1、读前提示

　　a、$表示后面紧跟着的是 shell 的命令。

　　b、[hint]表示该内容需要根据实际情况填写，实际填写时应去掉[]，hint 仅仅给予读者提示。

　　c、本文档仅针对位于 https://github.com/FCAS-SCUT/Chiplet-Gem5-SharedMemory/tree/main/gem5 的 gem5 版本，请读者自行下载源码使用 $git clone https://github.com/FCAS-SCUT/Chiplet-Gem5-SharedMemory/tree/main/gem5 或者其他办法

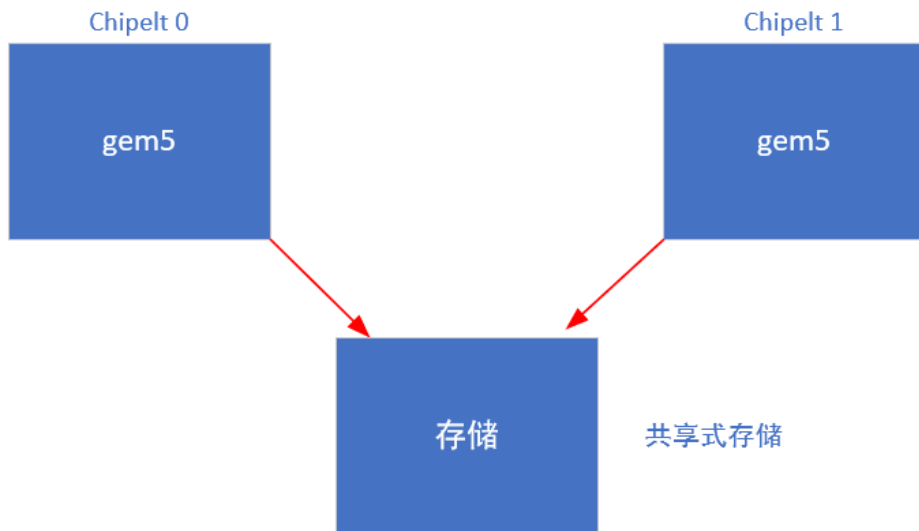　　d、本 Chiplet-gem5-SharedMemory 架构为所有的 Chiplet（gem5）都连接到同一块共享内存上，如下图 1：

图 1 gem5 架构参考图

2、运行依赖安装

gcc(version >= 7.0)

Clang(6 - 10)

SCons(version >= 3.0)

Python3.6+

此处提供 Ubuntu18.04 一键安装依赖命令$sudo apt install build-essential git m4 scons zlib1g zlib1g-dev \ libprotobuf-dev protobuf-compiler libprotoc-dev libgoogle-perftools-dev \ python3-dev python3-six python libboost-all-dev pkg-config

3、编译

使用 cd 命令切换到 gem5 根目录下，运行$scons ./build/X86/gem5.opt -j[NumberOfThread]

[NumberOfThread]是读者期望该编译使用多少个线程进行编译，去掉-j 选项默认单线程，建议读者采用多线程编译，一般选为电脑 CPU 核数 - 1 最佳。

4、运行一个 gem5

首先，使用 cd 命令切换到 gem5 根目录下，运行
$ ./build/X86/gem5.opt ./configs/example/fs.py --kernel=[vmlinux 二进制文件] --disk-image=[img 格式的系统镜像文件] -n [cpu 核数]

其次，使用 m5 连接 gem5

使用 cd 命令切换到 gem5 根目录下，运行

$./utils/tern/m5term 127.0.0.1 [在启动 gem5 之后，这个数字会给出]

数字可以在 gem5 弹出的信息中找到，例如下面这条就是 3456

system.pc.com_1.device: Listening for connections on port 3456

5 运行多个 gem5

如果读者想启动 n 个 gem5，则运行 4 中的命令 n 次即可

6、在 gem5 中运行自己的程序

读者在 10 中运行自己的镜像时，把程序文件放入自己想放入的文件夹中
后。读者可以在 m5 找到自己之前放入的文件夹中找到并启动

7、运行程序实例

7.1)、首先编译自己写的程序，假设目录如下结构，图 2 作简单的示例

图 2 示例目录结构图

7.2)、首先使用 cd 切换到该目录下，运行$g++ -lm5 -L./ ./sourceCode.cpp -o a.out

7.3)、这里给出另一种移动文件进入 img 文件的方式

$sudo mount -o loop,offset=1048576 ./System.img /mnt

$sudo cp ./a.out /mnt/

$sudo umount /mnt

7.4)、使用 4 中的教程启动 gem5，使用 m5 连接后

$/a.out

8、调用自定义函数 API

本 gem5 对系统函数进行了修改，可以在自己的代码中调用自定义的函数，并依靠该函数，本 gem5 做到了多个 gem5 之间的交互。

在调用端(m5 端)

实现自己的代码时，读者在修改/调用自定义的函数时，应该 include 本 gem5 根目录下/include/gem5/m5ops.h 头文件，本程序提供的自定义函数为 m5_gadia_call，以及 m5_gadia_receive 两个函数。

```
uint64_t result = m5_gadia_receive(0);
```

在上句代码中，m5_gadia_receive 来自上述的 m5ops.h，其参数类型 uint64_t，它的意义为查询是否有给编号 0 Chiplet 的信息，如果没有，则返回-1 的 uint64_t 值，若有，则返回在没有读过消息的队列中最久的消息。

```
m5_gadia_call(a, b, c, d);
```

在上句代码中，m5_gadia_call 来自 m5ops.h，其参数的意义表示为：a 为本 Chiplet 编号，b 为要传递消息的 Chiplet 编号，c 为数据本身，d 表示是否初始化共享内存。以上参数类型皆为 uint64_t

在被调用端(gem5 端口)

实现被调用的函数的定义以及实现分别位于 gem5 根目录 /src/sim/pseudo_inst.hh，以及 pseudo_inst.cc。调用端口的函数对应关系分别为 m5_gadia_call -> gadia_call 以及 m5_gadia_receive ->gadia_receive。他们都是通过操作系统的地址映射，从而实现了函数的调用关系。

读者可根据自己的实际需求修改在 gem5 端的函数实际行为。但在编译自己写的程序时，请使用$$(CXX_COMPILER) -lm5 -L[gem5 根目录/include] [源代码文件]

9、目前版本 gem5 底层文件交互说明

首先，我们要求每个 chiplet 拥有自己独一无二的编号，建议读者使用无符号整数类型来定义自己的 chiplet 编号，每次进行交互时调用的 API 函数要求至少表面自己的 chiplet 编号（具体查看 8 中对两个函数参数的说明内容）。

Gem5 底层在执行 gadia_call(a, b, c, d) 函数时，当 d 参数不要求初始化共享内存空间时，gem5 将访问文件 communicationb ，并在其内容追加内容 a b c \n。而 在执行 gadia_receive(a) 函数时，gem5 将访问文件 communicationa，并读取该文件中没有被读取过内容中，其中等待读取时间最久的内容，若没有新的内容，则返回特定的数字(uint64_t)-1 的值。

10、img 文件的制作

1、创建 MBR 格式磁盘

使用 qemu 创建

```
qemu-img create ubuntu-test.img 8G
```

使用 parted 命令创建 MBR 表 MSDOS

```
sudo parted ubuntu-test.img
```

成功进入之后

```
mklable

MSDOS

quit
```

2、安装 Ubuntu

```
qemu-system-x86_64 -hda ./ubuntu-test.img -cdrom [要安装的 ubuntu 的 iso 安装文件] -m 1024 -enable-kvm -boot d
```

就普通安装，但是在给磁盘分区时要注意以下问题

1、不要有除了/分区以外的任何分区（至少 boot 分区和 swap 分区是不能有的，其余的欢迎探索）

2、/分区要选择 bootable

3、不能有逻辑分区！

3、gem5 部署问题

直接跑安装好的 Ubuntu，进去部署，亦是在此阶段把自己要跑的程序文件移入到该镜像文件

```
qemu-system-x86_64 -hda ./ubuntu-test.img -m 1024 -enable-kvm
```

1、Ubuntu 15 版本以上直接跑以下代码

```
wget http://cs.wisc.edu/~powerjg/files/gem5-guest-tools-x86.tgz
tar xzvf gem5-guest-tools-x86.tgz
cd gem5-guest-tools/
sudo ./install
```

2、Ubuntu 15 版本以下

先跑上面的代码，肯定会报错的。报错之后再使用 Upstart 去启动 gem5.service，即 update-rc.d gem5.service enable

11、kernel 二进制的制作(vmlinux 文件制作方法)

此处提供已经适配好 gem5 的 kernel 的 config 文件，可在 https://www.kernel.org 中找到 4.8.13 的源码并在源码的根目录下运行$ make [config 文件]，编译$ make modules

```
#
# Automatically generated file; DO NOT EDIT.

# Linux/x86 4.8.13 Kernel Configuration

#
CONFIG_64BIT=y
```

```
CONFIG_X86_64=y

CONFIG_X86=y

CONFIG_INSTRUCTION_DECODER=y

CONFIG_OUTPUT_FORMAT="elf64-x86-64"

CONFIG_ARCH_DEFCONFIG="arch/x86/configs/x86_64_defconfig"

CONFIG_LOCKDEP_SUPPORT=y

CONFIG_STACKTRACE_SUPPORT=y

CONFIG_MMU=y

CONFIG_ARCH_MMAP_RND_BITS_MIN=28

CONFIG_ARCH_MMAP_RND_BITS_MAX=32

CONFIG_ARCH_MMAP_RND_COMPAT_BITS_MIN=8

CONFIG_ARCH_MMAP_RND_COMPAT_BITS_MAX=16

CONFIG_NEED_DMA_MAP_STATE=y

CONFIG_NEED_SG_DMA_LENGTH=y

CONFIG_GENERIC_ISA_DMA=y

CONFIG_GENERIC_BUG=y

CONFIG_GENERIC_BUG_RELATIVE_POINTERS=y

CONFIG_GENERIC_HWEIGHT=y

CONFIG_ARCH_MAY_HAVE_PC_FDC=y

CONFIG_RWSEM_XCHGADD_ALGORITHM=y

CONFIG_GENERIC_CALIBRATE_DELAY=y

CONFIG_ARCH_HAS_CPU_RELAX=y

CONFIG_ARCH_HAS_CACHE_LINE_SIZE=y

CONFIG_HAVE_SETUP_PER_CPU_AREA=y

CONFIG_NEED_PER_CPU_EMBED_FIRST_CHUNK=y

CONFIG_NEED_PER_CPU_PAGE_FIRST_CHUNK=y
```

```
CONFIG_ARCH_HIBERNATION_POSSIBLE=y

CONFIG_ARCH_SUSPEND_POSSIBLE=y

CONFIG_ARCH_WANT_HUGE_PMD_SHARE=y

CONFIG_ARCH_WANT_GENERAL_HUGETLB=y

CONFIG_ZONE_DMA32=y

CONFIG_AUDIT_ARCH=y

CONFIG_ARCH_SUPPORTS_OPTIMIZED_INLINING=y

CONFIG_ARCH_SUPPORTS_DEBUG_PAGEALLOC=y

CONFIG_X86_64_SMP=y

CONFIG_ARCH_SUPPORTS_UPROBES=y

CONFIG_FIX_EARLYCON_MEM=y

CONFIG_DEBUG_RODATA=y

CONFIG_PGTABLE_LEVELS=4

CONFIG_DEFCONFIG_LIST="/lib/modules/$UNAME_RELEASE/.config"

CONFIG_IRQ_WORK=y

CONFIG_BUILDTIME_EXTABLE_SORT=y


#
# General setup
#
CONFIG_INIT_ENV_ARG_LIMIT=32

CONFIG_CROSS_COMPILE=""

# CONFIG_COMPILE_TEST is not set

CONFIG_LOCALVERSION=""

# CONFIG_LOCALVERSION_AUTO is not set

CONFIG_HAVE_KERNEL_GZIP=y
```

```
CONFIG_HAVE_KERNEL_BZIP2=y

CONFIG_HAVE_KERNEL_LZMA=y

CONFIG_HAVE_KERNEL_XZ=y

CONFIG_HAVE_KERNEL_LZO=y

CONFIG_HAVE_KERNEL_LZ4=y

CONFIG_KERNEL_GZIP=y

# CONFIG_KERNEL_BZIP2 is not set

# CONFIG_KERNEL_LZMA is not set

# CONFIG_KERNEL_XZ is not set

# CONFIG_KERNEL_LZO is not set

# CONFIG_KERNEL_LZ4 is not set

CONFIG_DEFAULT_HOSTNAME="(none)"

CONFIG_SWAP=y

CONFIG_SYSVIPC=y

CONFIG_SYSVIPC_SYSCTL=y

CONFIG_POSIX_MQUEUE=y

CONFIG_POSIX_MQUEUE_SYSCTL=y

CONFIG_CROSS_MEMORY_ATTACH=y

CONFIG_FHANDLE=y

CONFIG_USELIB=y

CONFIG_AUDIT=y

CONFIG_HAVE_ARCH_AUDITSYSCALL=y

CONFIG_AUDITSYSCALL=y

CONFIG_AUDIT_WATCH=y

CONFIG_AUDIT_TREE=y
```

```
#
# IRQ subsystem
#
CONFIG_GENERIC_IRQ_PROBE=y
CONFIG_GENERIC_IRQ_SHOW=y
CONFIG_GENERIC_PENDING_IRQ=y
CONFIG_IRQ_DOMAIN=y
CONFIG_IRQ_DOMAIN_HIERARCHY=y
CONFIG_GENERIC_MSI_IRQ=y
CONFIG_GENERIC_MSI_IRQ_DOMAIN=y
CONFIG_IRQ_FORCED_THREADING=y
CONFIG_SPARSE_IRQ=y
CONFIG_CLOCKSOURCE_WATCHDOG=y
CONFIG_ARCH_CLOCKSOURCE_DATA=y
CONFIG_CLOCKSOURCE_VALIDATE_LAST_CYCLE=y
CONFIG_GENERIC_TIME_VSYSCALL=y
CONFIG_GENERIC_CLOCKEVENTS=y
CONFIG_GENERIC_CLOCKEVENTS_BROADCAST=y
CONFIG_GENERIC_CLOCKEVENTS_MIN_ADJUST=y
CONFIG_GENERIC_CMOS_UPDATE=y


#
# Timers subsystem
#
CONFIG_HZ_PERIODIC=y
# CONFIG_NO_HZ_IDLE is not set
```

```
# CONFIG_NO_HZ_FULL is not set

# CONFIG_NO_HZ is not set

# CONFIG_HIGH_RES_TIMERS is not set


#
# CPU/Task time and stats accounting
#
CONFIG_TICK_CPU_ACCOUNTING=y
# CONFIG_VIRT_CPU_ACCOUNTING_GEN is not set
# CONFIG_IRQ_TIME_ACCOUNTING is not set
CONFIG_BSD_PROCESS_ACCT=y
# CONFIG_BSD_PROCESS_ACCT_V3 is not set
# CONFIG_TASKSTATS is not set


#
# RCU Subsystem
#
CONFIG_TREE_RCU=y
# CONFIG_RCU_EXPERT is not set
CONFIG_SRCU=y
# CONFIG_TASKS_RCU is not set
CONFIG_RCU_STALL_COMMON=y
# CONFIG_TREE_RCU_TRACE is not set
# CONFIG_RCU_EXPEDITE_BOOT is not set
# CONFIG_BUILD_BIN2C is not set
# CONFIG_IKCONFIG is not set
```

```
CONFIG_LOG_BUF_SHIFT=17

CONFIG_LOG_CPU_MAX_BUF_SHIFT=12

CONFIG_NMI_LOG_BUF_SHIFT=13

CONFIG_HAVE_UNSTABLE_SCHED_CLOCK=y

CONFIG_ARCH_SUPPORTS_NUMA_BALANCING=y

CONFIG_ARCH_WANT_BATCHED_UNMAP_TLB_FLUSH=y

CONFIG_ARCH_SUPPORTS_INT128=y

CONFIG_CGROUPS=y

# CONFIG_MEMCG is not set

# CONFIG_BLK_CGROUP is not set

# CONFIG_CGROUP_SCHED is not set

# CONFIG_CGROUP_PIDS is not set

# CONFIG_CGROUP_FREEZER is not set

# CONFIG_CGROUP_HUGETLB is not set

# CONFIG_CPUSETS is not set

# CONFIG_CGROUP_DEVICE is not set

# CONFIG_CGROUP_CPUACCT is not set

# CONFIG_CGROUP_PERF is not set

# CONFIG_CGROUP_DEBUG is not set

# CONFIG_CHECKPOINT_RESTORE is not set

CONFIG_NAMESPACES=y

# CONFIG_UTS_NS is not set

# CONFIG_IPC_NS is not set

# CONFIG_USER_NS is not set

# CONFIG_PID_NS is not set

# CONFIG_NET_NS is not set
```

```
# CONFIG_SCHED_AUTOGROUP is not set

# CONFIG_SYSFS_DEPRECATED is not set

CONFIG_RELAY=y

CONFIG_BLK_DEV_INITRD=y

CONFIG_INITRAMFS_SOURCE=""

CONFIG_RD_GZIP=y

CONFIG_RD_BZIP2=y

CONFIG_RD_LZMA=y

CONFIG_RD_XZ=y

CONFIG_RD_LZO=y

CONFIG_RD_LZ4=y

# CONFIG_CC_OPTIMIZE_FOR_PERFORMANCE is not set

CONFIG_CC_OPTIMIZE_FOR_SIZE=y

CONFIG_SYSCTL=y

CONFIG_ANON_INODES=y

CONFIG_HAVE_UID16=y

CONFIG_SYSCTL_EXCEPTION_TRACE=y

CONFIG_HAVE_PCSPKR_PLATFORM=y

CONFIG_BPF=y

# CONFIG_EXPERT is not set

CONFIG_UID16=y

CONFIG_MULTIUSER=y

CONFIG_SGETMASK_SYSCALL=y

CONFIG_SYSFS_SYSCALL=y

# CONFIG_SYSCTL_SYSCALL is not set

CONFIG_KALLSYMS=y
```

```
# CONFIG_KALLSYMS_ALL is not set

CONFIG_KALLSYMS_ABSOLUTE_PERCPU=y

CONFIG_KALLSYMS_BASE_RELATIVE=y

CONFIG_PRINTK=y

CONFIG_PRINTK_NMI=y

CONFIG_BUG=y

CONFIG_ELF_CORE=y

CONFIG_PCSPKR_PLATFORM=y

CONFIG_BASE_FULL=y

CONFIG_FUTEX=y

CONFIG_EPOLL=y

CONFIG_SIGNALFD=y

CONFIG_TIMERFD=y

CONFIG_EVENTFD=y

# CONFIG_BPF_SYSCALL is not set

CONFIG_SHMEM=y

CONFIG_AIO=y

CONFIG_ADVISE_SYSCALLS=y

# CONFIG_USERFAULTFD is not set

CONFIG_PCI_QUIRKS=y

CONFIG_MEMBARRIER=y

# CONFIG_EMBEDDED is not set

CONFIG_HAVE_PERF_EVENTS=y


#

# Kernel Performance Events And Counters
```

```
#
CONFIG_PERF_EVENTS=y
# CONFIG_DEBUG_PERF_USE_VMALLOC is not set
CONFIG_VM_EVENT_COUNTERS=y
CONFIG_COMPAT_BRK=y
CONFIG_SLAB=y
# CONFIG_SLUB is not set
# CONFIG_SLAB_FREELIST_RANDOM is not set
# CONFIG_SYSTEM_DATA_VERIFICATION is not set
CONFIG_PROFILING=y
CONFIG_KEXEC_CORE=y
CONFIG_OPROFILE=m
# CONFIG_OPROFILE_EVENT_MULTIPLEX is not set
CONFIG_HAVE_OPROFILE=y
CONFIG_OPROFILE_NMI_TIMER=y
# CONFIG_KPROBES is not set
# CONFIG_JUMP_LABEL is not set
# CONFIG_UPROBES is not set
# CONFIG_HAVE_64BIT_ALIGNED_ACCESS is not set
CONFIG_HAVE_EFFICIENT_UNALIGNED_ACCESS=y
CONFIG_ARCH_USE_BUILTIN_BSWAP=y
CONFIG_HAVE_IOREMAP_PROT=y
CONFIG_HAVE_KPROBES=y
CONFIG_HAVE_KRETPROBES=y
CONFIG_HAVE_OPTPROBES=y
CONFIG_HAVE_KPROBES_ON_FTRACE=y
```

