ООО «РЕД СОФТ»

**Отчёт о проведении тестирования оборудования DI-1100 на совместимость с операционной системой РЕД ОС 7.3**

г. Москва, 2021

1. Технические характеристики АРМ:

|  |  |
| --- | --- |
| DI-1100 | |
| **Процессор** | Процессор Intel(R) Core(TM) i3-8145UE CPU @ 2.20GHz |
| **Оперативная память** | Модуль памяти 16 ГБ |
| **Дисковый массив №1** | Накопитель 64 ГБ |

1. Результаты тестирования специалистами ООО «РЕД СОФТ» и ООО "Ниеншанц-Автоматика":

* проведена успешная установка РЕД ОС 7.3;
* проведено тестирование: DI-1100 результат тестирования положительный.

1. Результаты тестирования специалистами ООО «РЕД СОФТ» и ООО "Ниеншанц-Автоматика"оборудования – DI-1100

|  |  |  |  |
| --- | --- | --- | --- |
| № п/п | Результат тестирования | Результат | Результат выполнения |
| **1** | **Тестирование CPU** | | |
| 1.1 | Вывод информации о процессоре с помощью утилиты lscpu | Успешно | Приложение 1 п.1.1 |
| 1.2 | Стресс тест процессора с помощью утилиты stress-ng | Успешно | Приложение 1 п.1.2 |
| 1.3 | Вывод сенсоров температуры компонентов с помощью утилиты sensors | Успешно | Приложение 1 п.1.3 |
| **2** | **Тестирование оперативной памяти** | | |
| 2.1 | Просмотр объёма оперативной памяти производится командой free –h | Успешно | Приложение 1 п.2.1 |
| 2.2 | Просмотр подробной информации о модулях оперативной памяти с помощью утилиты dmidecode | Успешно | Приложение 1 п.2.2 |
| 2.3 | Стресс тест оперативной памяти с помощью утилиты stress-ng | Успешно | Приложение 1 п.2.3 |
| **3** | **Тестирование системы хранения** | | |
| 3.1 | Вывод доступных устройств хранения с помощью ls | Успешно | Приложение 1 п.3.1 |
| 3.2 | Вывод информации о примонтированных разделах c помощью df | Успешно | Приложение 1 п.3.2 |
| 3.3 | Вывод SMART всех дисков, поддерживающих данную технологию с помощью smartctl | Успешно | Приложение 1 п.3.3 |
| 3.4 | Тестирование скорости всех накопителей с помощью утилиты hdparm | Успешно | Приложение 1 п.3.4 |
| **4** | **Тестирование устройств, подключенных к шине PCI** | | |
| 4.1 | Вывод информации о PCI устройствах с помощью lspci | Успешно | Приложение 1 п.4.1 |
| 4.2 | Вывод информации о применяемых драйверах для PCI устройств с помощью утилиты lspci | Успешно | Приложение 1 п.4.2 |
| **5** | **Тестирование SCSI устройств** | | |
| 5.1 | Вывод информации о SCSI устройствах с помощью lsscsi | Успешно | Приложение 1 п.5 |
| **6** | **Тестирование USB устройств** | | |
| 6.1 | Вывод информации о подключенных USB устройствах с помощью lsusb | Успешно | Приложение 1 п.6 |
| **7** | **Дополнительные тесты** | | |
| 7.1 | Вывод подробной информации о всех имеющихся устройствах inxi | Успешно | Приложение 1 п.7.1 |
| 7.2 | Тестирование с помощью бенчмарка 7Zip | Успешно | Приложение 1 п.7.2 |
| 7.3 | Тестирование сети с помощью утилиты mtr | Успешно | Приложение 1 п.7.3 |
| 7.4 | Вывод информации DMI для всех возможных устройств | Успешно | Приложение 1 п.7.4 |

Приложение 1

1 Тестирование CPU

* 1. Результат выполнения команды lscpu:

