

# IHEPCCC/HEPiX benchmarking WG Status update

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Grid Deployment Board  
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- Just an update to my presentation on 09-Jan-2008
- Regular phone conferences
  - About once every two weeks, more frequently when needed
- Dedicated test cluster at CERN
- Some more machines made available for benchmarking elsewhere (DESY Zeuthen, RAL)
- Agreement on boundary conditions (OS, gcc, options, how to run SPECcpu)
- Active participation by experiments
  - Atlas: Alessandro di Salvo, Franco Brasolin
  - CMS: Gabriele Benelli et al.
  - Alice: Peter Hristov
  - LHCb: Hubert Degaudenzi



# Benchmarking cluster at CERN

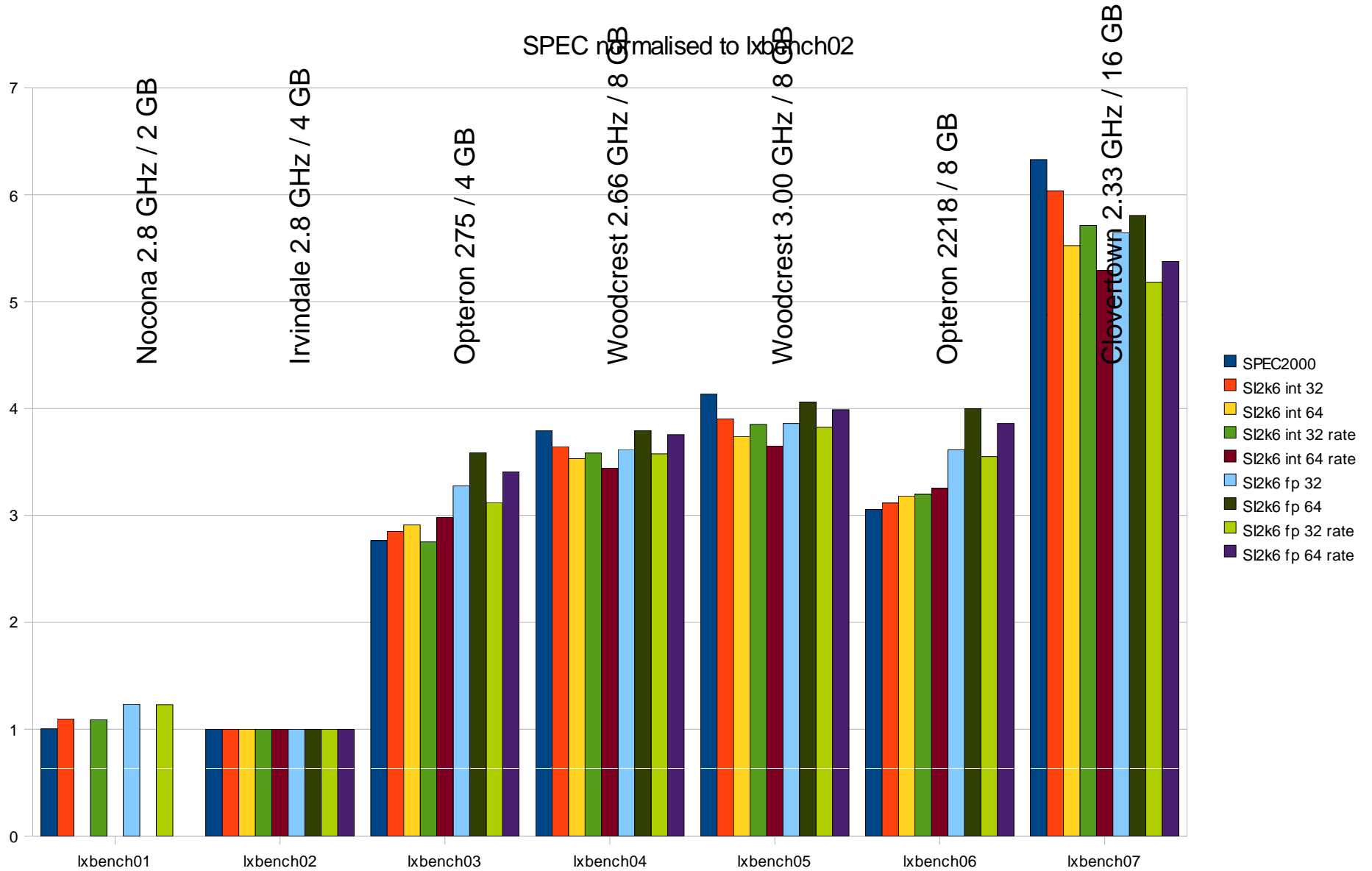
- 7 machines (rather) permanent:
  - Lxbench01: 2 x Nocona 2.8 GHz, 2 x 1 GB, E7320 board
  - Lxbench02: 2 x Irwindale 2.8 GHz, 4 x 1 GB, E7320 board
  - Lxbench03: 2 x Opteron 275, 4 x 1 GB, AMD-8132/8111 board
  - Lxbench04: 2 x Woodcrest 2.66 GHz, 8 x 1 GB, 5000P board
  - Lxbench05: 2 x Woodcrest 3 GHz, 8 x 1 GB, 5000P board
  - Lxbench06: 2 x Opteron 2218, 8 x 1 GB, HT2000/1000 board
  - Lxbench07: 2 x Clovertown 2.33 GHz, 8 x 2 GB, 5000P board
- Some temporary machines
  - Similar to some of the above, with different memory config