CONFIG_HAVE_NMI=y

CONFIG_HAVE_ARCH_TRACEHOOK=y

CONFIG_HAVE_DMA_CONTIGUOUS=y

CONFIG_GENERIC_SMP_IDLE_THREAD=y

CONFIG_ARCH_WANTS_DYNAMIC_TASK_STRUCT=y

CONFIG_HAVE_REGS_AND_STACK_ACCESS_API=y

CONFIG_HAVE_DMA_API_DEBUG=y

CONFIG_HAVE_HW_BREAKPOINT=y

CONFIG_HAVE_MIXED_BREAKPOINTS_REGS=y

CONFIG_HAVE_USER_RETURN_NOTIFIER=y

CONFIG_HAVE_PERF_EVENTS_NMI=y

CONFIG_HAVE_PERF_REGS=y

CONFIG_HAVE_PERF_USER_STACK_DUMP=y

CONFIG_HAVE_ARCH_JUMP_LABEL=y

CONFIG_ARCH_HAVE_NMI_SAFE_CMPXCHG=y

CONFIG_HAVE_CMPXCHG_LOCAL=y

CONFIG_HAVE_CMPXCHG_DOUBLE=y

CONFIG_ARCH_WANT_COMPAT_IPC_PARSE_VERSION=y

CONFIG_ARCH_WANT_OLD_COMPAT_IPC=y

CONFIG_HAVE_ARCH_SECCOMP_FILTER=y

CONFIG_HAVE_GCC_PLUGINS=y

CONFIG_GCC_PLUGINS is not set

CONFIG_HAVE_CC_STACKPROTECTOR=y

CONFIG_CC_STACKPROTECTOR is not set

CONFIG_CC_STACKPROTECTOR_NONE=y

CONFIG_CC_STACKPROTECTOR_REGULAR is not set

```
# CONFIG_CC_STACKPROTECTOR_STRONG is not set

CONFIG_HAVE_ARCH_WITHIN_STACK_FRAMES=y

CONFIG_HAVE_CONTEXT_TRACKING=y

CONFIG_HAVE_VIRT_CPU_ACCOUNTING_GEN=y

CONFIG_HAVE_IRQ_TIME_ACCOUNTING=y

CONFIG_HAVE_ARCH_TRANSPARENT_HUGEPAGE=y

CONFIG_HAVE_ARCH_HUGE_VMAP=y

CONFIG_HAVE_ARCH_SOFT_DIRTY=y

CONFIG_MODULES_USE_ELF_RELA=y

CONFIG_HAVE_IRQ_EXIT_ON_IRQ_STACK=y

CONFIG_ARCH_HAS_ELF_RANDOMIZE=y

CONFIG_HAVE_ARCH_MMAP_RND_BITS=y

CONFIG_HAVE_EXIT_THREAD=y

CONFIG_ARCH_MMAP_RND_BITS=28

CONFIG_HAVE_ARCH_MMAP_RND_COMPAT_BITS=y

CONFIG_ARCH_MMAP_RND_COMPAT_BITS=8

CONFIG_HAVE_COPY_THREAD_TLS=y

CONFIG_HAVE_STACK_VALIDATION=y

# CONFIG_HAVE_ARCH_HASH is not set

# CONFIG_ISA_BUS_API is not set

CONFIG_OLD_SIGSUSPEND3=y

CONFIG_COMPAT_OLD_SIGACTION=y

# CONFIG_CPU_NO_EFFICIENT_FFS is not set


#

# GCOV-based kernel profiling
```

```
#

CONFIG_ARCH_HAS_GCOV_PROFILE_ALL=y

# CONFIG_HAVE_GENERIC_DMA_COHERENT is not set

CONFIG_SLABINFO=y

CONFIG_RT_MUTEXES=y

CONFIG_BASE_SMALL=0

CONFIG_MODULES=y

# CONFIG_MODULE_FORCE_LOAD is not set

CONFIG_MODULE_UNLOAD=y

# CONFIG_MODULE_FORCE_UNLOAD is not set

CONFIG_MODVERSIONS=y

CONFIG_MODULE_SRCVERSION_ALL=y

# CONFIG_MODULE_SIG is not set

# CONFIG_MODULE_COMPRESS is not set

# CONFIG_TRIM_UNUSED_KSYMS is not set

CONFIG_MODULES_TREE_LOOKUP=y

CONFIG_BLOCK=y

CONFIG_BLK_DEV_BSG=y

CONFIG_BLK_DEV_BSGLIB=y

# CONFIG_BLK_DEV_INTEGRITY is not set

# CONFIG_BLK_CMDLINE_PARSER is not set


#

# Partition Types

#

# CONFIG_PARTITION_ADVANCED is not set
```

CONFIG_MSDOS_PARTITION=y

CONFIG_EFI_PARTITION=y

CONFIG_BLOCK_COMPAT=y

#
IO Schedulers
#
CONFIG_IOSCHED_NOOP=y

CONFIG_IOSCHED_DEADLINE=y

CONFIG_IOSCHED_CFQ=y

CONFIG_DEFAULT_DEADLINE is not set

CONFIG_DEFAULT_CFQ=y

CONFIG_DEFAULT_NOOP is not set

CONFIG_DEFAULT_IOSCHED="cfq"

