

# Intel® Cluster Poisson Solver Library Installation and Startup Guide

---

## Contents

[Installation](#)

[Running Examples](#)

[Disclaimer and Legal Information](#)

The Intel® Cluster Poisson Solver Library (Intel® CPSL) can be used on systems based on Intel® 64 architecture and running the Linux\* operating system. Please check the Release Notes (CPSL\_release\_notes.pdf) for the list of compatible Linux\* distributions.

## Installation

1. Untar the package into a suitable folder, for example, using command  

```
tar -zxvf l_cpsl_a_1.0.y.xxx.tar.gz ,
```

where `y` is the release-update number and `xxx` is the package number.
2. `cd` to the above folder.

## Running Examples

To run examples, first check the Release Notes for the list of compatible MPI compilers and releases of the Intel® Math Kernel Library (Intel® MKL), next follow the instructions below:

1. Make sure that an MPI compiler and Intel® MKL are installed on your system and have properly set environment.  
**Note:** Free non-commercial or trial version of Intel® MKL for Linux\* OS can be obtained from <http://downloadcenter.intel.com/default.aspx?iid=subhdr+downloads>.
2. `cd ./cpsl/1.0/examples .`
3. Type `make` in the command line and read the available options.
3. To run the examples with tasks `impi` and `mvapich`, run the proper `mpdboot` command.
4. Type `make <list of suitable options>`.  
**Important note:** The current version of Intel® CPSL requires the path to Intel® MKL provided through the `MKL_PATH` variable.
5. Check the results in `<MPI>_intel` folder, where `<MPI>` can be one of `impi`, `ompi`, or `mvapich`.

## Disclaimer and Legal Information

INFORMATION IN THIS DOCUMENT IS PROVIDED IN CONNECTION WITH INTEL® PRODUCTS. NO LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE, TO ANY INTELLECTUAL PROPERTY RIGHTS IS GRANTED BY THIS DOCUMENT. EXCEPT AS PROVIDED IN INTEL'S TERMS AND CONDITIONS OF SALE FOR SUCH PRODUCTS, INTEL ASSUMES NO LIABILITY WHATSOEVER, AND INTEL DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY, RELATING TO SALE AND/OR USE OF INTEL PRODUCTS INCLUDING LIABILITY OR WARRANTIES RELATING TO FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT.

UNLESS OTHERWISE AGREED IN WRITING BY INTEL, THE INTEL PRODUCTS ARE NOT DESIGNED NOR INTENDED FOR ANY APPLICATION IN WHICH THE FAILURE OF THE INTEL PRODUCT COULD CREATE A SITUATION WHERE PERSONAL INJURY OR DEATH MAY OCCUR.

Intel may make changes to specifications and product descriptions at any time, without notice. Designers must not rely on the absence or characteristics of any features or instructions marked "reserved" or "undefined." Intel reserves these for future definition and shall have no responsibility whatsoever for conflicts or incompatibilities arising from future changes to them. The information here is subject to change without notice. Do not finalize a design with this information.

The products described in this document may contain design defects or errors known as errata which may cause the product to deviate from published specifications. Current characterized errata are available on request.

Contact your local Intel sales office or your distributor to obtain the latest specifications and before placing your product order.

Copies of documents which have an order number and are referenced in this document, or other Intel literature, may be obtained by calling 1-800-548-4725, or by visiting [Intel's Web Site](#).

Intel processor numbers are not a measure of performance. Processor numbers differentiate features within each processor family, not across different processor families. See [http://www.intel.com/products/processor\\_number](http://www.intel.com/products/processor_number) for details.

MPEG is an international standard for video compression/decompression promoted by ISO. Implementations of MPEG CODECs, or MPEG enabled platforms may require licenses from various entities, including Intel Corporation.

This document contains information on products in the design phase of development.

BunnyPeople, Celeron, Celeron Inside, Centrino, Centrino Atom, Centrino Atom Inside, Centrino Inside, Centrino logo, Core Inside, FlashFile, i960, InstantIP, Intel, Intel logo, Intel386, Intel486, IntelDX2, IntelDX4, IntelSX2, Intel Atom, Intel Atom Inside, Intel Core, Intel Inside, Intel Inside logo, Intel. Leap ahead., Intel. Leap ahead. logo, Intel NetBurst, Intel NetMerge, Intel NetStructure, Intel SingleDriver, Intel SpeedStep, Intel StrataFlash, Intel Viiv, Intel vPro, Intel XScale, Itanium, Itanium Inside, MCS, MMX, Oplus, OverDrive, PDCharm, Pentium, Pentium Inside, skool, Sound Mark, The Journey Inside, Viiv Inside, vPro Inside, VTune, Xeon, and Xeon Inside are trademarks of Intel Corporation in the U.S. and other countries.

\* Other names and brands may be claimed as the property of others.

Copyright (C) 2008, Intel Corporation. All rights reserved.