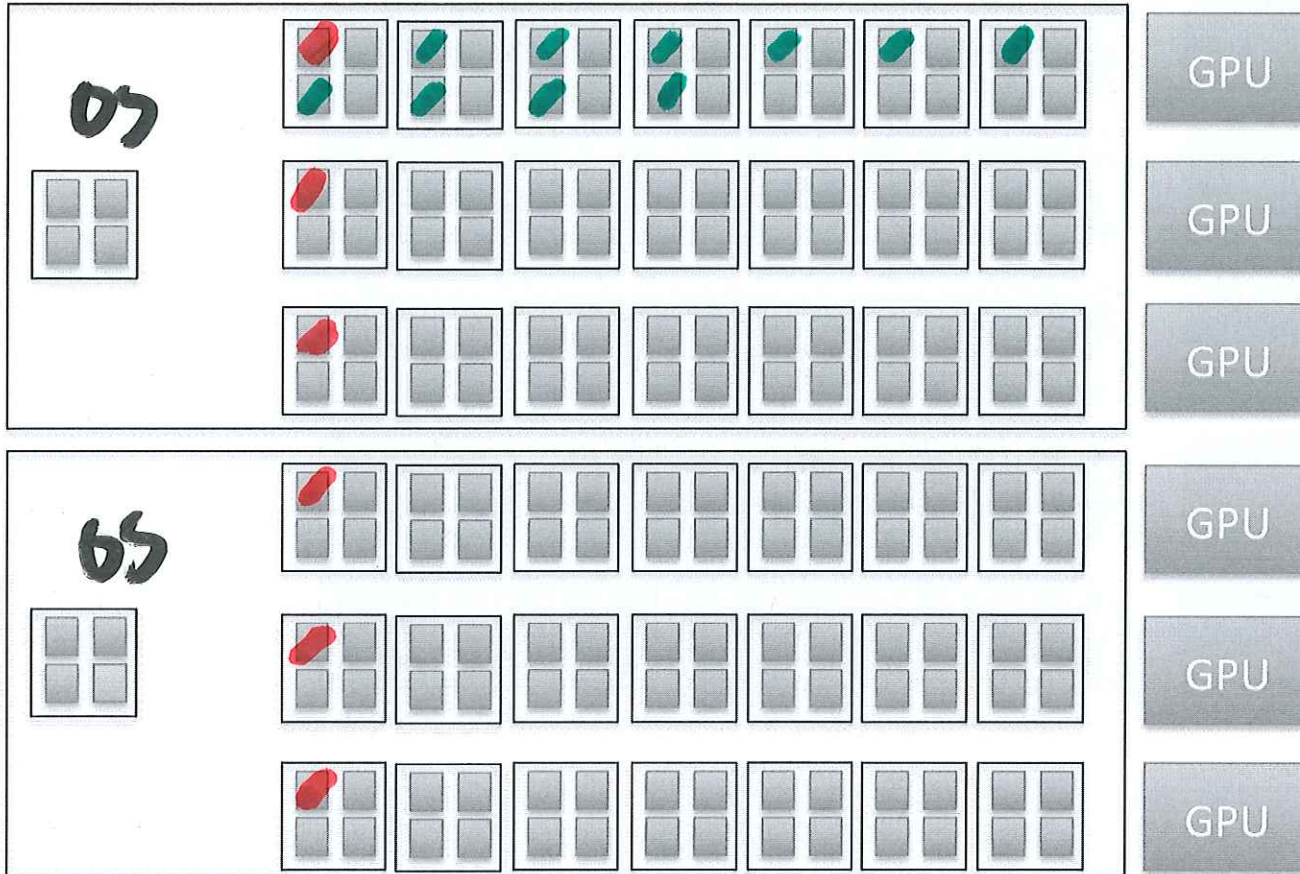
~~1 MPI~~



1 MPI \leftrightarrow 3 GPUs

X6C