CONFIG_INLINE_SPIN_UNLOCK_IRQ=y

CONFIG_INLINE_READ_UNLOCK=y

CONFIG_INLINE_READ_UNLOCK_IRQ=y

CONFIG_INLINE_WRITE_UNLOCK=y

CONFIG_INLINE_WRITE_UNLOCK_IRQ=y

CONFIG_ARCH_SUPPORTS_ATOMIC_RMW=y

CONFIG_MUTEX_SPIN_ON_OWNER=y

CONFIG_RWSEM_SPIN_ON_OWNER=y

CONFIG_LOCK_SPIN_ON_OWNER=y

CONFIG_ARCH_USE_QUEUED_SPINLOCKS=y

CONFIG_QUEUED_SPINLOCKS=y

CONFIG_ARCH_USE_QUEUED_RWLOCKS=y

```
CONFIG_QUEUED_RWLOCKS=y

CONFIG_FREEZER=y


#

# Processor type and features

#

CONFIG_ZONE_DMA=y

CONFIG_SMP=y

CONFIG_X86_FEATURE_NAMES=y

CONFIG_X86_FAST_FEATURE_TESTS=y

# CONFIG_X86_X2APIC is not set

CONFIG_X86_MPPARSE=y

# CONFIG_GOLDFISH is not set

CONFIG_X86_EXTENDED_PLATFORM=y

# CONFIG_X86_VSMP is not set

# CONFIG_X86_GOLDFISH is not set

# CONFIG_X86_INTEL_MID is not set

# CONFIG_X86_INTEL_LPSS is not set

# CONFIG_X86_AMD_PLATFORM_DEVICE is not set

# CONFIG_IOSF_MBI is not set

CONFIG_X86_SUPPORTS_MEMORY_FAILURE=y

# CONFIG_SCHED_OMIT_FRAME_POINTER is not set

CONFIG_HYPERVISOR_GUEST=y

CONFIG_PARAVIRT=y

# CONFIG_PARAVIRT_DEBUG is not set

# CONFIG_PARAVIRT_SPINLOCKS is not set
```

```
# CONFIG_XEN is not set

CONFIG_KVM_GUEST=y

# CONFIG_PARAVIRT_TIME_ACCOUNTING is not set

CONFIG_PARAVIRT_CLOCK=y

CONFIG_NO_BOOTMEM=y

# CONFIG_MK8 is not set

# CONFIG_MPSC is not set

# CONFIG_MCORE2 is not set

# CONFIG_MATOM is not set

CONFIG_GENERIC_CPU=y

CONFIG_X86_INTERNODE_CACHE_SHIFT=6

CONFIG_X86_L1_CACHE_SHIFT=6

CONFIG_X86_TSC=y

CONFIG_X86_CMPXCHG64=y

CONFIG_X86_CMOV=y

CONFIG_X86_MINIMUM_CPU_FAMILY=64

CONFIG_X86_DEBUGCTLMSR=y

CONFIG_CPU_SUP_INTEL=y

CONFIG_CPU_SUP_AMD=y

CONFIG_CPU_SUP_CENTAUR=y

CONFIG_HPET_TIMER=y

CONFIG_DMI=y

CONFIG_GART_IOMMU=y

# CONFIG_CALGARY_IOMMU is not set

CONFIG_SWIOTLB=y

CONFIG_IOMMU_HELPER=y
```

```
CONFIG_MAXSMP=y

CONFIG_NR_CPUS=8192

# CONFIG_SCHED_SMT is not set

CONFIG_SCHED_MC=y

# CONFIG_PREEMPT_NONE is not set

CONFIG_PREEMPT_VOLUNTARY=y

# CONFIG_PREEMPT is not set

CONFIG_X86_LOCAL_APIC=y

CONFIG_X86_IO_APIC=y

# CONFIG_X86_REROUTE_FOR_BROKEN_BOOT_IRQS is not set

CONFIG_X86_MCE=y

CONFIG_X86_MCE_INTEL=y

CONFIG_X86_MCE_AMD=y

CONFIG_X86_MCE_THRESHOLD=y

# CONFIG_X86_MCE_INJECT is not set

CONFIG_X86_THERMAL_VECTOR=y


#
# Performance monitoring
#
# CONFIG_PERF_EVENTS_INTEL_UNCORE is not set

# CONFIG_PERF_EVENTS_INTEL_RAPL is not set

# CONFIG_PERF_EVENTS_INTEL_CSTATE is not set

# CONFIG_PERF_EVENTS_AMD_POWER is not set

# CONFIG_VM86 is not set

CONFIG_X86_16BIT=y
```

```
CONFIG_X86_ESPFIX64=y

CONFIG_X86_VSYSCALL_EMULATION=y

# CONFIG_I8K is not set

CONFIG_MICROCODE=y

CONFIG_MICROCODE_INTEL=y

CONFIG_MICROCODE_AMD=y

CONFIG_MICROCODE_OLD_INTERFACE=y

CONFIG_X86_MSR=y

CONFIG_X86_CPUID=y

CONFIG_ARCH_PHYS_ADDR_T_64BIT=y

CONFIG_ARCH_DMA_ADDR_T_64BIT=y

CONFIG_X86_DIRECT_GBPAGES=y

# CONFIG_NUMA is not set

CONFIG_ARCH_SPARSEMEM_ENABLE=y

CONFIG_ARCH_SPARSEMEM_DEFAULT=y

CONFIG_ARCH_SELECT_MEMORY_MODEL=y

CONFIG_ARCH_PROC_KCORE_TEXT=y

CONFIG_ILLEGAL_POINTER_VALUE=0xdead000000000000

CONFIG_SELECT_MEMORY_MODEL=y

CONFIG_SPARSEMEM_MANUAL=y

CONFIG_SPARSEMEM=y

CONFIG_HAVE_MEMORY_PRESENT=y

CONFIG_SPARSEMEM_EXTREME=y

CONFIG_SPARSEMEM_VMEMMAP_ENABLE=y

CONFIG_SPARSEMEM_ALLOC_MEM_MAP_TOGETHER=y

# CONFIG_SPARSEMEM_VMEMMAP is not set
```

```
CONFIG_HAVE_MEMBLOCK=y

CONFIG_HAVE_MEMBLOCK_NODE_MAP=y

CONFIG_ARCH_DISCARD_MEMBLOCK=y

CONFIG_MEMORY_ISOLATION=y

# CONFIG_HAVE_BOOTMEM_INFO_NODE is not set

# CONFIG_MEMORY_HOTPLUG is not set

CONFIG_SPLIT_PTLOCK_CPUS=4

CONFIG_ARCH_ENABLE_SPLIT_PMD_PTLOCK=y

CONFIG_COMPACTION=y

CONFIG_MIGRATION=y

CONFIG_ARCH_ENABLE_HUGEPAGE_MIGRATION=y

CONFIG_PHYS_ADDR_T_64BIT=y

CONFIG_BOUNCE=y

CONFIG_VIRT_TO_BUS=y

# CONFIG_KSM is not set

CONFIG_DEFAULT_MMAP_MIN_ADDR=4096

CONFIG_ARCH_SUPPORTS_MEMORY_FAILURE=y

# CONFIG_MEMORY_FAILURE is not set

CONFIG_TRANSPARENT_HUGEPAGE=y

CONFIG_TRANSPARENT_HUGEPAGE_ALWAYS=y

# CONFIG_TRANSPARENT_HUGEPAGE_MADVISE is not set

CONFIG_TRANSPARENT_HUGE_PAGECACHE=y

# CONFIG_CLEANCACHE is not set

# CONFIG_FRONTSWAP is not set

CONFIG_CMA=y

# CONFIG_CMA_DEBUG is not set
```

```
CONFIG_CMA_AREAS=7

# CONFIG_ZPOOL is not set

# CONFIG_ZBUD is not set

# CONFIG_ZSMALLOC is not set

CONFIG_GENERIC_EARLY_IOREMAP=y

CONFIG_ARCH_SUPPORTS_DEFERRED_STRUCT_PAGE_INIT=y

# CONFIG_IDLE_PAGE_TRACKING is not set

CONFIG_ARCH_USES_HIGH_VMA_FLAGS=y

CONFIG_ARCH_HAS_PKEYS=y

# CONFIG_X86_PMEM_LEGACY is not set

# CONFIG_X86_CHECK_BIOS_CORRUPTION is not set

CONFIG_X86_RESERVE_LOW=64

CONFIG_MTRR=y

CONFIG_MTRR_SANITIZER=y

CONFIG_MTRR_SANITIZER_ENABLE_DEFAULT=0

CONFIG_MTRR_SANITIZER_SPARE_REG_NR_DEFAULT=1

CONFIG_X86_PAT=y

CONFIG_ARCH_USES_PG_UNCACHED=y

CONFIG_ARCH_RANDOM=y

CONFIG_X86_SMAP=y

# CONFIG_X86_INTEL_MPX is not set

CONFIG_X86_INTEL_MEMORY_PROTECTION_KEYS=y

# CONFIG_EFI is not set

# CONFIG_SECCOMP is not set

# CONFIG_HZ_100 is not set

# CONFIG_HZ_250 is not set
```

```
# CONFIG_HZ_300 is not set

CONFIG_HZ_1000=y

CONFIG_HZ=1000

# CONFIG_SCHED_HRTICK is not set

CONFIG_KEXEC=y

CONFIG_CRASH_DUMP=y

CONFIG_PHYSICAL_START=0x200000

# CONFIG_RELOCATABLE is not set

CONFIG_PHYSICAL_ALIGN=0x1000000

CONFIG_HOTPLUG_CPU=y

# CONFIG_BOOTPARAM_HOTPLUG_CPU0 is not set

# CONFIG_DEBUG_HOTPLUG_CPU0 is not set

# CONFIG_COMPAT_VDSO is not set

# CONFIG_LEGACY_VSYSCALL_NATIVE is not set

CONFIG_LEGACY_VSYSCALL_EMULATE=y

# CONFIG_LEGACY_VSYSCALL_NONE is not set

# CONFIG_CMDLINE_BOOL is not set

CONFIG_MODIFY_LDT_SYSCALL=y

CONFIG_HAVE_LIVEPATCH=y

CONFIG_ARCH_ENABLE_MEMORY_HOTPLUG=y


#
# Power management and ACPI options
#
CONFIG_SUSPEND=y

CONFIG_SUSPEND_FREEZER=y
```

```
# CONFIG_HIBERNATION is not set

CONFIG_PM_SLEEP=y

CONFIG_PM_SLEEP_SMP=y

# CONFIG_PM_AUTOSLEEP is not set

# CONFIG_PM_WAKELOCKS is not set

CONFIG_PM=y

# CONFIG_PM_DEBUG is not set

# CONFIG_WQ_POWER_EFFICIENT_DEFAULT is not set

CONFIG_ACPI=y

CONFIG_ACPI_LEGACY_TABLES_LOOKUP=y

CONFIG_ARCH_MIGHT_HAVE_ACPI_PDC=y

CONFIG_ACPI_SYSTEM_POWER_STATES_SUPPORT=y

# CONFIG_ACPI_DEBUGGER is not set

CONFIG_ACPI_SLEEP=y

CONFIG_ACPI_PROCFS_POWER=y

CONFIG_ACPI_REV_OVERRIDE_POSSIBLE=y

# CONFIG_ACPI_EC_DEBUGFS is not set

# CONFIG_ACPI_AC is not set

# CONFIG_ACPI_BATTERY is not set

# CONFIG_ACPI_BUTTON is not set

# CONFIG_ACPI_VIDEO is not set

# CONFIG_ACPI_DOCK is not set

CONFIG_ACPI_PROCESSOR_CSTATE=y

# CONFIG_ACPI_PROCESSOR is not set

# CONFIG_ACPI_CUSTOM_DSDT is not set

CONFIG_ARCH_HAS_ACPI_TABLE_UPGRADE=y
```

```
CONFIG_ACPI_TABLE_UPGRADE=y

# CONFIG_ACPI_DEBUG is not set

# CONFIG_ACPI_PCI_SLOT is not set

CONFIG_X86_PM_TIMER=y

# CONFIG_ACPI_CONTAINER is not set

CONFIG_ACPI_HOTPLUG_IOAPIC=y

# CONFIG_ACPI_SBS is not set

# CONFIG_ACPI_HED is not set

# CONFIG_ACPI_REDUCED_HARDWARE_ONLY is not set

# CONFIG_ACPI_NFIT is not set

CONFIG_HAVE_ACPI_APEI=y

CONFIG_HAVE_ACPI_APEI_NMI=y

# CONFIG_ACPI_APEI is not set

# CONFIG_DPTF_POWER is not set

# CONFIG_ACPI_EXTLOG is not set

# CONFIG_PMIC_OPREGION is not set

# CONFIG_ACPI_CONFIGFS is not set

# CONFIG_SFI is not set


#
# CPU Frequency scaling
#
# CONFIG_CPU_FREQ is not set


#
# CPU Idle
```

```
#

CONFIG_CPU_IDLE=y

CONFIG_CPU_IDLE_GOV_LADDER=y

# CONFIG_CPU_IDLE_GOV_MENU is not set

# CONFIG_ARCH_NEEDS_CPU_IDLE_COUPLED is not set

# CONFIG_INTEL_IDLE is not set


#

# Memory power savings

#

# CONFIG_I7300_IDLE is not set


#

# Bus options (PCI etc.)

#

CONFIG_PCI=y

CONFIG_PCI_DIRECT=y

CONFIG_PCI_MMCONFIG=y

CONFIG_PCI_DOMAINS=y

CONFIG_PCIEPORTBUS=y

CONFIG_HOTPLUG_PCI_PCIE=y

CONFIG_PCIEAER=y

# CONFIG_PCIE_ECRC is not set

# CONFIG_PCIEAER_INJECT is not set

CONFIG_PCIEASPM=y

# CONFIG_PCIEASPM_DEBUG is not set
```

```
CONFIG_PCIEASPM_DEFAULT=y

# CONFIG_PCIEASPM_POWERSAVE is not set

# CONFIG_PCIEASPM_PERFORMANCE is not set

CONFIG_PCIE_PME=y

# CONFIG_PCIE_DPC is not set

CONFIG_PCI_BUS_ADDR_T_64BIT=y

CONFIG_PCI_MSI=y

CONFIG_PCI_MSI_IRQ_DOMAIN=y

# CONFIG_PCI_DEBUG is not set

# CONFIG_PCI_REALLOC_ENABLE_AUTO is not set

# CONFIG_PCI_STUB is not set

CONFIG_HT_IRQ=y

# CONFIG_PCI_IOV is not set

# CONFIG_PCI_PRI is not set

# CONFIG_PCI_PASID is not set

CONFIG_PCI_LABEL=y

CONFIG_HOTPLUG_PCI=y

CONFIG_HOTPLUG_PCI_ACPI=y

CONFIG_HOTPLUG_PCI_ACPI_IBM=y

# CONFIG_HOTPLUG_PCI_CPCI is not set

# CONFIG_HOTPLUG_PCI_SHPC is not set


#

# PCI host controller drivers

#

# CONFIG_PCIE_DW_PLAT is not set
```

```
CONFIG_ISA_DMA_API=y

CONFIG_AMD_NB=y

CONFIG_PCCARD=y

CONFIG_PCMCIA=y

CONFIG_PCMCIA_LOAD_CIS=y

CONFIG_CARDBUS=y


#

# PC-card bridges

#

# CONFIG_YENTA is not set

# CONFIG_PD6729 is not set

# CONFIG_I82092 is not set

# CONFIG_RAPIDIO is not set

CONFIG_X86_SYSFB=y


#

# Executable file formats / Emulations

#

CONFIG_BINFMT_ELF=y

CONFIG_COMPAT_BINFMT_ELF=y

CONFIG_ELFCORE=y

# CONFIG_CORE_DUMP_DEFAULT_ELF_HEADERS is not set

CONFIG_BINFMT_SCRIPT=y

# CONFIG_HAVE_AOUT is not set

# CONFIG_BINFMT_MISC is not set
```

```
CONFIG_COREDUMP=y

CONFIG_IA32_EMULATION=y

CONFIG_IA32_AOUT=y

# CONFIG_X86_X32 is not set

CONFIG_COMPAT=y

CONFIG_COMPAT_FOR_U64_ALIGNMENT=y

CONFIG_SYSVIPC_COMPAT=y

CONFIG_X86_DEV_DMA_OPS=y

CONFIG_PMC_ATOM=y

# CONFIG_VMD is not set

CONFIG_NET=y


#
# Networking options
#
CONFIG_PACKET=y

# CONFIG_PACKET_DIAG is not set

CONFIG_UNIX=y

# CONFIG_UNIX_DIAG is not set

# CONFIG_XFRM_USER is not set

# CONFIG_NET_KEY is not set

CONFIG_INET=y

CONFIG_IP_MULTICAST=y

CONFIG_IP_ADVANCED_ROUTER=y

# CONFIG_IP_FIB_TRIE_STATS is not set

CONFIG_IP_MULTIPLE_TABLES=y
```

```
CONFIG_IP_ROUTE_MULTIPATH=y

CONFIG_IP_ROUTE_VERBOSE=y

# CONFIG_IP_PNP is not set

# CONFIG_NET_IPIP is not set

# CONFIG_NET_IPGRE_DEMUX is not set

# CONFIG_NET_IP_TUNNEL is not set

# CONFIG_IP_MROUTE is not set

# CONFIG_SYN_COOKIES is not set

# CONFIG_NET_UDP_TUNNEL is not set

# CONFIG_NET_FOU is not set

# CONFIG_INET_AH is not set

# CONFIG_INET_ESP is not set

# CONFIG_INET_IPCOMP is not set

# CONFIG_INET_XFRM_TUNNEL is not set

# CONFIG_INET_TUNNEL is not set

# CONFIG_INET_XFRM_MODE_TRANSPORT is not set

# CONFIG_INET_XFRM_MODE_TUNNEL is not set

# CONFIG_INET_XFRM_MODE_BEET is not set

# CONFIG_INET_DIAG is not set

CONFIG_TCP_CONG_ADVANCED=y

CONFIG_TCP_CONG_BIC=y

# CONFIG_TCP_CONG_CUBIC is not set

# CONFIG_TCP_CONG_WESTWOOD is not set

# CONFIG_TCP_CONG_HTCP is not set

# CONFIG_TCP_CONG_HSTCP is not set

# CONFIG_TCP_CONG_HYBLA is not set
```

```
# CONFIG_TCP_CONG_VEGAS is not set

# CONFIG_TCP_CONG_NV is not set

# CONFIG_TCP_CONG_SCALABLE is not set

# CONFIG_TCP_CONG_LP is not set

# CONFIG_TCP_CONG_VENO is not set

# CONFIG_TCP_CONG_YEAH is not set

# CONFIG_TCP_CONG_ILLINOIS is not set

# CONFIG_TCP_CONG_DCTCP is not set

# CONFIG_TCP_CONG_CDG is not set

CONFIG_DEFAULT_BIC=y

# CONFIG_DEFAULT_RENO is not set

CONFIG_DEFAULT_TCP_CONG="bic"

# CONFIG_TCP_MD5SIG is not set

# CONFIG_IPV6 is not set

CONFIG_NETWORK_SECMARK=y

CONFIG_NET_PTP_CLASSIFY=y

# CONFIG_NETWORK_PHY_TIMESTAMPING is not set

# CONFIG_NETFILTER is not set

# CONFIG_IP_DCCP is not set

# CONFIG_IP_SCTP is not set

# CONFIG_RDS is not set

# CONFIG_TIPC is not set

# CONFIG_ATM is not set

# CONFIG_L2TP is not set

# CONFIG_BRIDGE is not set

CONFIG_HAVE_NET_DSA=y
```

```
# CONFIG_VLAN_8021Q is not set

# CONFIG_DECNET is not set

# CONFIG_LLC2 is not set

# CONFIG_IPX is not set

# CONFIG_ATALK is not set

# CONFIG_X25 is not set

# CONFIG_LAPB is not set

# CONFIG_PHONET is not set

# CONFIG_IEEE802154 is not set

# CONFIG_NET_SCHED is not set

# CONFIG_DCB is not set

# CONFIG_BATMAN_ADV is not set

# CONFIG_OPENVSWITCH is not set

# CONFIG_VSOCKETS is not set

# CONFIG_NETLINK_DIAG is not set

# CONFIG_MPLS is not set

# CONFIG_HSR is not set

# CONFIG_NET_SWITCHDEV is not set

# CONFIG_NET_L3_MASTER_DEV is not set

# CONFIG_NET_NCSI is not set

CONFIG_RPS=y

CONFIG_RFS_ACCEL=y

CONFIG_XPS=y

# CONFIG_SOCK_CGROUP_DATA is not set

# CONFIG_CGROUP_NET_PRIO is not set

# CONFIG_CGROUP_NET_CLASSID is not set
```

```
CONFIG_NET_RX_BUSY_POLL=y

CONFIG_BQL=y

# CONFIG_BPF_JIT is not set

CONFIG_NET_FLOW_LIMIT=y


#

# Network testing

#

# CONFIG_NET_PKTGEN is not set

# CONFIG_HAMRADIO is not set

# CONFIG_CAN is not set

# CONFIG_IRDA is not set

CONFIG_BT=m

CONFIG_BT_BREDR=y

# CONFIG_BT_RFCOMM is not set

# CONFIG_BT_BNEP is not set

# CONFIG_BT_HIDP is not set

CONFIG_BT_HS=y

# CONFIG_BT_LE is not set

# CONFIG_BT_SELFTEST is not set


#

# Bluetooth device drivers

#

# CONFIG_BT_HCIBTUSB is not set

# CONFIG_BT_HCIUART is not set
```

```
# CONFIG_BT_HCIBCM203X is not set

# CONFIG_BT_HCIBFUSB is not set

# CONFIG_BT_HCIDTL1 is not set

# CONFIG_BT_HCIBT3C is not set

# CONFIG_BT_HCIBLUECARD is not set

# CONFIG_BT_HCIBTUART is not set

# CONFIG_BT_HCIVHCI is not set

# CONFIG_BT_MRVL is not set

# CONFIG_AF_RXRPC is not set

# CONFIG_AF_KCM is not set

CONFIG_FIB_RULES=y

CONFIG_WIRELESS=y

# CONFIG_CFG80211 is not set

# CONFIG_LIB80211 is not set


#
# CFG80211 needs to be enabled for MAC80211
#
CONFIG_MAC80211_STA_HASH_MAX_SIZE=0

# CONFIG_WIMAX is not set

CONFIG_RFKILL=m

CONFIG_RFKILL_INPUT=y

# CONFIG_NET_9P is not set

# CONFIG_CAIF is not set

# CONFIG_CEPH_LIB is not set

# CONFIG_NFC is not set
```

CONFIG_LWTUNNEL is not set

CONFIG_DST_CACHE is not set

CONFIG_NET_DEVLINK is not set

CONFIG_MAY_USE_DEVLINK=y

CONFIG_HAVE_EBPF_JIT=y

#
Device Drivers
#

#
Generic Driver Options
#
CONFIG_UEVENT_HELPER=y

CONFIG_UEVENT_HELPER_PATH="/sbin/hotplug"

CONFIG_DEVTMPFS=y

CONFIG_DEVTMPFS_MOUNT=y

CONFIG_STANDALONE=y

CONFIG_PREVENT_FIRMWARE_BUILD=y

CONFIG_FW_LOADER=y

CONFIG_FIRMWARE_IN_KERNEL=y

CONFIG_EXTRA_FIRMWARE=""

CONFIG_FW_LOADER_USER_HELPER_FALLBACK is not set

CONFIG_ALLOW_DEV_COREDUMP=y

CONFIG_DEBUG_DRIVER is not set

CONFIG_DEBUG_DEVRES is not set

```
# CONFIG_SYS_HYPERVISOR is not set

# CONFIG_GENERIC_CPU_DEVICES is not set

CONFIG_GENERIC_CPU_AUTOPROBE=y

# CONFIG_DMA_SHARED_BUFFER is not set

CONFIG_DMA_CMA=y


#

# Default contiguous memory area size:

#

CONFIG_CMA_SIZE_MBYTES=0

CONFIG_CMA_SIZE_SEL_MBYTES=y

# CONFIG_CMA_SIZE_SEL_PERCENTAGE is not set

# CONFIG_CMA_SIZE_SEL_MIN is not set

# CONFIG_CMA_SIZE_SEL_MAX is not set

CONFIG_CMA_ALIGNMENT=8


#

# Bus devices

#

CONFIG_CONNECTOR=y

# CONFIG_PROC_EVENTS is not set

# CONFIG_MTD is not set

# CONFIG_OF is not set

CONFIG_ARCH_MIGHT_HAVE_PC_PARPORT=y

# CONFIG_PARPORT is not set

CONFIG_PNP=y
```