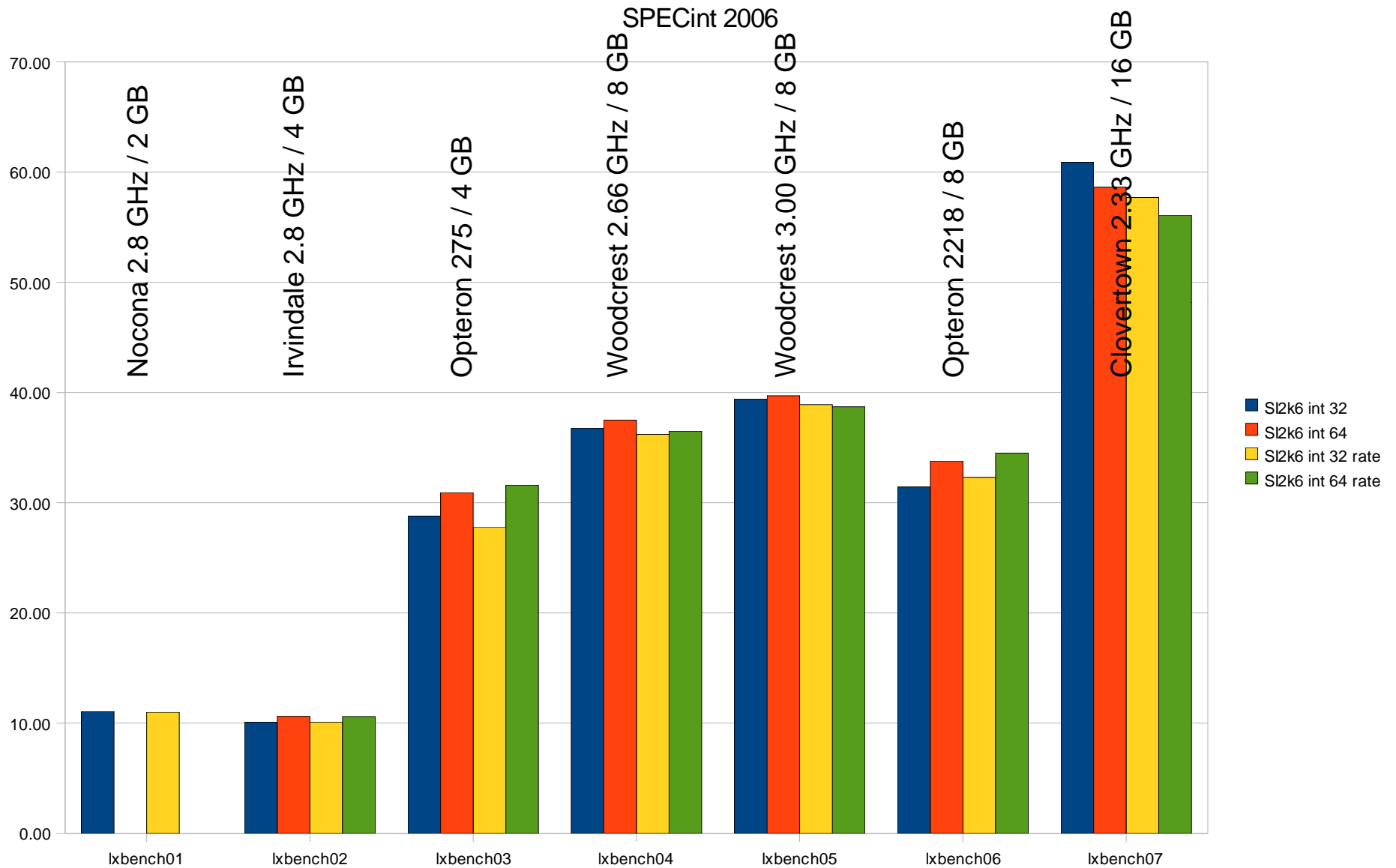
- DESY Zeuthen:
  - 2 x Harpertown 2.83 GHz
- RAL:
  - 2 x AMD Barcelona – not yet stable



