

National Competence Centre Bulgaria



NCC Bulgaria is built by a consortium coordinated by the Institute of Information and Communication Technologies at the Bulgarian Academy of Sciences (IICT-BAS), and two members, the Sofia University "St. Kliment Ohridski" (SU), and the University of National and World Economy (UNWE). The partners collaborate with Sofia Tech Park, where the Discoverer EuroHPC supercomputer is operating.

BULGARIAN SUPERCOMPUTERS IN TOP500 LISTS

System: HPE Proliant XL675d Gen10 Plus, AMD EPYC 7742 64C 2.25GHz, NVIDIA A100 SXM4 40 GB

Manufacturer: HPE Cores: 19,840

Interconnect: InfiniBand HDR

Linpack Performance (Rmax): 2.53 PFlop/s
Theoretical Peak (Rpeak): 3.21 PFlop/s
Operating System: SUSE Linux

LIST 11/2023 RANK 360 HEMUS



AVITOHOL

Site: Institute of Information and Communication Technologies at the Bulgarian Academy of Sciences

System: Cluster Platform SL230s Gen8 with Intel Xeon E5-2650v2 8C 2.6GH and Intel Xeon Phi 7120P

Manufacturer: HPE

Cores: 20700
Interconnect: InfiniBand FDR

LINPAC Performance (Rmax): 260 TFlop/s
Theoretical Peak (Rpeak): 412 T Flop/s

Operating System: Linux

LIST 11/2015 06/2015 RANK 389 332

System: BullSequana XH2000, AMD EPYC 7H12

64C 2.6GHz

Manufacturer: EVIDEN

Cores: 144,384

Interconnect: Infiniband HDR

Linpack Performance (Rmax): 4.52 PFlop/s
Theoretical Peak (Rpeak): 5.94 PFlop/s

Operating System: Linux

LIST 11/2023 ··· 06/2021 RANK 166 ··· 91

DISCOVERER



Site: Consortium Petascale Supercomputer Bulgaria

BLUE GENE/P SOLUTION



Site: Bulgarian State Agency for Information Technology and Communications (SAITC)

System: Blue Gene/P Solution

Manufacturer: IBM

Cores: 8192

Interconnect: Proprietary

Linpack Performance (Rmax): 23.86 TFlop/s
Theoretical Peak (Rpeak): 27.85 TFlop/s

Operating System: CNK/SLES **Decommissioned:** since 2018

LIST 11/2009 06/2009 11/2008 RANK 379 247 127

SERVICES

Main type of services:

- HPC+ training introductory/intermediate
- HPC+ training advanced/specialized
- HPC+ technical consultations
- Software design and development for Proof of
 Concept using HPC+





Introductory Training for Industrial Users, IICT-BAS, Bulgaria, October 12th, 2023



PUBLICITY

Raising Awareness:

- produce and distributed materials: posters, banners, brochures, flyers, newsletters, etc.
- publishing interviews, papers, success stories, best practices
- organizing dissemination events: workshops, conference, round tables, meetings



SUCCESS STORIES

- Public Sector
- Industrial Users
- Acientific Achievements





COOPERATION

Highlighted Collaborations with:

- CASTIEL and other NCCs
- some European CoEs using HPC
- some National CoEs and large national RIs projects
- some European Digital Innovation Hubs (EDIH)



FOLLOW US









The second annual HPC user forum, Sofia Tech Park, Bulgaria, November 16th, 2023

The National Competence Centre Bulgaria has received funding from the European Union through the European High Performance Computing Joint Undertaking (JU) and the Ministry of Education and Science of the Republic of Bulgaria.