CONFIG_PNP_DEBUG_MESSAGES is not set

#

Protocols

#

CONFIG_PNPACPI=y

CONFIG_BLK_DEV=y

CONFIG_BLK_DEV_NULL_BLK is not set

CONFIG_BLK_DEV_FD is not set

CONFIG_BLK_DEV_PCIESSD_MTIP32XX is not set

CONFIG_BLK_CPQ_CISS_DA is not set

CONFIG_BLK_DEV_DAC960 is not set

CONFIG_BLK_DEV_UMEM is not set

CONFIG_BLK_DEV_COW_COMMON is not set

CONFIG_BLK_DEV_LOOP=y

CONFIG_BLK_DEV_LOOP_MIN_COUNT=8

CONFIG_BLK_DEV_CRYPTOLOOP is not set

CONFIG_BLK_DEV_DRBD is not set

CONFIG_BLK_DEV_NBD is not set

CONFIG_BLK_DEV_SKD is not set

CONFIG_BLK_DEV_SX8=y

CONFIG_BLK_DEV_RAM=y

CONFIG_BLK_DEV_RAM_COUNT=16

CONFIG_BLK_DEV_RAM_SIZE=16384

CONFIG_CDROM_PKTCDVD is not set

CONFIG_ATA_OVER_ETH is not set

```
# CONFIG_BLK_DEV_HD is not set

# CONFIG_BLK_DEV_RBD is not set

# CONFIG_BLK_DEV_RSXX is not set

# CONFIG_BLK_DEV_NVME is not set

# CONFIG_NVME_TARGET is not set


#

# Misc devices

#

# CONFIG_SENSORS_LIS3LV02D is not set

# CONFIG_AD525X_DPOT is not set

# CONFIG_DUMMY_IRQ is not set

# CONFIG_IBM_ASM is not set

# CONFIG_PHANTOM is not set

# CONFIG_SGI_IOC4 is not set

# CONFIG_TIFM_CORE is not set

# CONFIG_ICS932S401 is not set

# CONFIG_ENCLOSURE_SERVICES is not set

# CONFIG_HP_ILO is not set

# CONFIG_APDS9802ALS is not set

# CONFIG_ISL29003 is not set

# CONFIG_ISL29020 is not set

# CONFIG_SENSORS_TSL2550 is not set

# CONFIG_SENSORS_BH1770 is not set

# CONFIG_SENSORS_APDS990X is not set

# CONFIG_HMC6352 is not set
```

```
# CONFIG_DS1682 is not set

# CONFIG_BMP085_I2C is not set

# CONFIG_USB_SWITCH_FSA9480 is not set

# CONFIG_SRAM is not set

# CONFIG_C2PORT is not set


#

# EEPROM support

#

# CONFIG_EEPROM_AT24 is not set

# CONFIG_EEPROM_LEGACY is not set

# CONFIG_EEPROM_MAX6875 is not set

# CONFIG_EEPROM_93CX6 is not set

# CONFIG_CB710_CORE is not set


#

# Texas Instruments shared transport line discipline

#

# CONFIG_SENSORS_LIS3_I2C is not set


#

# Altera FPGA firmware download module

#

# CONFIG_ALTERA_STAPL is not set

# CONFIG_INTEL_MEI is not set

# CONFIG_INTEL_MEI_ME is not set
```

```
# CONFIG_INTEL_MEI_TXE is not set

# CONFIG_VMWARE_VMCI is not set


#
# Intel MIC Bus Driver
#
# CONFIG_INTEL_MIC_BUS is not set


#
# SCIF Bus Driver
#
# CONFIG_SCIF_BUS is not set


#
# VOP Bus Driver
#
# CONFIG_VOP_BUS is not set


#
# Intel MIC Host Driver
#


#
# Intel MIC Card Driver
#
```

```
#
# SCIF Driver
#


#
# Intel MIC Coprocessor State Management (COSM) Drivers
#


#
# VOP Driver
#
# CONFIG_GENWQE is not set
# CONFIG_ECHO is not set
# CONFIG_CXL_BASE is not set
# CONFIG_CXL_AFU_DRIVER_OPS is not set
CONFIG_HAVE_IDE=y
CONFIG_IDE=y


#
# Please see Documentation/ide/ide.txt for help/info on IDE drives
#
CONFIG_IDE_XFER_MODE=y
CONFIG_IDE_TIMINGS=y
CONFIG_IDE_ATAPI=y
CONFIG_BLK_DEV_IDE_SATA=y
CONFIG_IDE_GD=y
```

```
CONFIG_IDE_GD_ATA=y

# CONFIG_IDE_GD_ATAPI is not set

CONFIG_BLK_DEV_IDECS=y

# CONFIG_BLK_DEV_DELKIN is not set

CONFIG_BLK_DEV_IDECD=y

CONFIG_BLK_DEV_IDECD_VERBOSE_ERRORS=y

# CONFIG_BLK_DEV_IDETAPE is not set

CONFIG_BLK_DEV_IDEACPI=y

# CONFIG_IDE_TASK_IOCTL is not set

# CONFIG_IDE_PROC_FS is not set


#

# IDE chipset support/bugfixes

#

CONFIG_IDE_GENERIC=y

CONFIG_BLK_DEV_PLATFORM=y

# CONFIG_BLK_DEV_CMD640 is not set

# CONFIG_BLK_DEV_IDEPNP is not set

CONFIG_BLK_DEV_IDEDMA_SFF=y


#

# PCI IDE chipsets support

#

CONFIG_BLK_DEV_IDEPCI=y

CONFIG_IDEPCI_PCIBUS_ORDER=y

# CONFIG_BLK_DEV_OFFBOARD is not set
```

```
CONFIG_BLK_DEV_GENERIC=y

# CONFIG_BLK_DEV_OPTI621 is not set

# CONFIG_BLK_DEV_RZ1000 is not set

CONFIG_BLK_DEV_IDEDMA_PCI=y

# CONFIG_BLK_DEV_AEC62XX is not set

# CONFIG_BLK_DEV_ALI15X3 is not set

CONFIG_BLK_DEV_AMD74XX=y

CONFIG_BLK_DEV_ATIIXP=y

# CONFIG_BLK_DEV_CMD64X is not set

# CONFIG_BLK_DEV_TRIFLEX is not set

# CONFIG_BLK_DEV_HPT366 is not set

# CONFIG_BLK_DEV_JMICRON is not set

CONFIG_BLK_DEV_PIIX=y

# CONFIG_BLK_DEV_IT8172 is not set

# CONFIG_BLK_DEV_IT8213 is not set

# CONFIG_BLK_DEV_IT821X is not set

# CONFIG_BLK_DEV_NS87415 is not set

# CONFIG_BLK_DEV_PDC202XX_OLD is not set

# CONFIG_BLK_DEV_PDC202XX_NEW is not set

# CONFIG_BLK_DEV_SVWKS is not set

# CONFIG_BLK_DEV_SIIMAGE is not set

# CONFIG_BLK_DEV_SIS5513 is not set

# CONFIG_BLK_DEV_SLC90E66 is not set

# CONFIG_BLK_DEV_TRM290 is not set

# CONFIG_BLK_DEV_VIA82CXXX is not set

# CONFIG_BLK_DEV_TC86C001 is not set
```

```
CONFIG_BLK_DEV_IDEDMA=y


#
# SCSI device support
#
CONFIG_SCSI_MOD=y
# CONFIG_RAID_ATTRS is not set
CONFIG_SCSI=y
CONFIG_SCSI_DMA=y
CONFIG_SCSI_NETLINK=y
# CONFIG_SCSI_MQ_DEFAULT is not set
CONFIG_SCSI_PROC_FS=y


#
# SCSI support type (disk, tape, CD-ROM)
#
CONFIG_BLK_DEV_SD=y
# CONFIG_CHR_DEV_ST is not set
# CONFIG_CHR_DEV_OSST is not set
CONFIG_BLK_DEV_SR=y
# CONFIG_BLK_DEV_SR_VENDOR is not set
CONFIG_CHR_DEV_SG=y
# CONFIG_CHR_DEV_SCH is not set
CONFIG_SCSI_CONSTANTS=y
CONFIG_SCSI_LOGGING=y
# CONFIG_SCSI_SCAN_ASYNC is not set
```

```
#
# SCSI Transports
#
CONFIG_SCSI_SPI_ATTRS=y

CONFIG_SCSI_FC_ATTRS=y

CONFIG_SCSI_ISCSI_ATTRS=y

CONFIG_SCSI_SAS_ATTRS=y

CONFIG_SCSI_SAS_LIBSAS=y

# CONFIG_SCSI_SAS_ATA is not set

# CONFIG_SCSI_SAS_HOST_SMP is not set

CONFIG_SCSI_SRP_ATTRS=y

# CONFIG_SCSI_LOWLEVEL is not set

# CONFIG_SCSI_LOWLEVEL_PCMCIA is not set

# CONFIG_SCSI_DH is not set

# CONFIG_SCSI_OSD_INITIATOR is not set

CONFIG_ATA=y

# CONFIG_ATA_NONSTANDARD is not set

CONFIG_ATA_VERBOSE_ERROR=y

CONFIG_ATA_ACPI=y

# CONFIG_SATA_ZPODD is not set

CONFIG_SATA_PMP=y


#
# Controllers with non-SFF native interface
#
```

```
CONFIG_SATA_AHCI=y

# CONFIG_SATA_AHCI_PLATFORM is not set

# CONFIG_SATA_INIC162X is not set

# CONFIG_SATA_ACARD_AHCI is not set

# CONFIG_SATA_SIL24 is not set

CONFIG_ATA_SFF=y


#

# SFF controllers with custom DMA interface

#

# CONFIG_PDC_ADMA is not set

# CONFIG_SATA_QSTOR is not set

# CONFIG_SATA_SX4 is not set

CONFIG_ATA_BMDMA=y


#

# SATA SFF controllers with BMDMA

#

CONFIG_ATA_PIIX=y

# CONFIG_SATA_MV is not set

CONFIG_SATA_NV=y

# CONFIG_SATA_PROMISE is not set

# CONFIG_SATA_SIL is not set

# CONFIG_SATA_SIS is not set

# CONFIG_SATA_SVW is not set

# CONFIG_SATA_ULI is not set
```

```
# CONFIG_SATA_VIA is not set

# CONFIG_SATA_VITESSE is not set


#
# PATA SFF controllers with BMDMA
#
# CONFIG_PATA_ALI is not set

# CONFIG_PATA_AMD is not set

# CONFIG_PATA_ARTOP is not set

# CONFIG_PATA_ATIIXP is not set

# CONFIG_PATA_ATP867X is not set

# CONFIG_PATA_CMD64X is not set

# CONFIG_PATA_CYPRESS is not set

# CONFIG_PATA_EFAR is not set

# CONFIG_PATA_HPT366 is not set

# CONFIG_PATA_HPT37X is not set

# CONFIG_PATA_HPT3X2N is not set

# CONFIG_PATA_HPT3X3 is not set

# CONFIG_PATA_IT8213 is not set

# CONFIG_PATA_IT821X is not set

# CONFIG_PATA_JMICRON is not set

# CONFIG_PATA_MARVELL is not set

# CONFIG_PATA_NETCELL is not set

# CONFIG_PATA_NINJA32 is not set

# CONFIG_PATA_NS87415 is not set

CONFIG_PATA_OLDPIIX=y
```

```
# CONFIG_PATA_OPTIDMA is not set

# CONFIG_PATA_PDC2027X is not set

# CONFIG_PATA_PDC_OLD is not set

# CONFIG_PATA_RADISYS is not set

# CONFIG_PATA_RDC is not set

# CONFIG_PATA_SCH is not set

# CONFIG_PATA_SERVERWORKS is not set

# CONFIG_PATA_SIL680 is not set

# CONFIG_PATA_SIS is not set

# CONFIG_PATA_TOSHIBA is not set

# CONFIG_PATA_TRIFLEX is not set

# CONFIG_PATA_VIA is not set

# CONFIG_PATA_WINBOND is not set


#

# PIO-only SFF controllers

#

# CONFIG_PATA_CMD640_PCI is not set

CONFIG_PATA_MPIIX=y

# CONFIG_PATA_NS87410 is not set

# CONFIG_PATA_OPTI is not set

# CONFIG_PATA_PCMCIA is not set

# CONFIG_PATA_RZ1000 is not set


#

# Generic fallback / legacy drivers
```

```
#
# CONFIG_PATA_ACPI is not set

CONFIG_ATA_GENERIC=y

# CONFIG_PATA_LEGACY is not set

# CONFIG_MD is not set

# CONFIG_TARGET_CORE is not set

# CONFIG_FUSION is not set


#
# IEEE 1394 (FireWire) support
#
# CONFIG_FIREWIRE is not set

# CONFIG_FIREWIRE_NOSY is not set

# CONFIG_MACINTOSH_DRIVERS is not set

CONFIG_NETDEVICES=y

CONFIG_NET_CORE=y

# CONFIG_BONDING is not set

# CONFIG_DUMMY is not set

# CONFIG_EQUALIZER is not set

# CONFIG_NET_FC is not set

# CONFIG_NET_TEAM is not set

# CONFIG_MACVLAN is not set

# CONFIG_VXLAN is not set

# CONFIG_MACSEC is not set

# CONFIG_NETCONSOLE is not set

# CONFIG_NETPOLL is not set
```

```
# CONFIG_NET_POLL_CONTROLLER is not set

# CONFIG_TUN is not set

# CONFIG_TUN_VNET_CROSS_LE is not set

# CONFIG_VETH is not set

# CONFIG_NLMON is not set

# CONFIG_ARCNET is not set


#
# CAIF transport drivers
#


#
# Distributed Switch Architecture drivers
#
CONFIG_ETHERNET=y

CONFIG_MDIO=y

CONFIG_NET_VENDOR_3COM=y

# CONFIG_PCMCIA_3C574 is not set

# CONFIG_PCMCIA_3C589 is not set

# CONFIG_VORTEX is not set

# CONFIG_TYPHOON is not set

CONFIG_NET_VENDOR_ADAPTEC=y

# CONFIG_ADAPTEC_STARFIRE is not set

CONFIG_NET_VENDOR_AGERE=y

# CONFIG_ET131X is not set

CONFIG_NET_VENDOR_ALTEON=y
```

```
# CONFIG_ACENIC is not set

# CONFIG_ALTERA_TSE is not set

CONFIG_NET_VENDOR_AMD=y

# CONFIG_AMD8111_ETH is not set

# CONFIG_PCNET32 is not set

# CONFIG_PCMCIA_NMCLAN is not set

CONFIG_NET_VENDOR_ARC=y

CONFIG_NET_VENDOR_ATHEROS=y

# CONFIG_ATL2 is not set

# CONFIG_ATL1 is not set

# CONFIG_ATL1E is not set

# CONFIG_ATL1C is not set

# CONFIG_ALX is not set

# CONFIG_NET_VENDOR_AURORA is not set

CONFIG_NET_CADENCE=y

# CONFIG_MACB is not set

CONFIG_NET_VENDOR_BROADCOM=y

# CONFIG_B44 is not set

# CONFIG_BCMGENET is not set

# CONFIG_BNX2 is not set

# CONFIG_CNIC is not set

# CONFIG_TIGON3 is not set

# CONFIG_BNX2X is not set

# CONFIG_BNXT is not set

CONFIG_NET_VENDOR_BROCADE=y

# CONFIG_BNA is not set
```

```
CONFIG_NET_VENDOR_CAVIUM=y

# CONFIG_THUNDER_NIC_PF is not set

# CONFIG_THUNDER_NIC_VF is not set

# CONFIG_THUNDER_NIC_BGX is not set

# CONFIG_LIQUIDIO is not set

CONFIG_NET_VENDOR_CHELSIO=y

# CONFIG_CHELSIO_T1 is not set

# CONFIG_CHELSIO_T3 is not set

# CONFIG_CHELSIO_T4 is not set

# CONFIG_CHELSIO_T4VF is not set

CONFIG_NET_VENDOR_CISCO=y

# CONFIG_ENIC is not set

# CONFIG_CX_ECAT is not set

# CONFIG_DNET is not set

CONFIG_NET_VENDOR_DEC=y

# CONFIG_NET_TULIP is not set

CONFIG_NET_VENDOR_DLINK=y

# CONFIG_DL2K is not set

# CONFIG_SUNDANCE is not set

CONFIG_NET_VENDOR_EMULEX=y

# CONFIG_BE2NET is not set

CONFIG_NET_VENDOR_EZCHIP=y

CONFIG_NET_VENDOR_EXAR=y

# CONFIG_S2IO is not set

# CONFIG_VXGE is not set

CONFIG_NET_VENDOR_FUJITSU=y
```

```
# CONFIG_PCMCIA_FMVJ18X is not set

CONFIG_NET_VENDOR_HP=y

# CONFIG_HP100 is not set

CONFIG_NET_VENDOR_INTEL=y

# CONFIG_E100 is not set

CONFIG_E1000=y

CONFIG_E1000E=y

CONFIG_E1000E_HWTS=y

CONFIG_IGB=y

CONFIG_IGBVF=y

CONFIG_IXGB=y

CONFIG_IXGBE=y

CONFIG_IXGBEVF=y

# CONFIG_I40E is not set

# CONFIG_I40EVF is not set

# CONFIG_FM10K is not set

CONFIG_NET_VENDOR_I825XX=y

# CONFIG_JME is not set

CONFIG_NET_VENDOR_MARVELL=y

# CONFIG_MVMDIO is not set

# CONFIG_MVNETA_BM is not set

# CONFIG_SKGE is not set

# CONFIG_SKY2 is not set

CONFIG_NET_VENDOR_MELLANOX=y

# CONFIG_MLX4_EN is not set

# CONFIG_MLX4_CORE is not set
```

```
# CONFIG_MLX5_CORE is not set

# CONFIG_MLXSW_CORE is not set

CONFIG_NET_VENDOR_MICREL=y

# CONFIG_KS8851_MLL is not set

# CONFIG_KSZ884X_PCI is not set

CONFIG_NET_VENDOR_MYRI=y

# CONFIG_MYRI10GE is not set

# CONFIG_FEALNX is not set

CONFIG_NET_VENDOR_NATSEMI=y

# CONFIG_NATSEMI is not set

# CONFIG_NS83820 is not set

CONFIG_NET_VENDOR_NETRONOME=y

# CONFIG_NFP_NETVF is not set

CONFIG_NET_VENDOR_8390=y

# CONFIG_PCMCIA_AXNET is not set

# CONFIG_NE2K_PCI is not set

# CONFIG_PCMCIA_PCNET is not set

CONFIG_NET_VENDOR_NVIDIA=y

# CONFIG_FORCEDETH is not set

CONFIG_NET_VENDOR_OKI=y

# CONFIG_ETHOC is not set

CONFIG_NET_PACKET_ENGINE=y

# CONFIG_HAMACHI is not set

# CONFIG_YELLOWFIN is not set

CONFIG_NET_VENDOR_QLOGIC=y

# CONFIG_QLA3XXX is not set
```

```
# CONFIG_QLCNIC is not set

# CONFIG_QLGE is not set

# CONFIG_NETXEN_NIC is not set

# CONFIG_QED is not set

CONFIG_NET_VENDOR_QUALCOMM=y

CONFIG_NET_VENDOR_REALTEK=y

# CONFIG_8139CP is not set

# CONFIG_8139TOO is not set

# CONFIG_R8169 is not set

CONFIG_NET_VENDOR_RENESAS=y

CONFIG_NET_VENDOR_RDC=y

# CONFIG_R6040 is not set

CONFIG_NET_VENDOR_ROCKER=y

CONFIG_NET_VENDOR_SAMSUNG=y

# CONFIG_SXGBE_ETH is not set

CONFIG_NET_VENDOR_SEEQ=y

CONFIG_NET_VENDOR_SILAN=y

# CONFIG_SC92031 is not set

CONFIG_NET_VENDOR_SIS=y

# CONFIG_SIS900 is not set

# CONFIG_SIS190 is not set

# CONFIG_SFC is not set

CONFIG_NET_VENDOR_SMSC=y

# CONFIG_PCMCIA_SMC91C92 is not set

# CONFIG_EPIC100 is not set

# CONFIG_SMSC911X is not set
```

```
# CONFIG_SMSC9420 is not set

CONFIG_NET_VENDOR_STMICRO=y

# CONFIG_STMMAC_ETH is not set

CONFIG_NET_VENDOR_SUN=y

# CONFIG_HAPPYMEAL is not set

# CONFIG_SUNGEM is not set

# CONFIG_CASSINI is not set

# CONFIG_NIU is not set

CONFIG_NET_VENDOR_SYNOPSYS=y

CONFIG_NET_VENDOR_TEHUTI=y

# CONFIG_TEHUTI is not set

CONFIG_NET_VENDOR_TI=y

# CONFIG_TI_CPSW_ALE is not set

# CONFIG_TLAN is not set

CONFIG_NET_VENDOR_VIA=y

# CONFIG_VIA_RHINE is not set

# CONFIG_VIA_VELOCITY is not set

CONFIG_NET_VENDOR_WIZNET=y

# CONFIG_WIZNET_W5100 is not set

# CONFIG_WIZNET_W5300 is not set

CONFIG_NET_VENDOR_XIRCOM=y

# CONFIG_PCMCIA_XIRC2PS is not set

# CONFIG_FDDI is not set

# CONFIG_HIPPI is not set

# CONFIG_NET_SB1000 is not set

# CONFIG_PHYLIB is not set
```