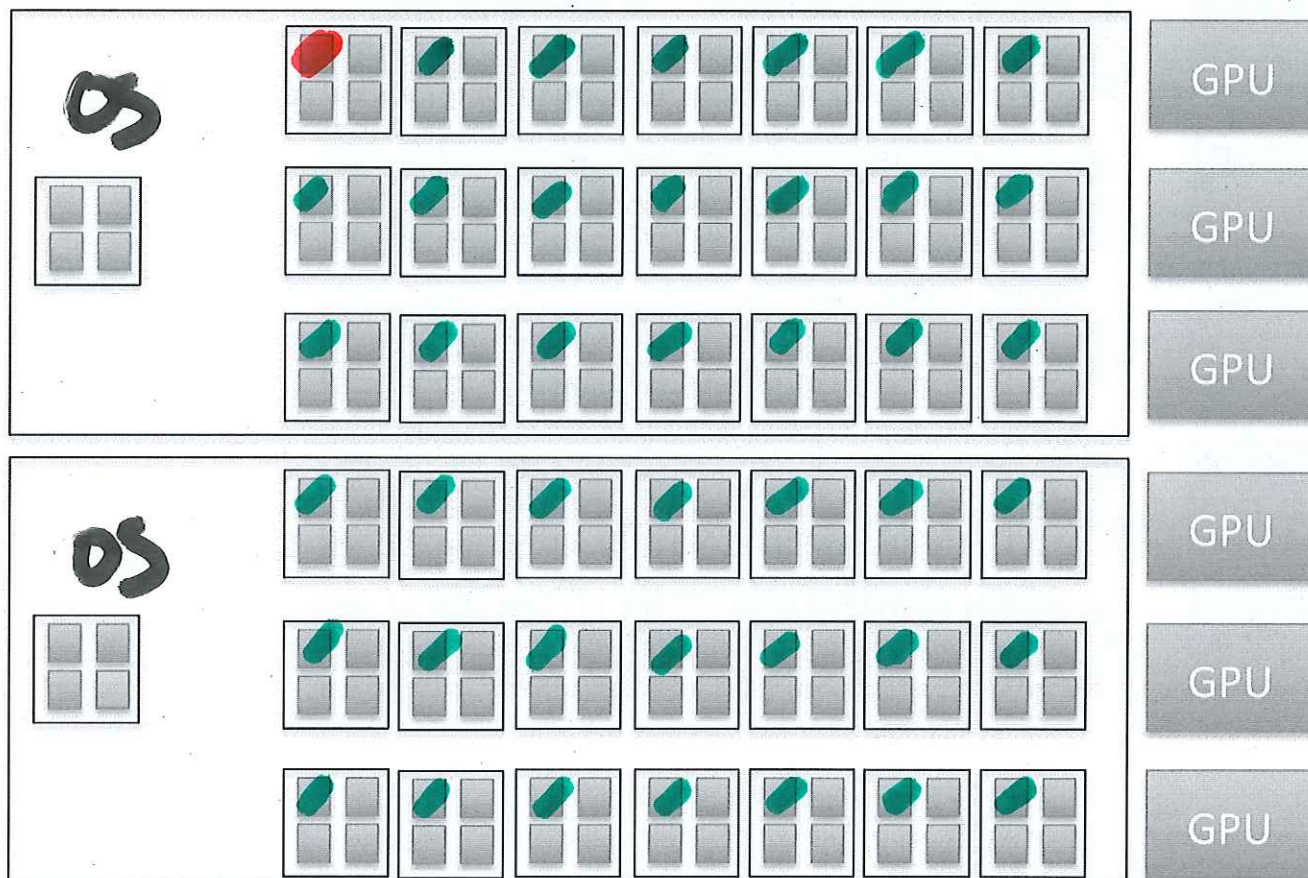
Summit Node – SMT4



B - 10 threads
spread over
Round robin.