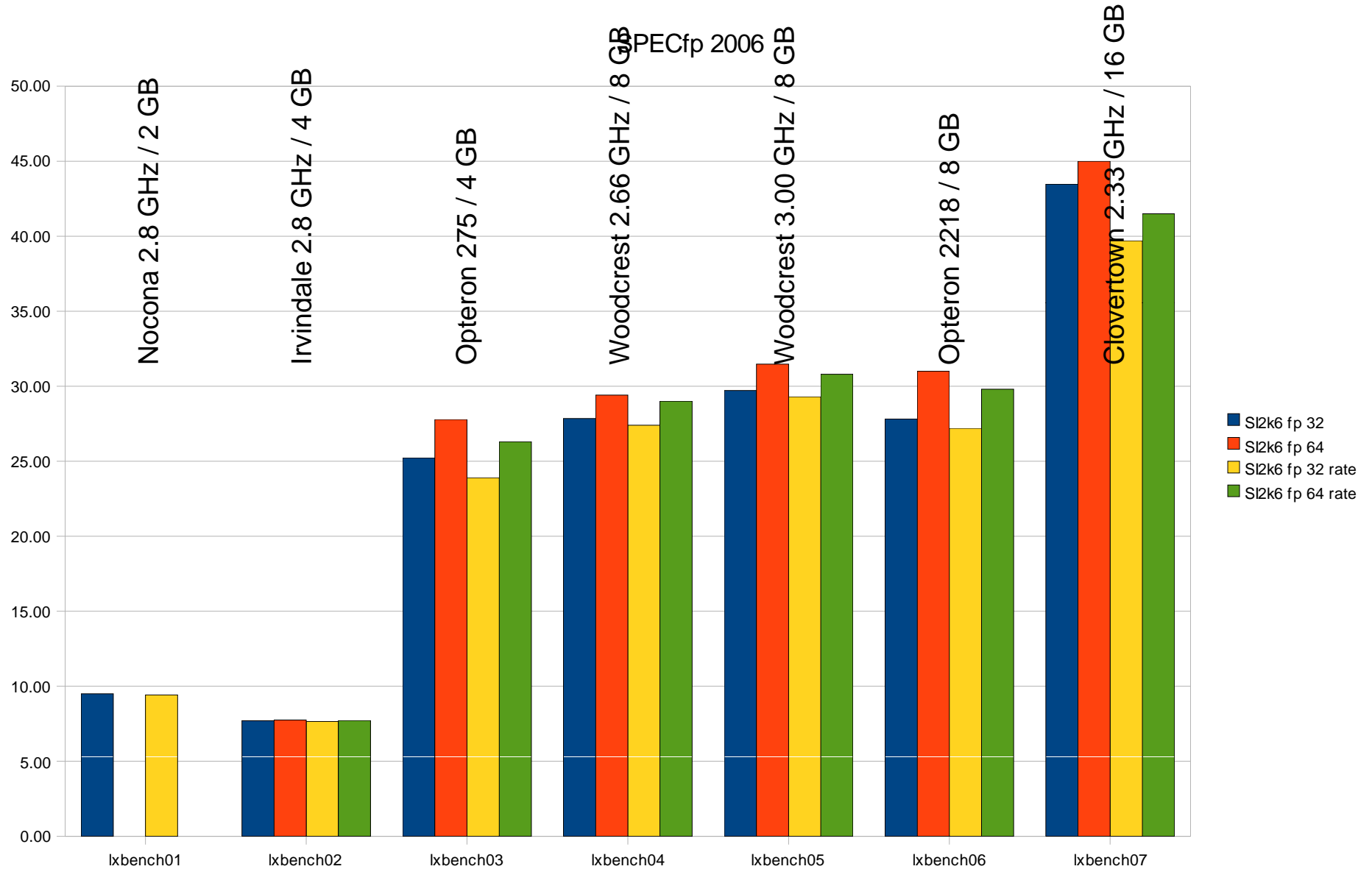
# SPEC benchmarks (1)