CONFIG_PPP is not set

CONFIG_SLIP is not set

CONFIG_USB_NET_DRIVERS=y

CONFIG_USB_CATC is not set

CONFIG_USB_KAWETH is not set

CONFIG_USB_PEGASUS is not set

CONFIG_USB_RTL8150 is not set

CONFIG_USB_RTL8152 is not set

CONFIG_USB_LAN78XX is not set

CONFIG_USB_USBNET is not set

CONFIG_USB_HSO is not set

CONFIG_USB_IPHETH is not set

CONFIG_WLAN=y

CONFIG_WLAN_VENDOR_ADMTEK=y

CONFIG_WLAN_VENDOR_ATH=y

CONFIG_ATH_DEBUG is not set

CONFIG_ATH5K_PCI is not set

CONFIG_WLAN_VENDOR_ATMEL=y

CONFIG_WLAN_VENDOR_BROADCOM=y

CONFIG_WLAN_VENDOR_CISCO=y

CONFIG_WLAN_VENDOR_INTEL=y

CONFIG_WLAN_VENDOR_INTERSIL=y

CONFIG_HOSTAP is not set

CONFIG_PRISM54 is not set

CONFIG_WLAN_VENDOR_MARVELL=y

CONFIG_WLAN_VENDOR_MEDIATEK=y

CONFIG_WLAN_VENDOR_RALINK=y

CONFIG_WLAN_VENDOR_REALTEK=y

CONFIG_WLAN_VENDOR_RSI=y

CONFIG_WLAN_VENDOR_ST=y

CONFIG_WLAN_VENDOR_TI=y

CONFIG_WLAN_VENDOR_ZYDAS=y

CONFIG_PCMCIA_RAYCS is not set

#

Enable WiMAX (Networking options) to see the WiMAX drivers

#

CONFIG_WAN is not set

CONFIG_VMXNET3 is not set

CONFIG_FUJITSU_ES is not set

CONFIG_ISDN is not set

CONFIG_NVM is not set

#

Input device support

#

CONFIG_INPUT=y

CONFIG_INPUT_FF_MEMLESS is not set

CONFIG_INPUT_POLLDEV=y

CONFIG_INPUT_SPARSEKMAP is not set

CONFIG_INPUT_MATRIXKMAP is not set

```
#
# Userland interfaces
#
CONFIG_INPUT_MOUSEDEV=y
# CONFIG_INPUT_MOUSEDEV_PSAUX is not set
CONFIG_INPUT_MOUSEDEV_SCREEN_X=1024
CONFIG_INPUT_MOUSEDEV_SCREEN_Y=768
# CONFIG_INPUT_JOYDEV is not set
# CONFIG_INPUT_EVDEV is not set
# CONFIG_INPUT_EVBUG is not set


#
# Input Device Drivers
#
CONFIG_INPUT_KEYBOARD=y
# CONFIG_KEYBOARD_ADP5588 is not set
# CONFIG_KEYBOARD_ADP5589 is not set
CONFIG_KEYBOARD_ATKBD=y
# CONFIG_KEYBOARD_QT1070 is not set
# CONFIG_KEYBOARD_QT2160 is not set
# CONFIG_KEYBOARD_LKKBD is not set
# CONFIG_KEYBOARD_TCA6416 is not set
# CONFIG_KEYBOARD_TCA8418 is not set
# CONFIG_KEYBOARD_LM8333 is not set
# CONFIG_KEYBOARD_MAX7359 is not set
# CONFIG_KEYBOARD_MCS is not set
```

```
# CONFIG_KEYBOARD_MPR121 is not set

# CONFIG_KEYBOARD_NEWTON is not set

# CONFIG_KEYBOARD_OPENCORES is not set

# CONFIG_KEYBOARD_STOWAWAY is not set

# CONFIG_KEYBOARD_SUNKBD is not set

# CONFIG_KEYBOARD_XTKBD is not set

# CONFIG_INPUT_MOUSE is not set

# CONFIG_INPUT_JOYSTICK is not set

# CONFIG_INPUT_TABLET is not set

# CONFIG_INPUT_TOUCHSCREEN is not set

# CONFIG_INPUT_MISC is not set

# CONFIG_RMI4_CORE is not set


#
# Hardware I/O ports
#
CONFIG_SERIO=y

CONFIG_ARCH_MIGHT_HAVE_PC_SERIO=y

CONFIG_SERIO_I8042=y

CONFIG_SERIO_SERPORT=y

# CONFIG_SERIO_CT82C710 is not set

# CONFIG_SERIO_PCIPS2 is not set

CONFIG_SERIO_LIBPS2=y

# CONFIG_SERIO_RAW is not set

# CONFIG_SERIO_ALTERA_PS2 is not set

# CONFIG_SERIO_PS2MULT is not set
```

```
# CONFIG_SERIO_ARC_PS2 is not set

# CONFIG_USERIO is not set

# CONFIG_GAMEPORT is not set


#
# Character devices
#
CONFIG_TTY=y

CONFIG_VT=y

CONFIG_CONSOLE_TRANSLATIONS=y

CONFIG_VT_CONSOLE=y

CONFIG_VT_CONSOLE_SLEEP=y

CONFIG_HW_CONSOLE=y

CONFIG_VT_HW_CONSOLE_BINDING=y

CONFIG_UNIX98_PTYS=y

# CONFIG_LEGACY_PTYS is not set

CONFIG_SERIAL_NONSTANDARD=y

# CONFIG_ROCKETPORT is not set

# CONFIG_CYCLADES is not set

# CONFIG_MOXA_INTELLIO is not set

# CONFIG_MOXA_SMARTIO is not set

# CONFIG_SYNCLINK is not set

# CONFIG_SYNCLINKMP is not set

# CONFIG_SYNCLINK_GT is not set

# CONFIG_NOZOMI is not set

# CONFIG_ISI is not set
```

```
# CONFIG_N_HDLC is not set

# CONFIG_N_GSM is not set

# CONFIG_TRACE_SINK is not set

CONFIG_DEVMEM=y

# CONFIG_DEVKMEM is not set


#
# Serial drivers
#
CONFIG_SERIAL_EARLYCON=y

CONFIG_SERIAL_8250=y

CONFIG_SERIAL_8250_DEPRECATED_OPTIONS=y

CONFIG_SERIAL_8250_PNP=y

# CONFIG_SERIAL_8250_FINTEK is not set

CONFIG_SERIAL_8250_CONSOLE=y

CONFIG_SERIAL_8250_PCI=y

# CONFIG_SERIAL_8250_CS is not set

CONFIG_SERIAL_8250_NR_UARTS=4

CONFIG_SERIAL_8250_RUNTIME_UARTS=4

# CONFIG_SERIAL_8250_EXTENDED is not set

# CONFIG_SERIAL_8250_FSL is not set

# CONFIG_SERIAL_8250_DW is not set

# CONFIG_SERIAL_8250_RT288X is not set

CONFIG_SERIAL_8250_MID=y

# CONFIG_SERIAL_8250_MOXA is not set
```

```
#
# Non-8250 serial port support
#
# CONFIG_SERIAL_UARTLITE is not set
CONFIG_SERIAL_CORE=y
CONFIG_SERIAL_CORE_CONSOLE=y
# CONFIG_SERIAL_JSM is not set
# CONFIG_SERIAL_SCCNXP is not set
# CONFIG_SERIAL_SC16IS7XX is not set
# CONFIG_SERIAL_ALTERA_JTAGUART is not set
# CONFIG_SERIAL_ALTERA_UART is not set
# CONFIG_SERIAL_ARC is not set
# CONFIG_SERIAL_RP2 is not set
# CONFIG_SERIAL_FSL_LPUART is not set
# CONFIG_IPMI_HANDLER is not set
# CONFIG_HW_RANDOM is not set
# CONFIG_NVRAM is not set
# CONFIG_R3964 is not set
# CONFIG_APPLICOM is not set

#
# PCMCIA character devices
#
# CONFIG_SYNCLINK_CS is not set
CONFIG_CARDMAN_4000=m
# CONFIG_CARDMAN_4040 is not set
```

```
# CONFIG_IPWIRELESS is not set

# CONFIG_MWAVE is not set

# CONFIG_RAW_DRIVER is not set

CONFIG_HPET=y

# CONFIG_HPET_MMAP is not set

# CONFIG_HANGCHECK_TIMER is not set

# CONFIG_TCG_TPM is not set

# CONFIG_TELCLOCK is not set

CONFIG_DEVPORT=y

# CONFIG_XILLYBUS is not set


#
# I2C support
#
CONFIG_I2C=y

CONFIG_ACPI_I2C_OPREGION=y

CONFIG_I2C_BOARDINFO=y

CONFIG_I2C_COMPAT=y

# CONFIG_I2C_CHARDEV is not set

# CONFIG_I2C_MUX is not set

# CONFIG_I2C_HELPER_AUTO is not set

CONFIG_I2C_SMBUS=m


#
# I2C Algorithms
#
```

```
CONFIG_I2C_ALGOBIT=y

# CONFIG_I2C_ALGOPCF is not set

# CONFIG_I2C_ALGOPCA is not set


#

# I2C Hardware Bus support

#


#

# PC SMBus host controller drivers

#

# CONFIG_I2C_ALI1535 is not set

# CONFIG_I2C_ALI1563 is not set

# CONFIG_I2C_ALI15X3 is not set

# CONFIG_I2C_AMD756 is not set

# CONFIG_I2C_AMD8111 is not set

# CONFIG_I2C_I801 is not set

# CONFIG_I2C_ISCH is not set

# CONFIG_I2C_ISMT is not set

# CONFIG_I2C_PIIX4 is not set

# CONFIG_I2C_NFORCE2 is not set

# CONFIG_I2C_SIS5595 is not set

# CONFIG_I2C_SIS630 is not set

# CONFIG_I2C_SIS96X is not set

# CONFIG_I2C_VIA is not set

# CONFIG_I2C_VIAPRO is not set
```

```
#
# ACPI drivers
#
# CONFIG_I2C_SCMI is not set


#
# I2C system bus drivers (mostly embedded / system-on-chip)
#
# CONFIG_I2C_DESIGNWARE_PCI is not set
# CONFIG_I2C_OCORES is not set
# CONFIG_I2C_PCA_PLATFORM is not set
# CONFIG_I2C_PXA_PCI is not set
# CONFIG_I2C_SIMTEC is not set
# CONFIG_I2C_XILINX is not set


#
# External I2C/SMBus adapter drivers
#
# CONFIG_I2C_DIOLAN_U2C is not set
CONFIG_I2C_PARPORT_LIGHT=m
# CONFIG_I2C_ROBOTFUZZ_OSIF is not set
# CONFIG_I2C_TAOS_EVM is not set
# CONFIG_I2C_TINY_USB is not set


#
```

```
# Other I2C/SMBus bus drivers

#

# CONFIG_I2C_STUB is not set

# CONFIG_I2C_SLAVE is not set

# CONFIG_I2C_DEBUG_CORE is not set

# CONFIG_I2C_DEBUG_ALGO is not set

# CONFIG_I2C_DEBUG_BUS is not set

# CONFIG_SPI is not set

# CONFIG_SPMI is not set

# CONFIG_HSI is not set


#
# PPS support
#
CONFIG_PPS=y
# CONFIG_PPS_DEBUG is not set

# CONFIG_NTP_PPS is not set


#
# PPS clients support
#
# CONFIG_PPS_CLIENT_KTIMER is not set

# CONFIG_PPS_CLIENT_LDISC is not set

# CONFIG_PPS_CLIENT_GPIO is not set


#
```

```
# PPS generators support
#


#
# PTP clock support
#
CONFIG_PTP_1588_CLOCK=y


#
# Enable PHYLIB and NETWORK_PHY_TIMESTAMPING to see the additional clocks.
#
# CONFIG_GPIOLIB is not set
# CONFIG_W1 is not set
# CONFIG_POWER_SUPPLY is not set
# CONFIG_POWER_RESET is not set
# CONFIG_POWER_AVS is not set
# CONFIG_HWMON is not set
# CONFIG_THERMAL is not set
# CONFIG_WATCHDOG is not set
CONFIG_SSB_POSSIBLE=y


#
# Sonics Silicon Backplane
#
# CONFIG_SSB is not set
CONFIG_BCMA_POSSIBLE=y
```

```
#
# Broadcom specific AMBA
#
# CONFIG_BCMA is not set


#
# Multifunction device drivers
#
# CONFIG_MFD_CORE is not set
# CONFIG_MFD_AS3711 is not set
# CONFIG_PMIC_ADP5520 is not set
# CONFIG_MFD_BCM590XX is not set
# CONFIG_MFD_AXP20X_I2C is not set
# CONFIG_MFD_CROS_EC is not set
# CONFIG_PMIC_DA903X is not set
# CONFIG_MFD_DA9052_I2C is not set
# CONFIG_MFD_DA9055 is not set
# CONFIG_MFD_DA9062 is not set
# CONFIG_MFD_DA9063 is not set
# CONFIG_MFD_DA9150 is not set
# CONFIG_MFD_DLN2 is not set
# CONFIG_MFD_MC13XXX_I2C is not set
# CONFIG_HTC_PASIC3 is not set
# CONFIG_LPC_ICH is not set
# CONFIG_LPC_SCH is not set
```

```
