Empowering MAX-UP Members with Low-Cost Dataflow Acceleration

Overview

As the community of Maxeler users continues to grow we recognised the need for a low-cost hardware as alternative to our Max-Workstations. Our new PCIe DFE card named Galava is available for all current and future MAX-UP members. With one-time investment of 4,999 US dollars any Linux based system can be extended with the power of Maxeler’s DFE technology and become a highly capable dataflow acceleration workstation. We expect Galava to allow much larger number of universities and non-commercial organizations benefit from the power of our DFE technology and help them provide state-of-the-art solutions for many computationally challenging problems operating on massive datasets. Few prominent examples, but not limited to, are: Seismic Data Processing, Weather Forecasting, Image processing, Biotechnology and Computational Biology, Finance and Risk, Internet Networking and Security. Galava can be ordered on Amazon (please contact us for your MAX-UP discount code) and has an expected delivery time of no longer than 15 weeks from the date of order.

About Maxeler University Program (MAX-UP): we give universities and research institutions access to state-of-the-art Maxeler dataflow computing technology. Our mission is to enable research and education on the fastest programmable technology for high-end data-intensive HPC applications. With more than 130 universities around the world that are currently part of the MAX-UP community we perform joint research projects in fields ranging from bioinformatics to cloud computing.

What Galava Provides You With

- Highly capable DFE reconfigurable substrate:
  - Large programmable logic fabric with 490,000 elements
  - 500 programmable multipliers
  - 5.6 MB of Fast Memory (FMEM) accessible at 12.6TB/s
  - Single cycle FMEM access (e.g., avg 5ns@200MHz)
- Competitive on board DRAM Large Memory (LMEM) size:
  - 12GB LMEM @ 32GB/s
  - Organized in three parallel channels
  - LMEM average latency of 250ns
- Capable PCIe interconnect to CPU with 2GB/s BW (peak)
- Sharp academic pricing of only $4,999 US
- Free access to Maxeler tools and educational materials
- Participation in the Maxeler user community:
  - the online Maxeler Developer Exchange (MDX)
  - MaxWorkshops co-located with major conferences
  - Online exchange of experience, expertise and ideas
  - Collaboration with other researchers
- Special support for award applications (e.g., Gordon Bell)

What You Can Do With Galava

- Use Galava in a Linux workstation
- Use Maxeler hardware and software designs in your teaching and research projects
- Work on joint publications and project proposals
- Accelerate real world, challenging data and compute intensive problems
- Benefit from and Contribute to the Maxeler AppGallery
- Influence the future Maxeler tool-flow features
- Increase your collaboration links with Industry

What We Expect From You

- Acknowledgment of our support
- Publish research using Maxeler technology on the web
- Acknowledgement in papers and presentations
- Strategic technical discussions and recommendations

Galava: Highly capable PCIe dataflow compute card, available to our MAX-UP members to promote affordable dataflow acceleration.