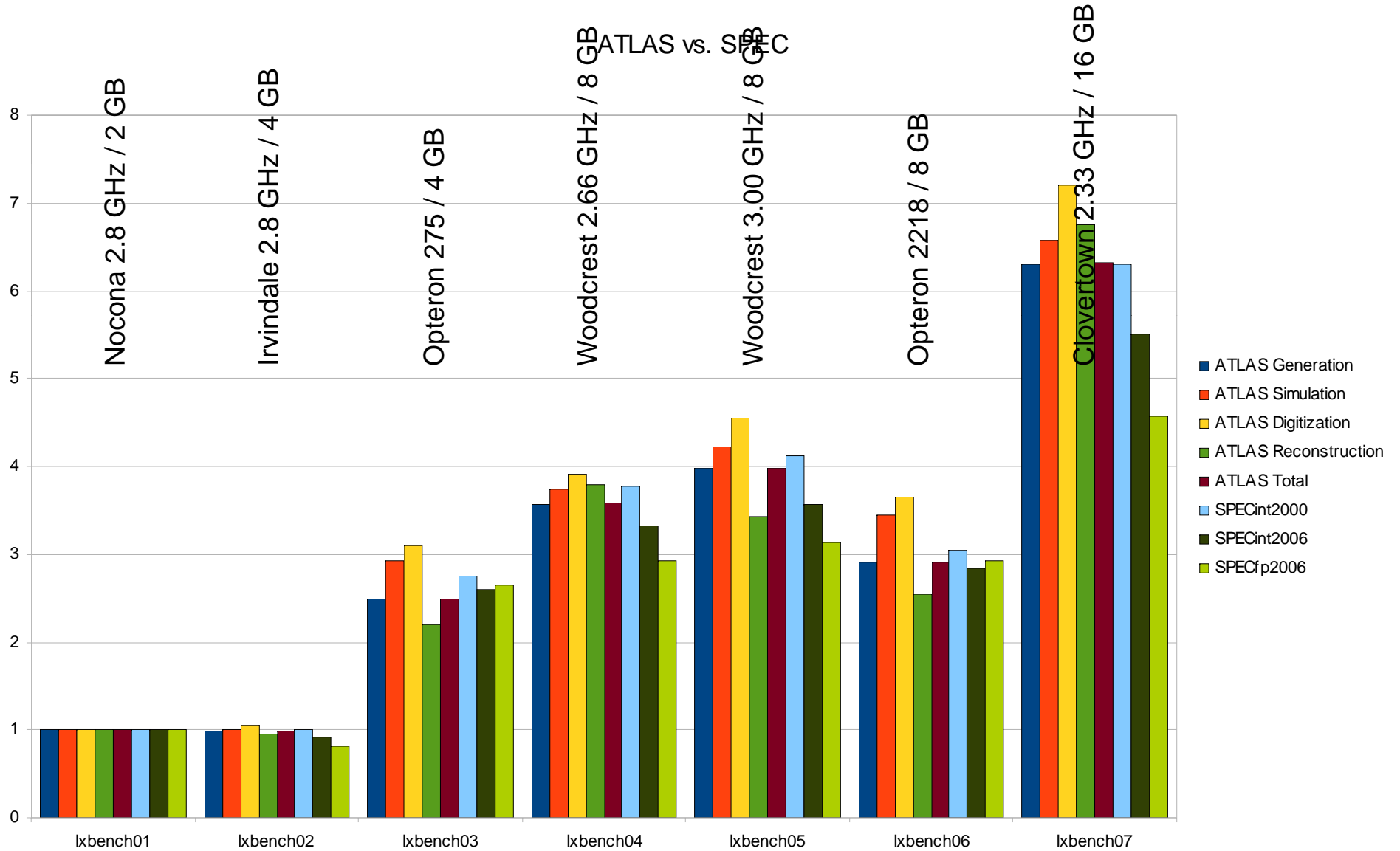
# SPEC benchmarks (2)