# CONFIG_MFD_INTEL_LPSS_ACPI is not set

# CONFIG_MFD_INTEL_LPSS_PCI is not set

# CONFIG_MFD_JANZ_CMODIO is not set

# CONFIG_MFD_KEMPLD is not set

# CONFIG_MFD_88PM800 is not set

# CONFIG_MFD_88PM805 is not set

# CONFIG_MFD_88PM860X is not set

# CONFIG_MFD_MAX14577 is not set

# CONFIG_MFD_MAX77693 is not set

# CONFIG_MFD_MAX77843 is not set

# CONFIG_MFD_MAX8907 is not set

# CONFIG_MFD_MAX8925 is not set

# CONFIG_MFD_MAX8997 is not set

# CONFIG_MFD_MAX8998 is not set

# CONFIG_MFD_MT6397 is not set

# CONFIG_MFD_MENF21BMC is not set

# CONFIG_MFD_VIPERBOARD is not set

# CONFIG_MFD_RETU is not set

# CONFIG_MFD_PCF50633 is not set

# CONFIG_MFD_RDC321X is not set

# CONFIG_MFD_RTSX_PCI is not set

# CONFIG_MFD_RT5033 is not set

# CONFIG_MFD_RTSX_USB is not set

# CONFIG_MFD_RC5T583 is not set

# CONFIG_MFD_SEC_CORE is not set

# CONFIG_MFD_SI476X_CORE is not set
```

```
# CONFIG_MFD_SM501 is not set

# CONFIG_MFD_SKY81452 is not set

# CONFIG_MFD_SMSC is not set

# CONFIG_ABX500_CORE is not set

# CONFIG_MFD_SYSCON is not set

# CONFIG_MFD_TI_AM335X_TSCADC is not set

# CONFIG_MFD_LP3943 is not set

# CONFIG_MFD_LP8788 is not set

# CONFIG_MFD_PALMAS is not set

# CONFIG_TPS6105X is not set

# CONFIG_TPS6507X is not set

# CONFIG_MFD_TPS65086 is not set

# CONFIG_MFD_TPS65090 is not set

# CONFIG_MFD_TPS65217 is not set

# CONFIG_MFD_TPS65218 is not set

# CONFIG_MFD_TPS6586X is not set

# CONFIG_MFD_TPS65912_I2C is not set

# CONFIG_MFD_TPS80031 is not set

# CONFIG_TWL4030_CORE is not set

# CONFIG_TWL6040_CORE is not set

# CONFIG_MFD_WL1273_CORE is not set

# CONFIG_MFD_LM3533 is not set

# CONFIG_MFD_TMIO is not set

# CONFIG_MFD_VX855 is not set

# CONFIG_MFD_ARIZONA_I2C is not set

# CONFIG_MFD_WM8400 is not set
```

```
# CONFIG_MFD_WM831X_I2C is not set

# CONFIG_MFD_WM8350_I2C is not set

# CONFIG_MFD_WM8994 is not set

# CONFIG_REGULATOR is not set

# CONFIG_MEDIA_SUPPORT is not set


#
# Graphics support
#
CONFIG_AGP=y

CONFIG_AGP_AMD64=y

CONFIG_AGP_INTEL=y

CONFIG_AGP_SIS=y

CONFIG_AGP_VIA=y

CONFIG_INTEL_GTT=y

CONFIG_VGA_ARB=y

CONFIG_VGA_ARB_MAX_GPUS=16

# CONFIG_VGA_SWITCHEROO is not set

# CONFIG_DRM is not set


#
# ACP (Audio CoProcessor) Configuration
#


#
# Frame buffer Devices
```

```
#
# CONFIG_FB is not set

CONFIG_BACKLIGHT_LCD_SUPPORT=y

# CONFIG_LCD_CLASS_DEVICE is not set

CONFIG_BACKLIGHT_CLASS_DEVICE=m

# CONFIG_BACKLIGHT_GENERIC is not set

# CONFIG_BACKLIGHT_APPLE is not set

# CONFIG_BACKLIGHT_PM8941_WLED is not set

# CONFIG_BACKLIGHT_SAHARA is not set

# CONFIG_BACKLIGHT_ADP8860 is not set

# CONFIG_BACKLIGHT_ADP8870 is not set

# CONFIG_BACKLIGHT_LM3639 is not set

# CONFIG_BACKLIGHT_LV5207LP is not set

# CONFIG_BACKLIGHT_BD6107 is not set

# CONFIG_VGASTATE is not set


#
# Console display driver support
#
CONFIG_VGA_CONSOLE=y

CONFIG_VGACON_SOFT_SCROLLBACK=y

CONFIG_VGACON_SOFT_SCROLLBACK_SIZE=64

CONFIG_DUMMY_CONSOLE=y

CONFIG_DUMMY_CONSOLE_COLUMNS=80

CONFIG_DUMMY_CONSOLE_ROWS=25

# CONFIG_SOUND is not set
```

```
#
# HID support
#
CONFIG_HID=y
# CONFIG_HID_BATTERY_STRENGTH is not set
# CONFIG_HIDRAW is not set
# CONFIG_UHID is not set
CONFIG_HID_GENERIC=y

#
# Special HID drivers
#
CONFIG_HID_A4TECH=y
# CONFIG_HID_ACRUX is not set
CONFIG_HID_APPLE=y
# CONFIG_HID_APPLEIR is not set
# CONFIG_HID_AUREAL is not set
CONFIG_HID_BELKIN=y
# CONFIG_HID_BETOP_FF is not set
CONFIG_HID_CHERRY=y
CONFIG_HID_CHICONY=y
# CONFIG_HID_CMEDIA is not set
CONFIG_HID_CYPRESS=y
CONFIG_HID_DRAGONRISE=y
# CONFIG_DRAGONRISE_FF is not set
```

```
# CONFIG_HID_EMS_FF is not set

# CONFIG_HID_ELECOM is not set

# CONFIG_HID_ELO is not set

CONFIG_HID_EZKEY=y

# CONFIG_HID_GEMBIRD is not set

# CONFIG_HID_GFRM is not set

# CONFIG_HID_HOLTEK is not set

# CONFIG_HID_KEYTOUCH is not set

CONFIG_HID_KYE=y

# CONFIG_HID_UCLOGIC is not set

# CONFIG_HID_WALTOP is not set

CONFIG_HID_GYRATION=y

# CONFIG_HID_ICADE is not set

CONFIG_HID_TWINHAN=y

CONFIG_HID_KENSINGTON=y

# CONFIG_HID_LCPOWER is not set

# CONFIG_HID_LENOVO is not set

CONFIG_HID_LOGITECH=y

# CONFIG_HID_LOGITECH_HIDPP is not set

# CONFIG_LOGITECH_FF is not set

# CONFIG_LOGIRUMBLEPAD2_FF is not set

# CONFIG_LOGIG940_FF is not set

# CONFIG_LOGIWHEELS_FF is not set

# CONFIG_HID_MAGICMOUSE is not set

CONFIG_HID_MICROSOFT=y

CONFIG_HID_MONTEREY=y
```

```
# CONFIG_HID_MULTITOUCH is not set

CONFIG_HID_NTRIG=y

CONFIG_HID_ORTEK=y

CONFIG_HID_PANTHERLORD=y

# CONFIG_PANTHERLORD_FF is not set

# CONFIG_HID_PENMOUNT is not set

CONFIG_HID_PETALYNX=y

# CONFIG_HID_PICOLCD is not set

# CONFIG_HID_PLANTRONICS is not set

# CONFIG_HID_PRIMAX is not set

# CONFIG_HID_ROCCAT is not set

# CONFIG_HID_SAITEK is not set

CONFIG_HID_SAMSUNG=y

# CONFIG_HID_SPEEDLINK is not set

# CONFIG_HID_STEELSERIES is not set

CONFIG_HID_SUNPLUS=y

# CONFIG_HID_RMI is not set

CONFIG_HID_GREENASIA=y

# CONFIG_GREENASIA_FF is not set

CONFIG_HID_SMARTJOYPLUS=y

# CONFIG_SMARTJOYPLUS_FF is not set

# CONFIG_HID_TIVO is not set

CONFIG_HID_TOPSEED=y

CONFIG_HID_THRUSTMASTER=y

# CONFIG_THRUSTMASTER_FF is not set

# CONFIG_HID_WACOM is not set
```

```
# CONFIG_HID_XINMO is not set

CONFIG_HID_ZEROPLUS=y

# CONFIG_ZEROPLUS_FF is not set

# CONFIG_HID_ZYDACRON is not set

# CONFIG_HID_SENSOR_HUB is not set

# CONFIG_HID_ALPS is not set


#
# USB HID support
#
CONFIG_USB_HID=y

# CONFIG_HID_PID is not set

# CONFIG_USB_HIDDEV is not set


#
# I2C HID support
#
# CONFIG_I2C_HID is not set

CONFIG_USB_OHCI_LITTLE_ENDIAN=y

CONFIG_USB_SUPPORT=y

CONFIG_USB_COMMON=y

CONFIG_USB_ARCH_HAS_HCD=y

CONFIG_USB=y

# CONFIG_USB_ANNOUNCE_NEW_DEVICES is not set


#
```

```
# Miscellaneous USB options

#

CONFIG_USB_DEFAULT_PERSIST=y

# CONFIG_USB_DYNAMIC_MINORS is not set

# CONFIG_USB_OTG is not set

# CONFIG_USB_OTG_WHITELIST is not set

# CONFIG_USB_ULPI_BUS is not set

CONFIG_USB_MON=y

# CONFIG_USB_WUSB_CBAF is not set


#

# USB Host Controller Drivers

#

# CONFIG_USB_C67X00_HCD is not set

# CONFIG_USB_XHCI_HCD is not set

CONFIG_USB_EHCI_HCD=y

# CONFIG_USB_EHCI_ROOT_HUB_TT is not set

# CONFIG_USB_EHCI_TT_NEWSCHED is not set

CONFIG_USB_EHCI_PCI=y

# CONFIG_USB_EHCI_HCD_PLATFORM is not set

# CONFIG_USB_OXU210HP_HCD is not set

# CONFIG_USB_ISP116X_HCD is not set

# CONFIG_USB_ISP1362_HCD is not set

# CONFIG_USB_FOTG210_HCD is not set

CONFIG_USB_OHCI_HCD=y

CONFIG_USB_OHCI_HCD_PCI=y
```

```
# CONFIG_USB_OHCI_HCD_PLATFORM is not set

CONFIG_USB_UHCI_HCD=y

# CONFIG_USB_SL811_HCD is not set

# CONFIG_USB_R8A66597_HCD is not set

# CONFIG_USB_HCD_TEST_MODE is not set


#

# USB Device Class drivers

#

# CONFIG_USB_ACM is not set

# CONFIG_USB_PRINTER is not set

# CONFIG_USB_WDM is not set

# CONFIG_USB_TMC is not set


#

# NOTE: USB_STORAGE depends on SCSI but BLK_DEV_SD may

#


#

# also be needed; see USB_STORAGE Help for more info

#

# CONFIG_USB_STORAGE is not set


#

# USB Imaging devices

#
```

```
# CONFIG_USB_MDC800 is not set

# CONFIG_USB_MICROTEK is not set

# CONFIG_USBIP_CORE is not set

# CONFIG_USB_MUSB_HDRC is not set

# CONFIG_USB_DWC3 is not set

# CONFIG_USB_DWC2 is not set

# CONFIG_USB_CHIPIDEA is not set

# CONFIG_USB_ISP1760 is not set


#
# USB port drivers
#
# CONFIG_USB_SERIAL is not set


#
# USB Miscellaneous drivers
#
# CONFIG_USB_EMI62 is not set

# CONFIG_USB_EMI26 is not set

# CONFIG_USB_ADUTUX is not set

# CONFIG_USB_SEVSEG is not set

# CONFIG_USB_RIO500 is not set

# CONFIG_USB_LEGOTOWER is not set

# CONFIG_USB_LCD is not set

# CONFIG_USB_CYPRESS_CY7C63 is not set

# CONFIG_USB_CYTHERM is not set
```

```
# CONFIG_USB_IDMOUSE is not set

# CONFIG_USB_FTDI_ELAN is not set

# CONFIG_USB_APPLEDISPLAY is not set

# CONFIG_USB_SISUSBVGA is not set

# CONFIG_USB_LD is not set

# CONFIG_USB_TRANCEVIBRATOR is not set

# CONFIG_USB_IOWARRIOR is not set

# CONFIG_USB_TEST is not set

# CONFIG_USB_EHSET_TEST_FIXTURE is not set

# CONFIG_USB_ISIGHTFW is not set

# CONFIG_USB_YUREX is not set

# CONFIG_USB_EZUSB_FX2 is not set

# CONFIG_USB_HSIC_USB3503 is not set

# CONFIG_USB_LINK_LAYER_TEST is not set

# CONFIG_UCSI is not set


#
# USB Physical Layer drivers
#
# CONFIG_USB_PHY is not set

# CONFIG_NOP_USB_XCEIV is not set

# CONFIG_USB_ISP1301 is not set

# CONFIG_USB_GADGET is not set

# CONFIG_UWB is not set

# CONFIG_MMC is not set

# CONFIG_MEMSTICK is not set
```

```
# CONFIG_NEW_LEDS is not set

# CONFIG_ACCESSIBILITY is not set

# CONFIG_INFINIBAND is not set

CONFIG_EDAC_ATOMIC_SCRUB=y

CONFIG_EDAC_SUPPORT=y

# CONFIG_EDAC is not set

CONFIG_RTC_LIB=y

CONFIG_RTC_MC146818_LIB=y

# CONFIG_RTC_CLASS is not set

# CONFIG_DMADEVICES is not set


#
# DMABUF options
#
# CONFIG_SYNC_FILE is not set

# CONFIG_AUXDISPLAY is not set

# CONFIG_UIO is not set

# CONFIG_VIRT_DRIVERS is not set


#
# Virtio drivers
#
# CONFIG_VIRTIO_PCI is not set

# CONFIG_VIRTIO_MMIO is not set


#
```