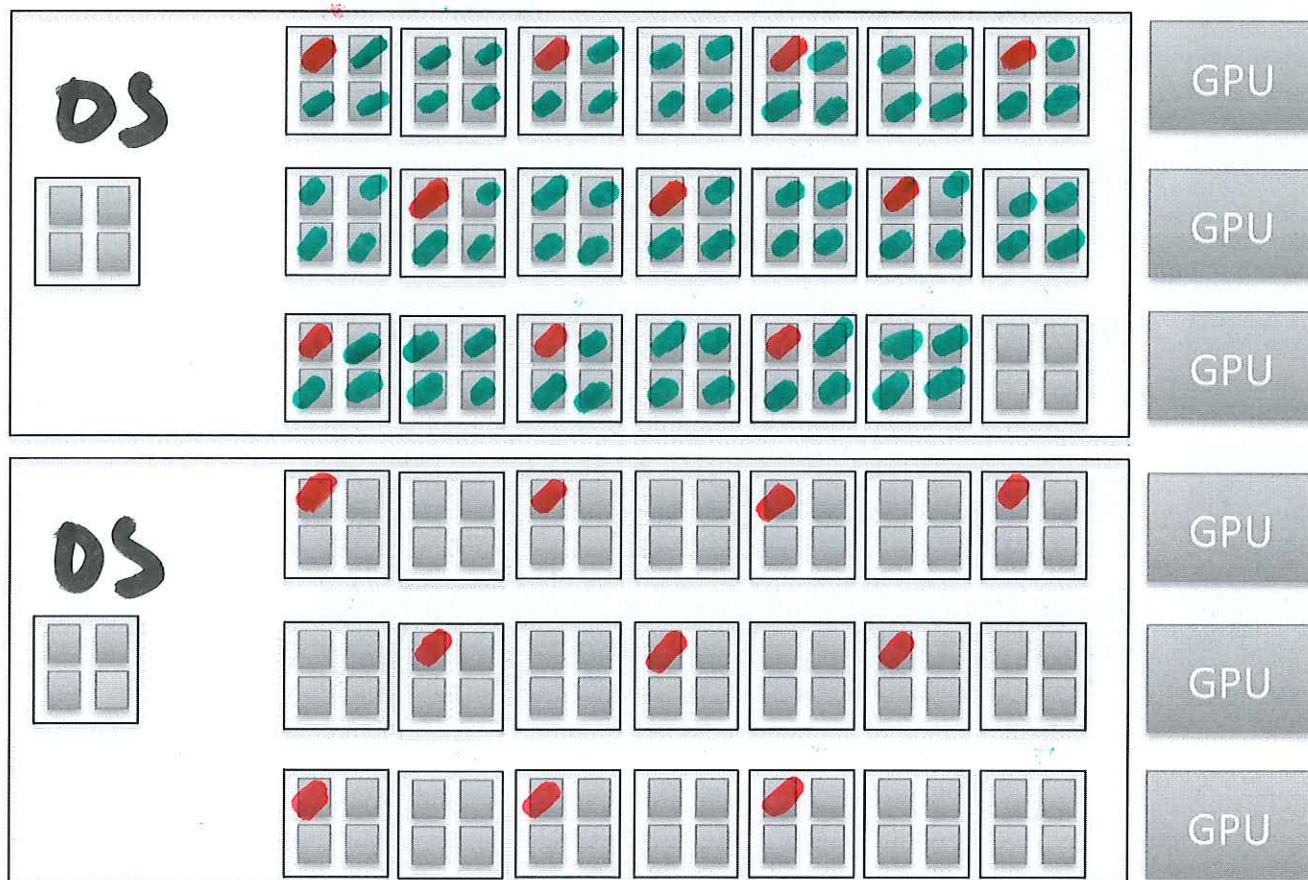
LS-DALTON

Summit Node – SMT4



NAMD

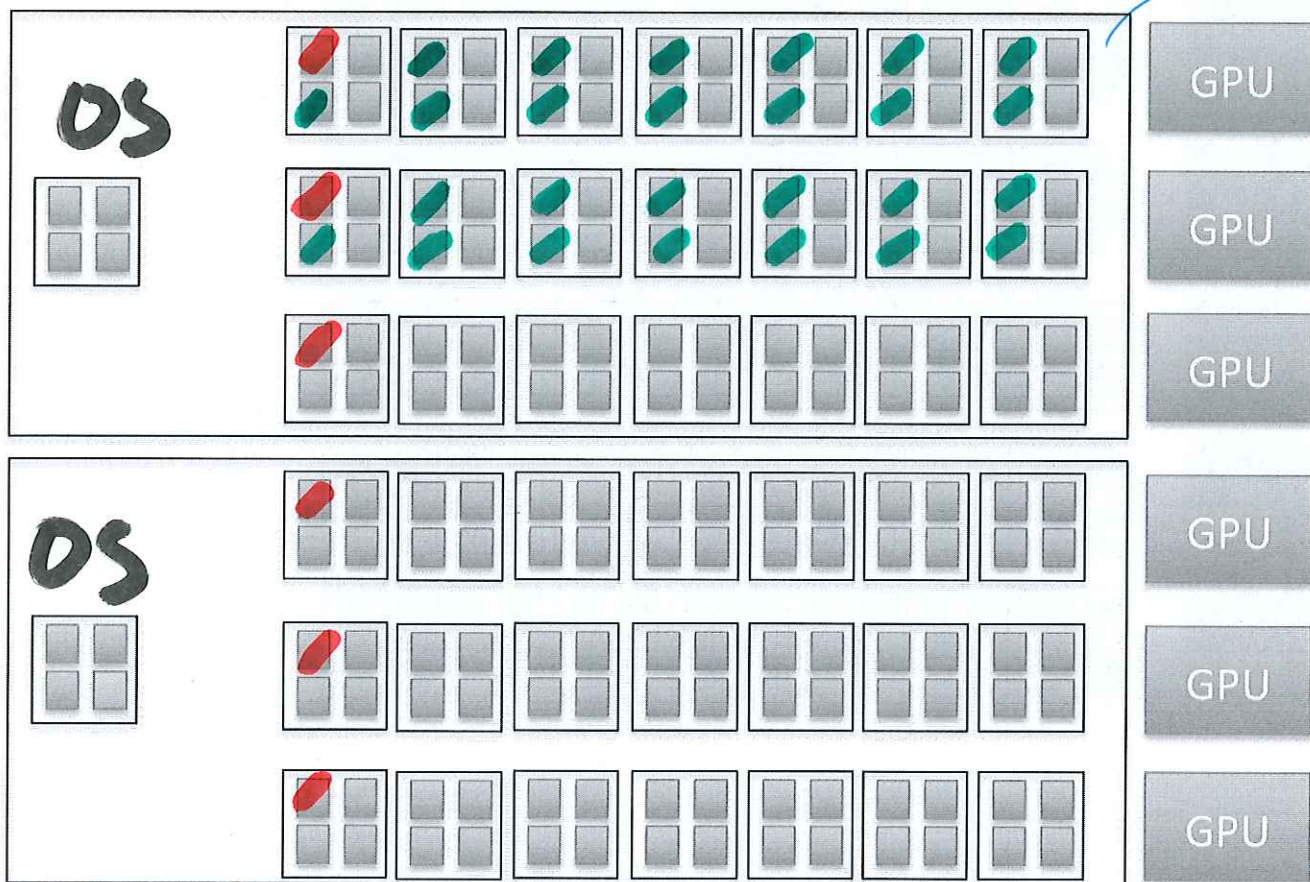
Summit Node – SMT4



MPS

Flash, BTC, HACC

Summit Node – SMT4



will Fill up
Round robin
~~load~~ robin
in The seven cores

Summit Node SMT4