# SPEC benchmarks (3)



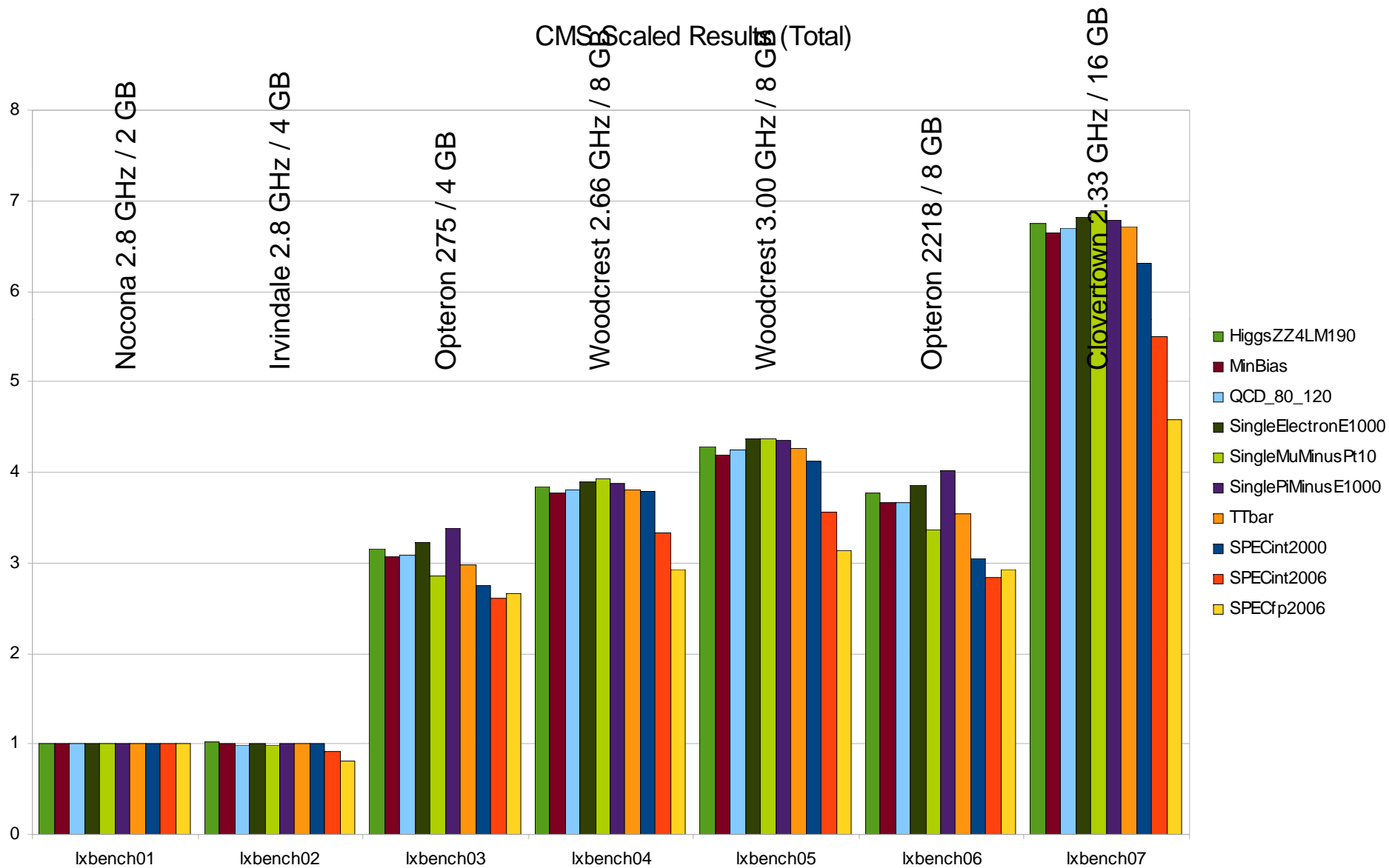
# ATLAS benchmarks (preliminary)