Microsoft Hyper-V guest support

#

CONFIG_HYPERV is not set

CONFIG_STAGING is not set

CONFIG_X86_PLATFORM_DEVICES=y

CONFIG_ASUS_LAPTOP is not set

CONFIG_DELL_SMO8800 is not set

CONFIG_DELL_RBTN is not set

CONFIG_FUJITSU_LAPTOP is not set

CONFIG_FUJITSU_TABLET is not set

CONFIG_AMILO_RFKILL is not set

CONFIG_HP_ACCEL is not set

CONFIG_HP_WIRELESS is not set

CONFIG_MSI_LAPTOP is not set

CONFIG_PANASONIC_LAPTOP is not set

CONFIG_SONY_LAPTOP is not set

CONFIG_IDEAPAD_LAPTOP is not set

CONFIG_THINKPAD_ACPI is not set

CONFIG_SENSORS_HDAPS is not set

CONFIG_EEEPC_LAPTOP is not set

CONFIG_ASUS_WIRELESS is not set

CONFIG_ACPI_WMI is not set

CONFIG_TOPSTAR_LAPTOP is not set

CONFIG_TOSHIBA_BT_RFKILL is not set

CONFIG_TOSHIBA_HAPS is not set

CONFIG_ACPI_CMPC is not set

```
# CONFIG_INTEL_HID_EVENT is not set

# CONFIG_INTEL_VBTN is not set

# CONFIG_INTEL_IPS is not set

# CONFIG_INTEL_PMC_CORE is not set

# CONFIG_IBM_RTL is not set

# CONFIG_SAMSUNG_LAPTOP is not set

# CONFIG_INTEL_OAKTRAIL is not set

# CONFIG_SAMSUNG_Q10 is not set

# CONFIG_APPLE_GMUX is not set

# CONFIG_INTEL_RST is not set

# CONFIG_INTEL_SMARTCONNECT is not set

# CONFIG_PVPANIC is not set

# CONFIG_INTEL_PMC_IPC is not set

# CONFIG_SURFACE_PRO3_BUTTON is not set

# CONFIG_INTEL_PUNIT_IPC is not set

# CONFIG_CHROME_PLATFORMS is not set


#

# Hardware Spinlock drivers

#


#

# Clock Source drivers

#

CONFIG_CLKEVT_I8253=y

CONFIG_I8253_LOCK=y
```

```
CONFIG_CLKBLD_I8253=y

# CONFIG_ATMEL_PIT is not set

# CONFIG_SH_TIMER_CMT is not set

# CONFIG_SH_TIMER_MTU2 is not set

# CONFIG_SH_TIMER_TMU is not set

# CONFIG_EM_TIMER_STI is not set

# CONFIG_MAILBOX is not set

CONFIG_IOMMU_SUPPORT=y


#

# Generic IOMMU Pagetable Support

#

# CONFIG_AMD_IOMMU is not set

# CONFIG_INTEL_IOMMU is not set

# CONFIG_IRQ_REMAP is not set


#

# Remoteproc drivers

#

# CONFIG_STE_MODEM_RPROC is not set


#

# Rpmsg drivers

#


#
```

```
# SOC (System On Chip) specific Drivers

#


#
# Broadcom SoC drivers
#
# CONFIG_SUNXI_SRAM is not set

# CONFIG_SOC_TI is not set

# CONFIG_PM_DEVFREQ is not set

# CONFIG_EXTCON is not set

# CONFIG_MEMORY is not set

# CONFIG_IIO is not set

# CONFIG_NTB is not set

# CONFIG_VME_BUS is not set

# CONFIG_PWM is not set

CONFIG_ARM_GIC_MAX_NR=1

# CONFIG_IPACK_BUS is not set

# CONFIG_RESET_CONTROLLER is not set

# CONFIG_FMC is not set


#
# PHY Subsystem
#
# CONFIG_GENERIC_PHY is not set

# CONFIG_PHY_PXA_28NM_HSIC is not set

# CONFIG_PHY_PXA_28NM_USB2 is not set
```

```
# CONFIG_BCM_KONA_USB2_PHY is not set

# CONFIG_POWERCAP is not set

# CONFIG_MCB is not set


#
# Performance monitor support
#
CONFIG_RAS=y
# CONFIG_THUNDERBOLT is not set


#
# Android
#
# CONFIG_ANDROID is not set

# CONFIG_LIBNVDIMM is not set

# CONFIG_DEV_DAX is not set

# CONFIG_NVMEM is not set

# CONFIG_STM is not set

# CONFIG_INTEL_TH is not set


#
# FPGA Configuration Support
#
# CONFIG_FPGA is not set


#
```

```
# Firmware Drivers

#

# CONFIG_EDD is not set

CONFIG_FIRMWARE_MEMMAP=y

# CONFIG_DELL_RBU is not set

# CONFIG_DCDBAS is not set

# CONFIG_DMIID is not set

# CONFIG_DMI_SYSFS is not set

CONFIG_DMI_SCAN_MACHINE_NON_EFI_FALLBACK=y

# CONFIG_ISCSI_IBFT_FIND is not set

# CONFIG_FW_CFG_SYSFS is not set

# CONFIG_GOOGLE_FIRMWARE is not set


#
# File systems
#

CONFIG_DCACHE_WORD_ACCESS=y

CONFIG_EXT2_FS=y

CONFIG_EXT2_FS_XATTR=y

CONFIG_EXT2_FS_POSIX_ACL=y

CONFIG_EXT2_FS_SECURITY=y

CONFIG_EXT3_FS=y

CONFIG_EXT3_FS_POSIX_ACL=y

CONFIG_EXT3_FS_SECURITY=y

CONFIG_EXT4_FS=y

CONFIG_EXT4_FS_POSIX_ACL=y
```

```
CONFIG_EXT4_FS_SECURITY=y

# CONFIG_EXT4_ENCRYPTION is not set

# CONFIG_EXT4_DEBUG is not set

CONFIG_JBD2=y

# CONFIG_JBD2_DEBUG is not set

CONFIG_FS_MBCACHE=y

# CONFIG_REISERFS_FS is not set

# CONFIG_JFS_FS is not set

# CONFIG_XFS_FS is not set

# CONFIG_GFS2_FS is not set

# CONFIG_OCFS2_FS is not set

# CONFIG_BTRFS_FS is not set

# CONFIG_NILFS2_FS is not set

# CONFIG_F2FS_FS is not set

# CONFIG_FS_DAX is not set

CONFIG_FS_POSIX_ACL=y

CONFIG_EXPORTFS=y

# CONFIG_EXPORTFS_BLOCK_OPS is not set

CONFIG_FILE_LOCKING=y

CONFIG_MANDATORY_FILE_LOCKING=y

# CONFIG_FS_ENCRYPTION is not set

CONFIG_FSNOTIFY=y

CONFIG_DNOTIFY=y

CONFIG_INOTIFY_USER=y

# CONFIG_FANOTIFY is not set

CONFIG_QUOTA=y
```

```
# CONFIG_QUOTA_NETLINK_INTERFACE is not set

# CONFIG_PRINT_QUOTA_WARNING is not set

# CONFIG_QUOTA_DEBUG is not set

# CONFIG_QFMT_V1 is not set

# CONFIG_QFMT_V2 is not set

CONFIG_QUOTACTL=y

CONFIG_QUOTACTL_COMPAT=y

CONFIG_AUTOFS4_FS=y

CONFIG_FUSE_FS=y

CONFIG_CUSE=y

# CONFIG_OVERLAY_FS is not set


#
# Caches
#
# CONFIG_FSCACHE is not set


#
# CD-ROM/DVD Filesystems
#
# CONFIG_ISO9660_FS is not set

# CONFIG_UDF_FS is not set


#
# DOS/FAT/NT Filesystems
#
```

```
# CONFIG_MSDOS_FS is not set

# CONFIG_VFAT_FS is not set

# CONFIG_NTFS_FS is not set


#
# Pseudo filesystems
#
CONFIG_PROC_FS=y

CONFIG_PROC_KCORE=y

# CONFIG_PROC_VMCORE is not set

CONFIG_PROC_SYSCTL=y

CONFIG_PROC_PAGE_MONITOR=y

# CONFIG_PROC_CHILDREN is not set

CONFIG_KERNFS=y

CONFIG_SYSFS=y

CONFIG_TMPFS=y

# CONFIG_TMPFS_POSIX_ACL is not set

# CONFIG_TMPFS_XATTR is not set

CONFIG_HUGETLBFS=y

CONFIG_HUGETLB_PAGE=y

CONFIG_CONFIGFS_FS=y

CONFIG_MISC_FILESYSTEMS=y

# CONFIG_ORANGEFS_FS is not set

# CONFIG_ADFS_FS is not set

# CONFIG_AFFS_FS is not set

# CONFIG_HFS_FS is not set
```

```
# CONFIG_HFSPLUS_FS is not set

# CONFIG_BEFS_FS is not set

# CONFIG_BFS_FS is not set

# CONFIG_EFS_FS is not set

# CONFIG_LOGFS is not set

# CONFIG_CRAMFS is not set

# CONFIG_SQUASHFS is not set

# CONFIG_VXFS_FS is not set

# CONFIG_MINIX_FS is not set

# CONFIG_OMFS_FS is not set

# CONFIG_HPFS_FS is not set

# CONFIG_QNX4FS_FS is not set

# CONFIG_QNX6FS_FS is not set

# CONFIG_ROMFS_FS is not set

# CONFIG_PSTORE is not set

# CONFIG_SYSV_FS is not set

# CONFIG_UFS_FS is not set

# CONFIG_NETWORK_FILESYSTEMS is not set

CONFIG_NLS=y

CONFIG_NLS_DEFAULT="iso8859-1"

# CONFIG_NLS_CODEPAGE_437 is not set

# CONFIG_NLS_CODEPAGE_737 is not set

# CONFIG_NLS_CODEPAGE_775 is not set

# CONFIG_NLS_CODEPAGE_850 is not set

# CONFIG_NLS_CODEPAGE_852 is not set

# CONFIG_NLS_CODEPAGE_855 is not set
```

```
# CONFIG_NLS_CODEPAGE_857 is not set

# CONFIG_NLS_CODEPAGE_860 is not set

# CONFIG_NLS_CODEPAGE_861 is not set

# CONFIG_NLS_CODEPAGE_862 is not set

# CONFIG_NLS_CODEPAGE_863 is not set

# CONFIG_NLS_CODEPAGE_864 is not set

# CONFIG_NLS_CODEPAGE_865 is not set

# CONFIG_NLS_CODEPAGE_866 is not set

# CONFIG_NLS_CODEPAGE_869 is not set

# CONFIG_NLS_CODEPAGE_936 is not set

# CONFIG_NLS_CODEPAGE_950 is not set

# CONFIG_NLS_CODEPAGE_932 is not set

# CONFIG_NLS_CODEPAGE_949 is not set

# CONFIG_NLS_CODEPAGE_874 is not set

# CONFIG_NLS_ISO8859_8 is not set

# CONFIG_NLS_CODEPAGE_1250 is not set

# CONFIG_NLS_CODEPAGE_1251 is not set

# CONFIG_NLS_ASCII is not set

# CONFIG_NLS_ISO8859_1 is not set

# CONFIG_NLS_ISO8859_2 is not set

# CONFIG_NLS_ISO8859_3 is not set

# CONFIG_NLS_ISO8859_4 is not set

# CONFIG_NLS_ISO8859_5 is not set

# CONFIG_NLS_ISO8859_6 is not set

# CONFIG_NLS_ISO8859_7 is not set

# CONFIG_NLS_ISO8859_9 is not set
```

CONFIG_NLS_ISO8859_13 is not set

CONFIG_NLS_ISO8859_14 is not set

CONFIG_NLS_ISO8859_15 is not set

CONFIG_NLS_KOI8_R is not set

CONFIG_NLS_KOI8_U is not set

CONFIG_NLS_MAC_ROMAN is not set

CONFIG_NLS_MAC_CELTIC is not set

CONFIG_NLS_MAC_CENTEURO is not set

CONFIG_NLS_MAC_CROATIAN is not set

CONFIG_NLS_MAC_CYRILLIC is not set

CONFIG_NLS_MAC_GAELIC is not set

CONFIG_NLS_MAC_GREEK is not set

CONFIG_NLS_MAC_ICELAND is not set

CONFIG_NLS_MAC_INUIT is not set

CONFIG_NLS_MAC_ROMANIAN is not set

CONFIG_NLS_MAC_TURKISH is not set

CONFIG_NLS_UTF8 is not set

CONFIG_DLM is not set

#
Kernel hacking
#
CONFIG_TRACE_IRQFLAGS_SUPPORT=y

#
printk and dmesg options

```
#

# CONFIG_PRINTK_TIME is not set

CONFIG_MESSAGE_LOGLEVEL_DEFAULT=4

# CONFIG_BOOT_PRINTK_DELAY is not set


#

# Compile-time checks and compiler options

#

# CONFIG_DEBUG_INFO is not set

# CONFIG_ENABLE_WARN_DEPRECATED is not set

# CONFIG_ENABLE_MUST_CHECK is not set

CONFIG_FRAME_WARN=2048

# CONFIG_STRIP_ASM_SYMS is not set

# CONFIG_READABLE_ASM is not set

# CONFIG_UNUSED_SYMBOLS is not set

# CONFIG_PAGE_OWNER is not set

# CONFIG_DEBUG_FS is not set

# CONFIG_HEADERS_CHECK is not set

# CONFIG_DEBUG_SECTION_MISMATCH is not set

CONFIG_SECTION_MISMATCH_WARN_ONLY=y

CONFIG_ARCH_WANT_FRAME_POINTERS=y

# CONFIG_FRAME_POINTER is not set

# CONFIG_STACK_VALIDATION is not set

# CONFIG_DEBUG_FORCE_WEAK_PER_CPU is not set

# CONFIG_MAGIC_SYSRQ is not set

CONFIG_DEBUG_KERNEL=y
```

```
#
# Memory Debugging
#
# CONFIG_PAGE_EXTENSION is not set
# CONFIG_DEBUG_PAGEALLOC is not set
# CONFIG_PAGE_POISONING is not set
# CONFIG_DEBUG_OBJECTS is not set
# CONFIG_DEBUG_SLAB is not set
CONFIG_HAVE_DEBUG_KMEMLEAK=y
# CONFIG_DEBUG_KMEMLEAK is not set
# CONFIG_DEBUG_STACK_USAGE is not set
# CONFIG_DEBUG_VM is not set
# CONFIG_DEBUG_VIRTUAL is not set
CONFIG_DEBUG_MEMORY_INIT=y
# CONFIG_DEBUG_PER_CPU_MAPS is not set
CONFIG_HAVE_DEBUG_STACKOVERFLOW=y
# CONFIG_DEBUG_STACKOVERFLOW is not set
CONFIG_HAVE_ARCH_KMEMCHECK=y
CONFIG_ARCH_HAS_KCOV=y
# CONFIG_KCOV is not set
# CONFIG_DEBUG_SHIRQ is not set


#
# Debug Lockups and Hangs
#
```

CONFIG_LOCKUP_DETECTOR is not set

CONFIG_DETECT_HUNG_TASK is not set

CONFIG_WQ_WATCHDOG is not set

CONFIG_PANIC_ON_OOPS is not set

CONFIG_PANIC_ON_OOPS_VALUE=0

CONFIG_PANIC_TIMEOUT=0

CONFIG_SCHED_DEBUG is not set

CONFIG_SCHED_INFO is not set

CONFIG_SCHEDSTATS is not set

CONFIG_SCHED_STACK_END_CHECK is not set

CONFIG_DEBUG_TIMEKEEPING is not set

CONFIG_TIMER_STATS is not set

#

Lock Debugging (spinlocks, mutexes, etc...)

