

《硬件内存模型和 C/C++ 内存模型》课程参考资料

前言：为避免引起版权问题，本文只给出资料名称及其链接，请会员们自行下载/阅读。

资料 1: A Tutorial Introduction to the ARM and POWER Relaxed Memory Models

原始链接: <https://www.cl.cam.ac.uk/~pes20/ppc-supplemental/test7.pdf>

资料 2: An Operational Semantics for C/C++11 Concurrency:

原始链接: <https://www.cl.cam.ac.uk/~pes20/cerberus/c11op.pdf>

资料 3: A Tutorial Introduction to the ARM and POWER Relaxed Memory Models

原始链接: <https://www.cl.cam.ac.uk/~pes20/ppc-supplemental/test7.pdf>

资料 4: Simplifying ARM Concurrency: Multicopy-Atomic Axiomatic and Operational Models for ARMv8

原始链接: <https://dl.acm.org/doi/pdf/10.1145/3158107>

资料 5: Common Compiler Optimisations are Invalid in the C11 Memory Model and what we can do about it

原始链接: <https://plv.mpi-sws.org/c11comp/pop115.pdf>

资料 6: x86-TSO: A Rigorous and Usable Programmer's Model for x86 Multiprocessors

原始链接: <https://www.cl.cam.ac.uk/~pes20/weakmemory/cacm.pdf>

资料 7: Foundations of the C++ Concurrency Memory Model

原始链接: <https://rsim.cs.illinois.edu/Pubs/08PLDI.pdf>

资料 8: Hardware Memory Models

原始链接: <https://research.swtch.com/hwmm.pdf>

资料 9: How to Make a Multiprocessor Computer That Correctly Executes Multiprocess Programs

原始链接:

<https://www.microsoft.com/en-us/research/uploads/prod/2016/12/How-to-Make-a-Multiprocessor-Computer-That-Correctly-Executes-Multiprocess-Programs.pdf>

资料 10: Intel® 64 Architecture Memory Ordering White Paper

原始链接: https://www.cs.cmu.edu/~410-f10/doc/Intel_Reordering_318147.pdf

资料 11: Memory Barriers a Hardware View for Software Hackers

原始链接:

<http://www.rdrop.com/users/paulmck/scalability/paper/whymb.2010.06.07c.pdf>

资料 12: Outlawing Ghosts-Avoiding Out-of-Thin-Air Results

原始链接: <http://plrg.eecs.uci.edu/publications/mspc14.pdf>

资料 13: P2055R0- A Relaxed Guide to memory_order_relaxed

原始链接:

<https://www.open-std.org/jtc1/sc22/wg21/docs/papers/2020/p2055r0.pdf>

资料 14: Partial and Total Orders - Eli Bendersky's website

原始链接: <https://eli.thegreenplace.net/2018/partial-and-total-orders/>

资料 15: The Semantics of x86-CC Multiprocessor Machine Code

原始链接: <https://www.cl.cam.ac.uk/~pes20/weakmemory/pop109.pdf>

资料 16: Common Compiler Optimisations are Invalid in the C11 Memory Model and what we can do about it

原始链接: <https://plv.mpi-sws.org/c11comp/pop115.pdf>

资料 17: Programming Language Memory Models

原始链接: <https://research.swtch.com/plmm>

资料 18: Relaxed Separation Logic: A Program Logic for C11 Concurrency

原始链接: <https://people.mpi-sws.org/~viktor/papers/oopsla2013-rsl.pdf>

资料 19: On the Definition of Sequential Consistency

原始链接: https://users.cs.utah.edu/~ganesh/unpublished/sc_definition.pdf

资料 20: SNOOPING PROTOCOLS

原始链接:

<https://users.cs.utah.edu/~bojnordi/classes/7810/s20/slides/07-snooping.pdf>

资料 21: The C11 and C++11 Concurrency Model

原始链接: https://sigplan.org/Awards/Dissertation/2015_batty.pdf

资料 22: Updating the Go Memory Model

原始链接: <https://research.swtch.com/gomm.pdf>

资料 23: Weak Ordering - A New Definition

原始链接: <https://rsim.cs.uiuc.edu/Pubs/ps2pdf/isca90.pdf>

资料 24: A Better x86 Memory Model: x86-TSO

原始链接:

<https://www.cl.cam.ac.uk/~pes20/weakmemory/x86tso-paper.tphols.pdf>

资料 25: Atomic Read-Modify-Write Primitives for I/O Devices

原始链接:

<https://www.intel.com/content/dam/doc/white-paper/atomic-read-modify-write-primitives-i-o-devices-paper.pdf>

资料 26: Intel® 64 Architecture Memory Ordering White Paper

原始链接: https://www.cs.cmu.edu/~410-f10/doc/Intel_Reordering_318147.pdf

资料 27: Memory barriers in C

原始链接:

<https://mariadb.org/wp-content/uploads/2017/11/2017-11-Memory-barriers.pdf>

资料 28: N3934: Towards Implementation and Use of memory order consume

原始链接:

<http://www.rdrop.com/users/paulmck/scalability/paper/consume.2014.02.16c.pdf>

资料 29: N2389-Clean up atomics, non-normative changes proposal for integration to C2x

原始链接: <https://www.open-std.org/jtc1/sc22/wg14/www/docs/n2389.pdf>