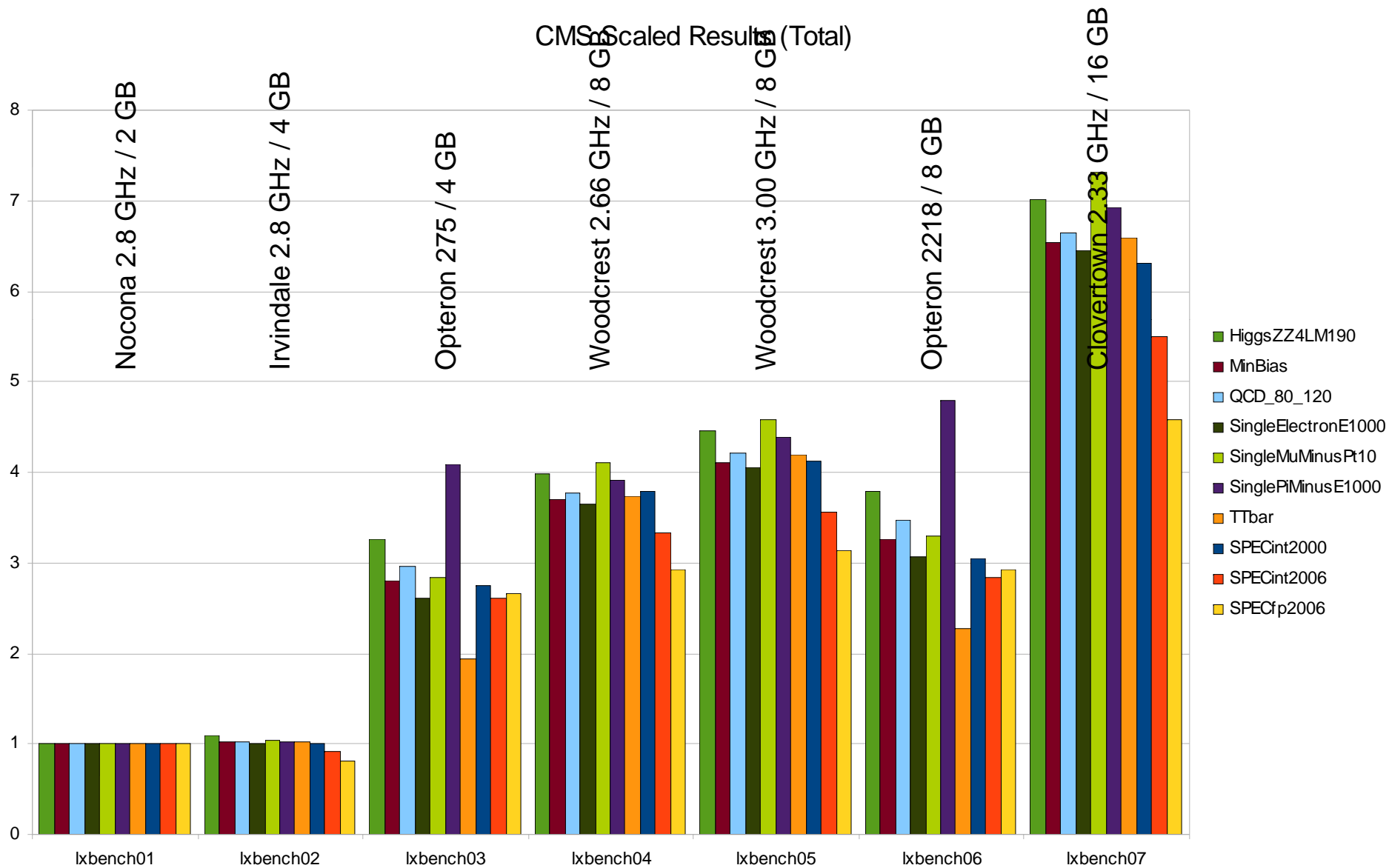
# CMS benchmarks (1) (preliminary)

## All processing steps



# CMS benchmarks (2) (preliminary)

## Reconstruction only





## Coming next

- More results from experiments
  - Atlas moving to standard benchmark suite, redoing their tests
  - CMS: Analysis ongoing
  - Awaiting results from Alice and LHCb
- Extend measurements to more machines
- Run with perfmon (CPU performance/event counters)
- Interim report at HEPiX in May
- Aim: Recommendation just after HEPiX