

Some Libraries on the Cell

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- SPRNG Parallel Random Number Library
 - Collaborator: K. Gunaranjan, Sri Sathya Sai University, India
 - Up to 10^9 random number per second on each SPU
- Common MPI Features
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 - Barrier under $0.5 \mu\text{s}$ on a Cell processor, $1 \mu\text{s}$ on a blade
 - Broadcast reaches memory bandwidth limit
 - Send/Receive under $0.5 \mu\text{s}$ latency
 - Up to 6 GB/s bandwidth with data in main memory
 - Up to 21 GB/s with data in local store
 - Non-blocking implementation too available