Hands-On Introduction to OpenMP
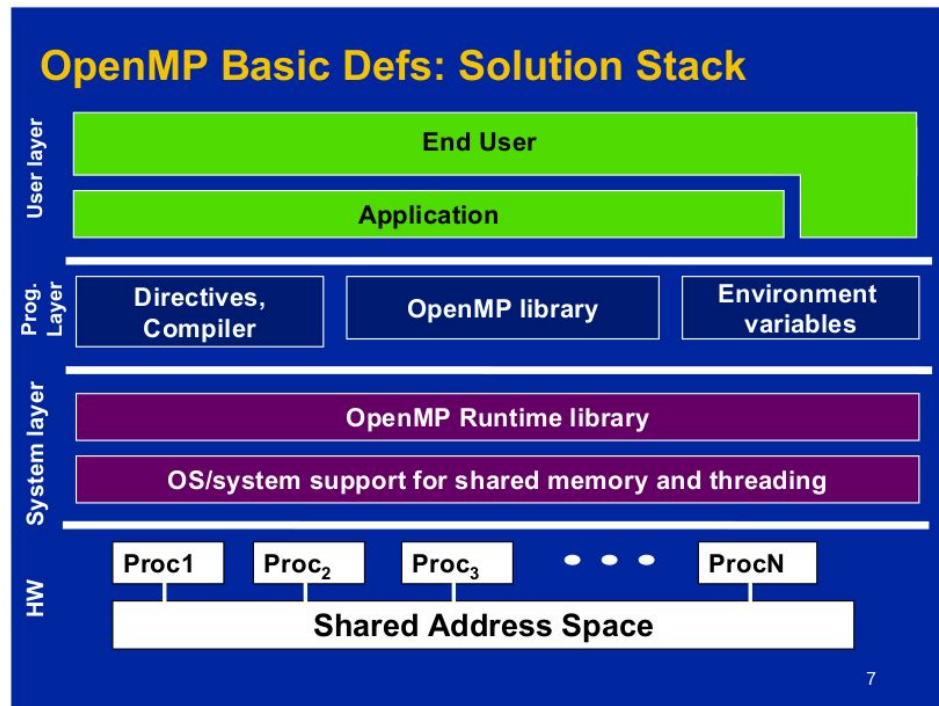
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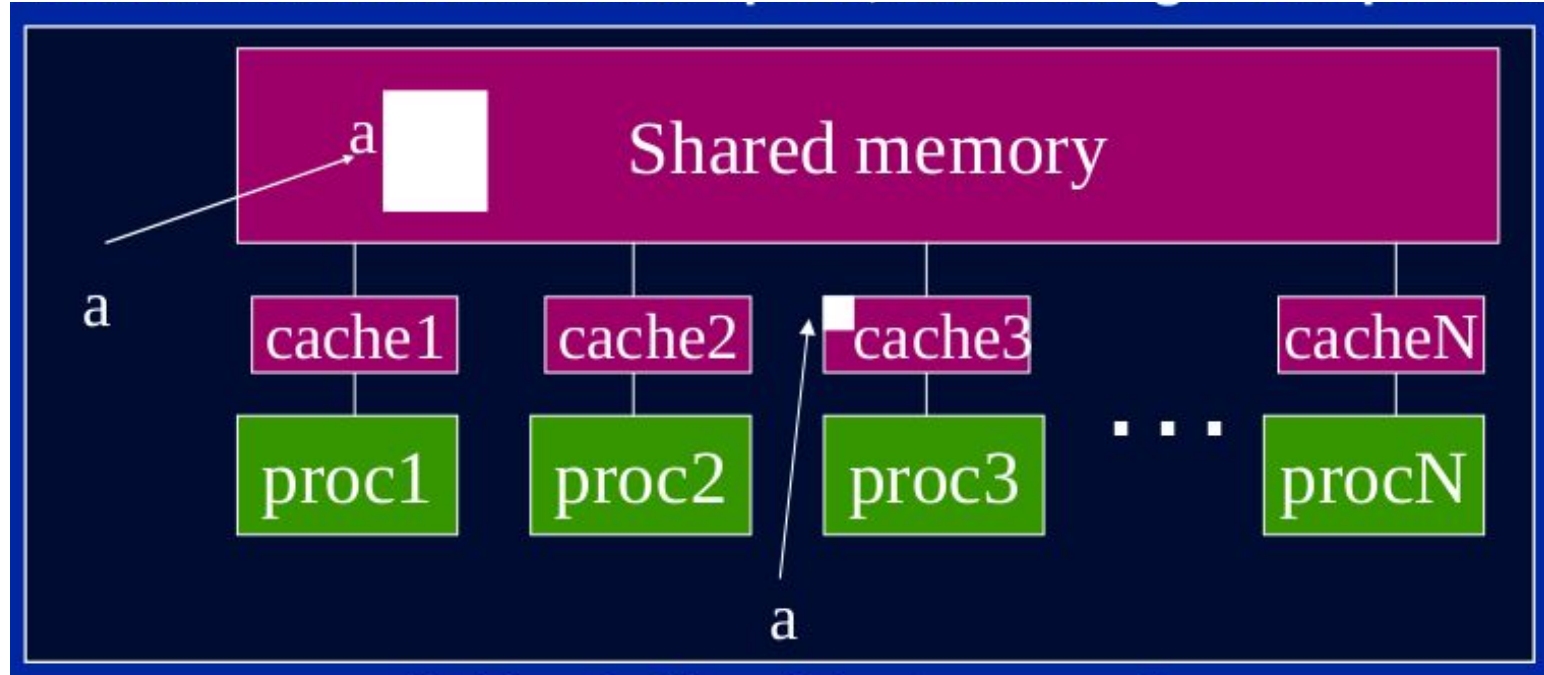Rajagiri School of Engineering & Technology

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- Creating Threads
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- Parallel Loops
- Synchronization
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Introduction

- API for multithreaded programs
- Compiler directives and libraries

OpenMP Basic Defs: Solution Stack

User layer
- End User
- Application

Prog. Layer
- Directives, Compiler
- OpenMP library
- Environment variables

System layer
- OpenMP Runtime library
- OS/system support for shared memory and threading

HW
- Proc1
- Proc$_2$
- Proc$_3$
- • • •
- ProcN
- Shared Address Space

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Memory Model

Fork-Join Parallelism