

# PERFORMANCE-ORIENTED COMPUTING

Extra – Information on LCC3



# OVERVIEW

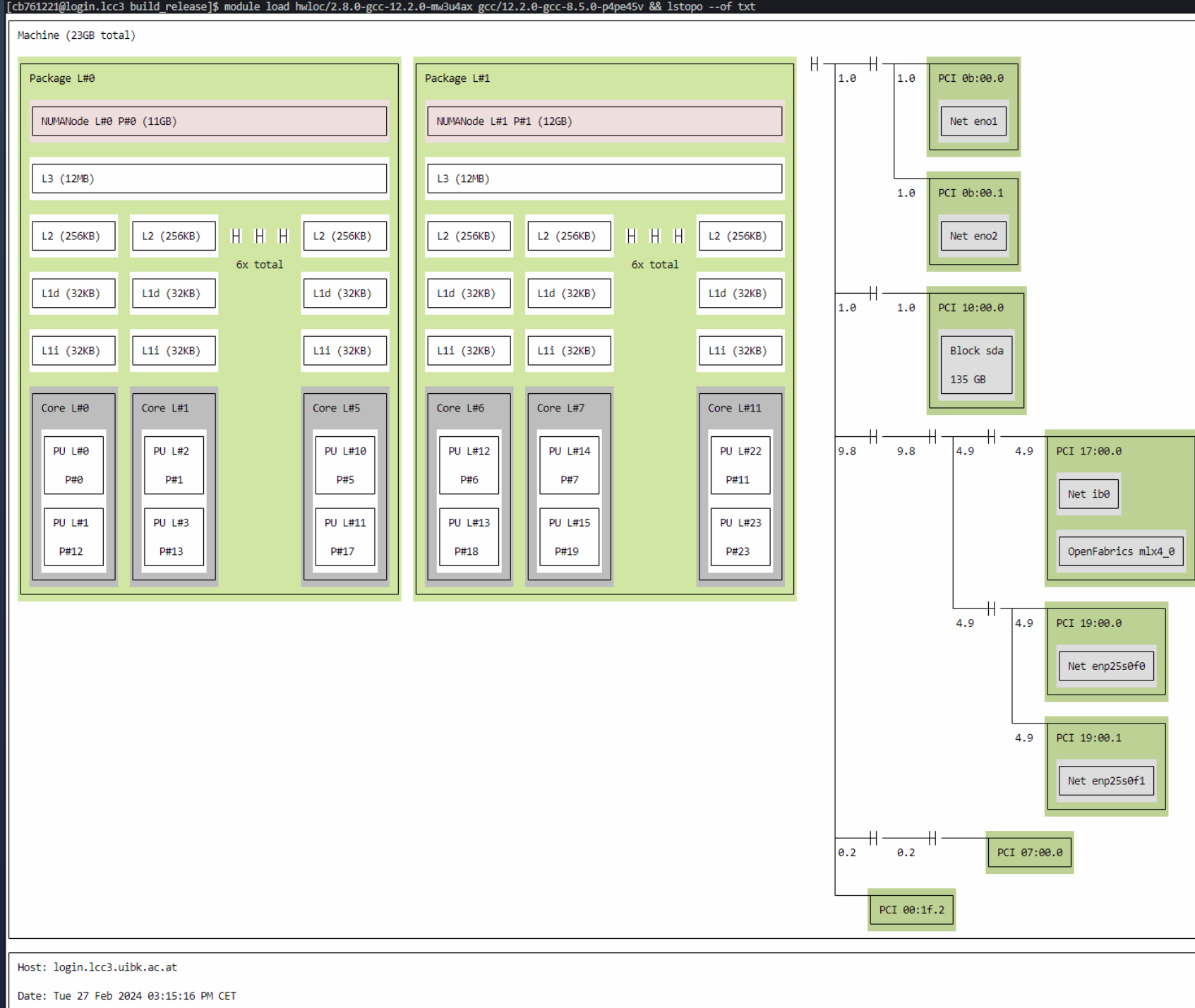
*In order to **eliminate hardware differences as a factor**, you'll generally be asked to perform your measurements / analysis / optimization **on the LCC3 cluster** in addition to your own hardware.*

In this small overview, we'll discuss the following:

- ▶ **Basic Information**
- ▶ **Usage**
- ▶ **Important Guidelines**
- ▶ **Accounts**

# BASIC LCC3 CLUSTER INFORMATION

- ▶ LCC3 is compute cluster at UIBK **specifically for teaching use**
- ▶ It consists of some rather old nodes, but that's irrelevant for our purposes
- ▶ What's important is that they **are all the same!**



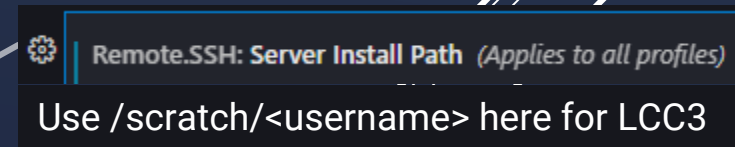
# USAGE

- ▶ To run benchmarks on the cluster, you need to submit them using the **Slurm** system (<https://slurm.schedmd.com/documentation.html>)
  - ▶ Using either ``sbatch`` or ``srun``
- ▶ You can find some helper scripts in the VU repo, in ``lcc3_helpers/``
- ▶ Note that LCC3 is only available from within the UIBK network
  - ▶ You need to use VPN to work on it from remote locations

# IMPORTANT GUIDELINES

Since LCC3 is a **shared system**, there are some important rules you must follow when using it:

- ▶ Do **not run any significant workload on the login / head node**
- ▶ Keep your individual **job durations low**; if you need to perform lots of benchmarks, run them as individual jobs
- ▶ Ensure that you aren't unnecessarily occupying nodes with e.g. hung or stuck runs
- ▶ Storage space in \$HOME is limited - use \$SCRATCH for large but ephemeral data (such as the VSCode Server Install Path)



# ACCOUNTS

- ▶ Everyone will get an individual account now
  - ▶ Later on, during group exercises, you can use the account of any group member
- ▶ Please **change the password right away** after receiving your account
  - ▶ Don't let me log into anyone's account with the starting password tomorrow, otherwise I will be quite distraught

QUESTIONS ?

