



denali

Marc Greenberg
Director, Technical Marketing
Denali Databahn Products Group

Personalized IP? How Can It Be?

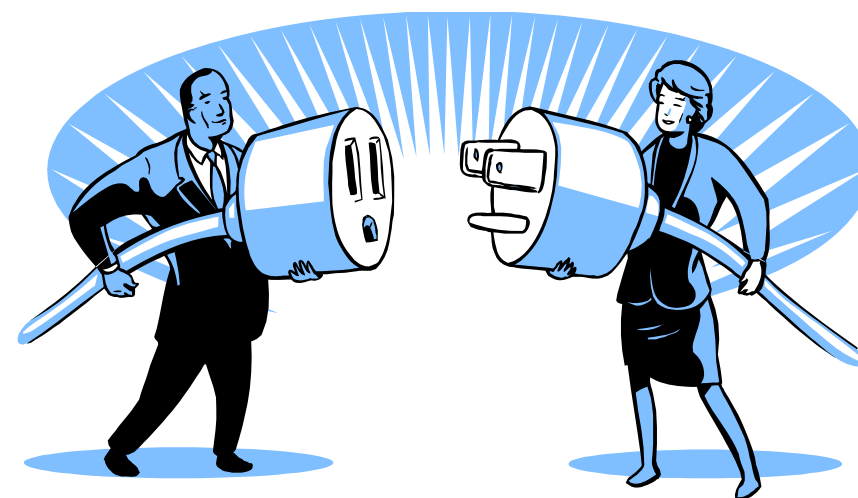
- What everyone wants: an exact fit for their design
- What everyone needs: proven, tested, productized IP
- The solution: Personalized IP
 - Built from a proven code-base
 - Automatically customized to fit the application
 - Tested to ensure correct functionality after customization
 - Delivered as a complete product



Personalized IP: Why Would I Need It?