#

CONFIG_DEBUG_RT_MUTEXES is not set

CONFIG_DEBUG_SPINLOCK is not set

CONFIG_DEBUG_MUTEXES is not set

CONFIG_DEBUG_WW_MUTEX_SLOWPATH is not set

CONFIG_DEBUG_LOCK_ALLOC is not set

CONFIG_PROVE_LOCKING is not set

CONFIG_LOCK_STAT is not set

CONFIG_DEBUG_ATOMIC_SLEEP is not set

CONFIG_DEBUG_LOCKING_API_SELFTESTS is not set

CONFIG_LOCK_TORTURE_TEST is not set

```
# CONFIG_STACKTRACE is not set

# CONFIG_DEBUG_KOBJECT is not set

CONFIG_DEBUG_BUGVERBOSE=y

# CONFIG_DEBUG_LIST is not set

# CONFIG_DEBUG_PI_LIST is not set

# CONFIG_DEBUG_SG is not set

# CONFIG_DEBUG_NOTIFIERS is not set

# CONFIG_DEBUG_CREDENTIALS is not set


#
# RCU Debugging
#
# CONFIG_PROVE_RCU is not set

# CONFIG_SPARSE_RCU_POINTER is not set

# CONFIG_TORTURE_TEST is not set

# CONFIG_RCU_PERF_TEST is not set

# CONFIG_RCU_TORTURE_TEST is not set

CONFIG_RCU_CPU_STALL_TIMEOUT=60

# CONFIG_RCU_TRACE is not set

# CONFIG_RCU_EQS_DEBUG is not set

# CONFIG_DEBUG_WQ_FORCE_RR_CPU is not set

# CONFIG_DEBUG_BLOCK_EXT_DEVT is not set

# CONFIG_CPU_HOTPLUG_STATE_CONTROL is not set

# CONFIG_NOTIFIER_ERROR_INJECTION is not set

# CONFIG_FAULT_INJECTION is not set

# CONFIG_LATENCYTOP is not set
```

```
CONFIG_USER_STACKTRACE_SUPPORT=y

CONFIG_HAVE_FUNCTION_TRACER=y

CONFIG_HAVE_FUNCTION_GRAPH_TRACER=y

CONFIG_HAVE_FUNCTION_GRAPH_FP_TEST=y

CONFIG_HAVE_DYNAMIC_FTRACE=y

CONFIG_HAVE_DYNAMIC_FTRACE_WITH_REGS=y

CONFIG_HAVE_FTRACE_MCOUNT_RECORD=y

CONFIG_HAVE_SYSCALL_TRACEPOINTS=y

CONFIG_HAVE_FENTRY=y

CONFIG_HAVE_C_RECORDMCOUNT=y

CONFIG_TRACE_CLOCK=y

CONFIG_RING_BUFFER=y

CONFIG_RING_BUFFER_ALLOW_SWAP=y

CONFIG_TRACING_SUPPORT=y

CONFIG_FTRACE=y

# CONFIG_FUNCTION_TRACER is not set

# CONFIG_IRQSOFF_TRACER is not set

# CONFIG_SCHED_TRACER is not set

# CONFIG_ENABLE_DEFAULT_TRACERS is not set

# CONFIG_FTRACE_SYSCALLS is not set

# CONFIG_TRACER_SNAPSHOT is not set

CONFIG_BRANCH_PROFILE_NONE=y

# CONFIG_PROFILE_ANNOTATED_BRANCHES is not set

# CONFIG_PROFILE_ALL_BRANCHES is not set

# CONFIG_STACK_TRACER is not set

# CONFIG_BLK_DEV_IO_TRACE is not set
```

CONFIG_UPROBE_EVENT is not set

CONFIG_PROBE_EVENTS is not set

CONFIG_MMIOTRACE is not set

CONFIG_HIST_TRIGGERS is not set

CONFIG_TRACEPOINT_BENCHMARK is not set

CONFIG_RING_BUFFER_BENCHMARK is not set

CONFIG_RING_BUFFER_STARTUP_TEST is not set

#
Runtime Testing
#
CONFIG_TEST_LIST_SORT is not set

CONFIG_BACKTRACE_SELF_TEST is not set

CONFIG_RBTREE_TEST is not set

CONFIG_INTERVAL_TREE_TEST is not set

CONFIG_PERCPU_TEST is not set

CONFIG_ATOMIC64_SELFTEST is not set

CONFIG_TEST_HEXDUMP is not set

CONFIG_TEST_STRING_HELPERS is not set

CONFIG_TEST_KSTRTOX is not set

CONFIG_TEST_PRINTF is not set

CONFIG_TEST_BITMAP is not set

CONFIG_TEST_UUID is not set

CONFIG_TEST_RHASHTABLE is not set

CONFIG_TEST_HASH is not set

CONFIG_PROVIDE_OHCI1394_DMA_INIT is not set

```
# CONFIG_DMA_API_DEBUG is not set

# CONFIG_TEST_LKM is not set

# CONFIG_TEST_USER_COPY is not set

# CONFIG_TEST_BPF is not set

# CONFIG_TEST_FIRMWARE is not set

# CONFIG_TEST_UDELAY is not set

# CONFIG_MEMTEST is not set

# CONFIG_TEST_STATIC_KEYS is not set

# CONFIG_SAMPLES is not set

CONFIG_HAVE_ARCH_KGDB=y

# CONFIG_KGDB is not set

CONFIG_ARCH_HAS_UBSAN_SANITIZE_ALL=y

# CONFIG_UBSAN is not set

CONFIG_ARCH_HAS_DEVMEM_IS_ALLOWED=y

# CONFIG_STRICT_DEVMEM is not set

CONFIG_X86_VERBOSE_BOOTUP=y

CONFIG_EARLY_PRINTK=y

# CONFIG_EARLY_PRINTK_DBGP is not set

# CONFIG_X86_PTDUMP_CORE is not set

# CONFIG_X86_PTDUMP is not set

CONFIG_DEBUG_RODATA_TEST=y

# CONFIG_DEBUG_WX is not set

# CONFIG_DEBUG_SET_MODULE_RONX is not set

# CONFIG_DEBUG_NX_TEST is not set

CONFIG_DOUBLEFAULT=y

# CONFIG_DEBUG_TLBFLUSH is not set
```

CONFIG_IOMMU_DEBUG is not set

CONFIG_IOMMU_STRESS is not set

CONFIG_HAVE_MMIOTRACE_SUPPORT=y

CONFIG_IO_DELAY_TYPE_0X80=0

CONFIG_IO_DELAY_TYPE_0XED=1

CONFIG_IO_DELAY_TYPE_UDELAY=2

CONFIG_IO_DELAY_TYPE_NONE=3

CONFIG_IO_DELAY_0X80=y

CONFIG_IO_DELAY_0XED is not set

CONFIG_IO_DELAY_UDELAY is not set

CONFIG_IO_DELAY_NONE is not set

CONFIG_DEFAULT_IO_DELAY_TYPE=0

CONFIG_CPA_DEBUG is not set

CONFIG_OPTIMIZE_INLINING is not set

CONFIG_DEBUG_ENTRY is not set

CONFIG_DEBUG_NMI_SELFTEST is not set

CONFIG_X86_DEBUG_FPU=y

CONFIG_PUNIT_ATOM_DEBUG is not set

#
Security options
#
CONFIG_KEYS is not set

CONFIG_SECURITY_DMESG_RESTRICT=y

CONFIG_SECURITY is not set

CONFIG_SECURITYFS is not set

```
CONFIG_HAVE_HARDENED_USERCOPY_ALLOCATOR=y

CONFIG_HAVE_ARCH_HARDENED_USERCOPY=y

# CONFIG_HARDENED_USERCOPY is not set

CONFIG_DEFAULT_SECURITY_DAC=y

CONFIG_DEFAULT_SECURITY=""

CONFIG_CRYPTO=y


#
# Crypto core or helper
#
CONFIG_CRYPTO_ALGAPI=y

CONFIG_CRYPTO_ALGAPI2=y

CONFIG_CRYPTO_AEAD=m

CONFIG_CRYPTO_AEAD2=y

CONFIG_CRYPTO_BLKCIPHER=m

CONFIG_CRYPTO_BLKCIPHER2=y

CONFIG_CRYPTO_HASH=y

CONFIG_CRYPTO_HASH2=y

CONFIG_CRYPTO_RNG=m

CONFIG_CRYPTO_RNG2=y

CONFIG_CRYPTO_RNG_DEFAULT=m

CONFIG_CRYPTO_AKCIPHER2=y

CONFIG_CRYPTO_KPP2=y

# CONFIG_CRYPTO_RSA is not set

# CONFIG_CRYPTO_DH is not set

# CONFIG_CRYPTO_ECDH is not set
```

```
CONFIG_CRYPTO_MANAGER=y

CONFIG_CRYPTO_MANAGER2=y

# CONFIG_CRYPTO_USER is not set

CONFIG_CRYPTO_MANAGER_DISABLE_TESTS=y

# CONFIG_CRYPTO_GF128MUL is not set

CONFIG_CRYPTO_NULL=m

CONFIG_CRYPTO_NULL2=y

# CONFIG_CRYPTO_PCRYPT is not set

CONFIG_CRYPTO_WORKQUEUE=y

# CONFIG_CRYPTO_CRYPTD is not set

# CONFIG_CRYPTO_MCRYPTD is not set

# CONFIG_CRYPTO_AUTHENC is not set

# CONFIG_CRYPTO_TEST is not set


#

# Authenticated Encryption with Associated Data

#

# CONFIG_CRYPTO_CCM is not set

# CONFIG_CRYPTO_GCM is not set

# CONFIG_CRYPTO_CHACHA20POLY1305 is not set

CONFIG_CRYPTO_SEQIV=m

CONFIG_CRYPTO_ECHAINIV=m


#

# Block modes

#
```

```
# CONFIG_CRYPTO_CBC is not set

# CONFIG_CRYPTO_CTR is not set

# CONFIG_CRYPTO_CTS is not set

CONFIG_CRYPTO_ECB=m

# CONFIG_CRYPTO_LRW is not set

# CONFIG_CRYPTO_PCBC is not set

# CONFIG_CRYPTO_XTS is not set

# CONFIG_CRYPTO_KEYWRAP is not set


#
# Hash modes
#
CONFIG_CRYPTO_CMAC=m

CONFIG_CRYPTO_HMAC=y

# CONFIG_CRYPTO_XCBC is not set

# CONFIG_CRYPTO_VMAC is not set


#
# Digest
#
CONFIG_CRYPTO_CRC32C=y

# CONFIG_CRYPTO_CRC32C_INTEL is not set

# CONFIG_CRYPTO_CRC32 is not set

# CONFIG_CRYPTO_CRC32_PCLMUL is not set

# CONFIG_CRYPTO_CRCT10DIF is not set

# CONFIG_CRYPTO_GHASH is not set
```

```
# CONFIG_CRYPTO_POLY1305 is not set

# CONFIG_CRYPTO_POLY1305_X86_64 is not set

# CONFIG_CRYPTO_MD4 is not set

CONFIG_CRYPTO_MD5=y

# CONFIG_CRYPTO_MICHAEL_MIC is not set

# CONFIG_CRYPTO_RMD128 is not set

# CONFIG_CRYPTO_RMD160 is not set

# CONFIG_CRYPTO_RMD256 is not set

# CONFIG_CRYPTO_RMD320 is not set

CONFIG_CRYPTO_SHA1=y

# CONFIG_CRYPTO_SHA1_SSSE3 is not set

# CONFIG_CRYPTO_SHA256_SSSE3 is not set

# CONFIG_CRYPTO_SHA512_SSSE3 is not set

# CONFIG_CRYPTO_SHA1_MB is not set

# CONFIG_CRYPTO_SHA256_MB is not set

# CONFIG_CRYPTO_SHA512_MB is not set

CONFIG_CRYPTO_SHA256=m

# CONFIG_CRYPTO_SHA512 is not set

# CONFIG_CRYPTO_SHA3 is not set

# CONFIG_CRYPTO_TGR192 is not set

# CONFIG_CRYPTO_WP512 is not set

# CONFIG_CRYPTO_GHASH_CLMUL_NI_INTEL is not set


#
# Ciphers
#
```

```
CONFIG_CRYPTO_AES=y

# CONFIG_CRYPTO_AES_X86_64 is not set

# CONFIG_CRYPTO_AES_NI_INTEL is not set

# CONFIG_CRYPTO_ANUBIS is not set

# CONFIG_CRYPTO_ARC4 is not set

# CONFIG_CRYPTO_BLOWFISH is not set

# CONFIG_CRYPTO_BLOWFISH_X86_64 is not set

# CONFIG_CRYPTO_CAMELLIA is not set

# CONFIG_CRYPTO_CAMELLIA_X86_64 is not set

# CONFIG_CRYPTO_CAMELLIA_AESNI_AVX_X86_64 is not set

# CONFIG_CRYPTO_CAMELLIA_AESNI_AVX2_X86_64 is not set

# CONFIG_CRYPTO_CAST5 is not set

# CONFIG_CRYPTO_CAST5_AVX_X86_64 is not set

# CONFIG_CRYPTO_CAST6 is not set

# CONFIG_CRYPTO_CAST6_AVX_X86_64 is not set

# CONFIG_CRYPTO_DES is not set

# CONFIG_CRYPTO_DES3_EDE_X86_64 is not set

# CONFIG_CRYPTO_FCRYPT is not set

# CONFIG_CRYPTO_KHAZAD is not set

# CONFIG_CRYPTO_SALSA20 is not set

# CONFIG_CRYPTO_SALSA20_X86_64 is not set

# CONFIG_CRYPTO_CHACHA20 is not set

# CONFIG_CRYPTO_CHACHA20_X86_64 is not set

# CONFIG_CRYPTO_SEED is not set

# CONFIG_CRYPTO_SERPENT is not set

# CONFIG_CRYPTO_SERPENT_SSE2_X86_64 is not set
```

```
# CONFIG_CRYPTO_SERPENT_AVX_X86_64 is not set

# CONFIG_CRYPTO_SERPENT_AVX2_X86_64 is not set

# CONFIG_CRYPTO_TEA is not set

# CONFIG_CRYPTO_TWOFISH is not set

# CONFIG_CRYPTO_TWOFISH_X86_64 is not set

# CONFIG_CRYPTO_TWOFISH_X86_64_3WAY is not set

# CONFIG_CRYPTO_TWOFISH_AVX_X86_64 is not set


#
# Compression
#
# CONFIG_CRYPTO_DEFLATE is not set

# CONFIG_CRYPTO_LZO is not set

# CONFIG_CRYPTO_842 is not set

# CONFIG_CRYPTO_LZ4 is not set

# CONFIG_CRYPTO_LZ4HC is not set


#
# Random Number Generation
#
# CONFIG_CRYPTO_ANSI_CPRNG is not set

CONFIG_CRYPTO_DRBG_MENU=m

CONFIG_CRYPTO_DRBG_HMAC=y

# CONFIG_CRYPTO_DRBG_HASH is not set

CONFIG_CRYPTO_DRBG=m

CONFIG_CRYPTO_JITTERENTROPY=m
```

CONFIG_CRYPTO_USER_API_HASH is not set

CONFIG_CRYPTO_USER_API_SKCIPHER is not set

CONFIG_CRYPTO_USER_API_RNG is not set

CONFIG_CRYPTO_USER_API_AEAD is not set

CONFIG_CRYPTO_HW is not set

#

Certificates for signature checking

#

CONFIG_HAVE_KVM=y

CONFIG_VIRTUALIZATION is not set

CONFIG_BINARY_PRINTF is not set

#

Library routines

#

CONFIG_BITREVERSE=y

CONFIG_HAVE_ARCH_BITREVERSE is not set

CONFIG_RATIONAL=y

CONFIG_GENERIC_STRNCPY_FROM_USER=y

CONFIG_GENERIC_STRNLEN_USER=y

CONFIG_GENERIC_NET_UTILS=y

CONFIG_GENERIC_FIND_FIRST_BIT=y

CONFIG_GENERIC_PCI_IOMAP=y

CONFIG_GENERIC_IOMAP=y

CONFIG_GENERIC_IO=y

```
CONFIG_ARCH_USE_CMPXCHG_LOCKREF=y

CONFIG_ARCH_HAS_FAST_MULTIPLIER=y

# CONFIG_CRC_CCITT is not set

CONFIG_CRC16=y

# CONFIG_CRC_T10DIF is not set

# CONFIG_CRC_ITU_T is not set

CONFIG_CRC32=y

# CONFIG_CRC32_SELFTEST is not set

CONFIG_CRC32_SLICEBY8=y

# CONFIG_CRC32_SLICEBY4 is not set

# CONFIG_CRC32_SARWATE is not set

# CONFIG_CRC32_BIT is not set

# CONFIG_CRC7 is not set

CONFIG_LIBCRC32C=y

# CONFIG_CRC8 is not set

# CONFIG_AUDIT_ARCH_COMPAT_GENERIC is not set

# CONFIG_RANDOM32_SELFTEST is not set

CONFIG_ZLIB_INFLATE=y

CONFIG_LZO_DECOMPRESS=y

CONFIG_LZ4_DECOMPRESS=y

CONFIG_XZ_DEC=y

CONFIG_XZ_DEC_X86=y

CONFIG_XZ_DEC_POWERPC=y

CONFIG_XZ_DEC_IA64=y

CONFIG_XZ_DEC_ARM=y

CONFIG_XZ_DEC_ARMTHUMB=y
```

```
CONFIG_XZ_DEC_SPARC=y

CONFIG_XZ_DEC_BCJ=y

# CONFIG_XZ_DEC_TEST is not set

CONFIG_DECOMPRESS_GZIP=y

CONFIG_DECOMPRESS_BZIP2=y

CONFIG_DECOMPRESS_LZMA=y

CONFIG_DECOMPRESS_XZ=y

CONFIG_DECOMPRESS_LZO=y

CONFIG_DECOMPRESS_LZ4=y

CONFIG_GENERIC_ALLOCATOR=y

CONFIG_RADIX_TREE_MULTIORDER=y

CONFIG_HAS_IOMEM=y

CONFIG_HAS_IOPORT_MAP=y

CONFIG_HAS_DMA=y

CONFIG_CPUMASK_OFFSTACK=y

CONFIG_CPU_RMAP=y

CONFIG_DQL=y

CONFIG_GLOB=y

# CONFIG_GLOB_SELFTEST is not set

CONFIG_NLATTR=y

CONFIG_ARCH_HAS_ATOMIC64_DEC_IF_POSITIVE=y

# CONFIG_CORDIC is not set

# CONFIG_DDR is not set

# CONFIG_IRQ_POLL is not set

# CONFIG_SG_SPLIT is not set

CONFIG_SG_POOL=y
```

```
CONFIG_ARCH_HAS_SG_CHAIN=y

CONFIG_ARCH_HAS_PMEM_API=y

CONFIG_ARCH_HAS_MMIO_FLUSH=y
```