## Tera Tera Tera

Ed Davis ed.davis@intel.com

## Intel Corporation 2111 NE 25th Ave. Hillsboro, OR 97124

In the coming age of PetaFLOP computers, it is important to make sure that we have the proper building blocks for the industry. This requires TeraFLOP performance at the chip level. It also requires TeraBytes per second of memory bandwidth. It also requires Terabits per second of communications between processor chips and modules and last but certainly not least, the parallelization software is quintessential to squeeze optimum performance out of this hardware.

This paper will describe some of the research and development Intel is doing to achieve these goals from quad-core to multi-core and many-core and also provide a glimpse of the future chips, technologies, platforms and software that Intel is doing on the road to bringing all this to fruition.