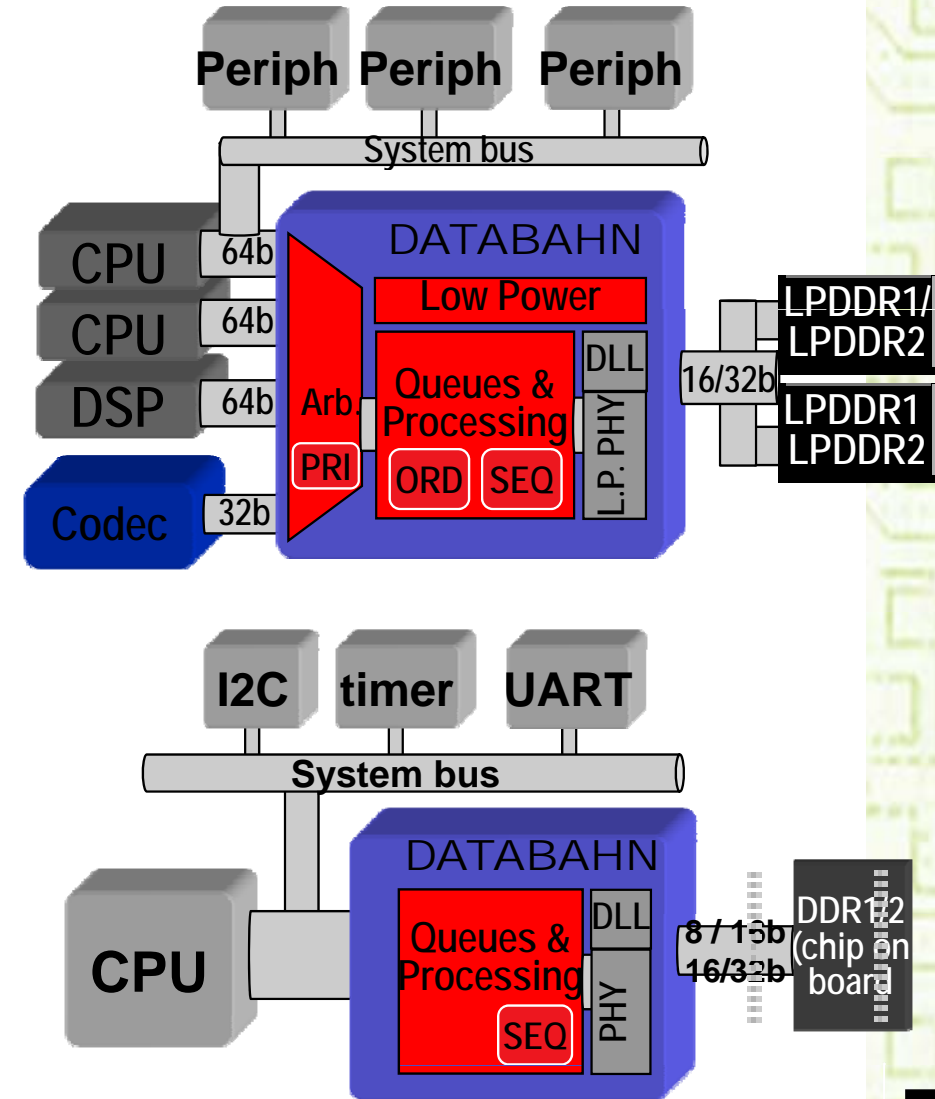
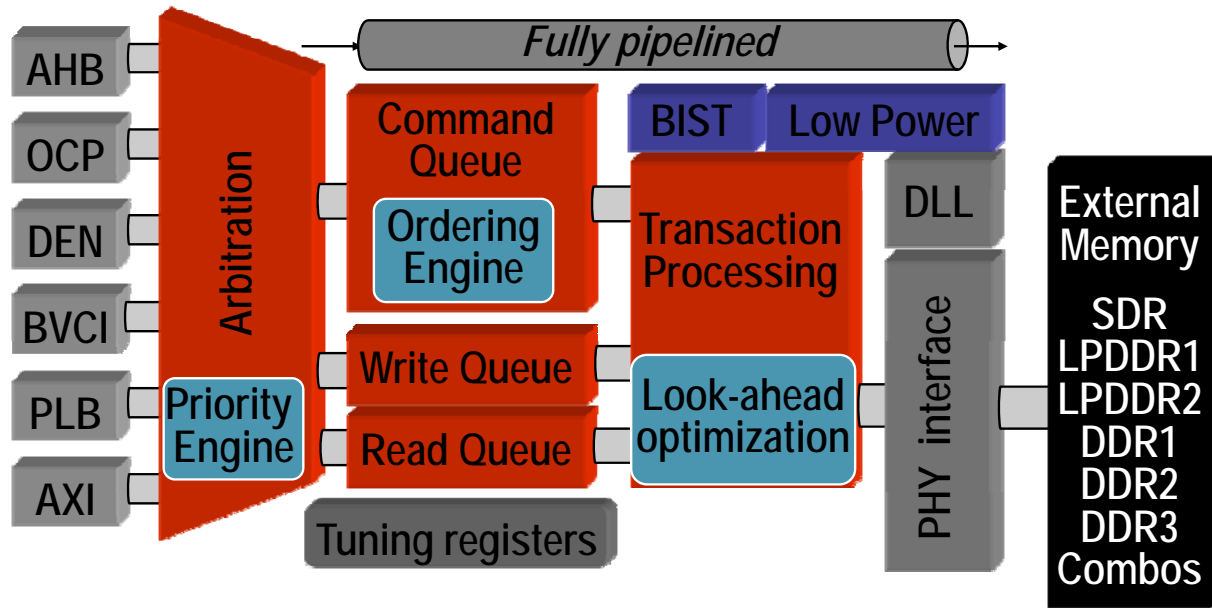
- Major Function / Connectivity / Version / Revision
- On-Chip Busses: Number, Type, Width, Synchronicity
- Speed / Throughput / Latency
- Foundry, Geometry, Library, Vt, PVT, Package
- Major Features included/excluded for power/area

- Goal: Get the best fit for your chip



Example: Memory Controller

- Customize to fit the application



Personalized IP: What to customize?

- Everything!
- RTL
- Scripts
- Documentation
- Don't use 'defines' for customization
- Then test everything



How Does Denali Help?

- Customizable IP for Memory Controllers and PHYs for DDR1, DDR2, DDR3 and Low-Power Memories
 - Proven in silicon in more than 100 customer chips
- Customizable IP for PCIe Gen2
- Fully tested with regression suites that adapt to the customization
- Side files and documentation customized to match
- Less risk and more time for you to build your chip



Thank you



- Explore Denali IP at ChipEstimate.com
<http://chipestimate.com/vendorlist.php?v=261>
- Use Denali IP to plan your next chip!
<http://denali.com/dram>
- Visit Denali at booth 1611
- Please stay and talk with Marc Greenberg