Архитектура: x86\_64

CPU op-mode(s): 32-bit, 64-bit

Address sizes: 39 bits physical, 48 bits virtual

Порядок байт: Little Endian

CPU(s): 4

On-line CPU(s) list: 0-3

ID прроизводителя: GenuineIntel

BIOS Vendor ID: Intel(R) Corporation

Имя модели: Intel(R) Core(TM) i3-8145UE CPU @ 2.20GHz

BIOS Model name: Intel(R) Core(TM) i3-8145UE CPU @ 2.20GHz

Семейство ЦПУ: 6

Модель: 142

Thread(s) per core: 2

Ядер на сокет: 2

Сокетов: 1

Степпинг: 12

CPU max MHz: 3900,0000

CPU min MHz: 400,0000

BogoMIPS: 4800.00

Флаги: fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush dts acpi mmx fxsr sse sse2 ss ht tm pbe syscall nx pdpe1gb rdtscp lm constant\_tsc art arch\_perfmon pebs bts rep\_good nopl xtopology nonstop\_tsc cpuid aperfmperf pni pclmulqdq dtes64 monitor ds\_cpl vmx est tm2 ssse3 sdbg fma cx16 xtpr pdcm pcid sse4\_1 sse4\_2 x2apic movbe popcnt tsc\_deadline\_timer aes xsave avx f16c rdrand lahf\_lm abm 3dnowprefetch cpuid\_fault epb invpcid\_single ssbd ibrs ibpb stibp ibrs\_enhanced tpr\_shadow vnmi flexpriority ept vpid ept\_ad fsgsbase tsc\_adjust bmi1 avx2 smep bmi2 erms invpcid mpx rdseed adx smap clflushopt intel\_pt xsaveopt xsavec xgetbv1 xsaves dtherm ida arat pln pts hwp hwp\_notify hwp\_act\_window hwp\_epp md\_clear flush\_l1d arch\_capabilities

Виртуализация: VT-x

L1d cache: 64 KiB (2 instances)

L1i cache: 64 KiB (2 instances)

L2 cache: 512 KiB (2 instances)

L3 cache: 4 MiB (1 instance)

NUMA node(s): 1

NUMA node0 CPU(s): 0-3

Vulnerability Itlb multihit: KVM: Mitigation: VMX disabled

Vulnerability L1tf: Not affected

Vulnerability Mds: Not affected

Vulnerability Meltdown: Not affected

Vulnerability Spec store bypass: Mitigation; Speculative Store Bypass disabled via prctl and seccomp

Vulnerability Spectre v1: Mitigation; usercopy/swapgs barriers and \_\_user pointer sanitization

Vulnerability Spectre v2: Mitigation; Enhanced IBRS, IBPB conditional, RSB filling

Vulnerability Srbds: Mitigation; TSX disabled

Vulnerability Tsx async abort: Not affected

1.2 Результат выполнения команды stress-ng --cpu 0 -t 60 --metrics-brief

stress-ng: info: [2419] dispatching hogs: 4 cpu

stress-ng: info: [2419] successful run completed in 90.18s (1 min, 30.18 secs)

stress-ng: info: [2419] stressor bogo ops real time usr time sys time bogo ops/s bogo ops/s

stress-ng: info: [2419] (secs) (secs) (secs) (real time) (usr+sys time)

stress-ng: info: [2419] cpu 62256 90.17 359.80 0.00 690.45 173.03

1.3 Результат выполнения команды sensors

coretemp-isa-0000

Adapter: ISA adapter

Package id 0: +42.0°C (high = +100.0°C, crit = +100.0°C)

Core 0: +42.0°C (high = +100.0°C, crit = +100.0°C)

Core 1: +38.0°C (high = +100.0°C, crit = +100.0°C)

acpitz-acpi-0

Adapter: ACPI interface

temp1: +44.0°C (crit = +105.0°C)

pch\_cannonlake-virtual-0

Adapter: Virtual device

temp1: +29.0°C

2 Тестирование ОЗУ

2.1 Результат выполнения команды free –h

total used free shared buff/cache available

Mem: 15Gi 602Mi 14Gi 95Mi 740Mi 14Gi

Swap: 3,8Gi 0B 3,8Gi

2.2 Результат выполнения команды dmidecode memory

# dmidecode 3.2

Getting SMBIOS data from sysfs.

SMBIOS 3.2.0 present.

Handle 0x003A, DMI type 16, 23 bytes

Physical Memory Array

Location: System Board Or Motherboard

Use: System Memory

Error Correction Type: None

Maximum Capacity: 32 GB

Error Information Handle: Not Provided

Number Of Devices: 2

Handle 0x0047, DMI type 17, 84 bytes

Memory Device

Array Handle: 0x003A

Error Information Handle: Not Provided

Total Width: 64 bits

Data Width: 64 bits

Size: 16 GB

Form Factor: SODIMM

Set: None

Locator: ChannelA-DIMM0

Bank Locator: BANK 0

Type: DDR4

Type Detail: Synchronous

Speed: 2667 MT/s

Manufacturer: 8AD3

Serial Number: 00000000

Asset Tag: 9876543210

Part Number: CIR-W4SUSW2616G

Rank: 2

Configured Memory Speed: 2400 MT/s

Minimum Voltage: 1.2 V

Maximum Voltage: 1.2 V

Configured Voltage: 1.2 V

Memory Technology: DRAM

Memory Operating Mode Capability: Volatile memory

Firmware Version: Not Specified

Module Manufacturer ID: Bank 11, Hex 0xD3

Module Product ID: Unknown

Memory Subsystem Controller Manufacturer ID: Unknown

Memory Subsystem Controller Product ID: Unknown

Non-Volatile Size: None

Volatile Size: 16 GB

Cache Size: None

Logical Size: None

Handle 0x0048, DMI type 17, 84 bytes

Memory Device

Array Handle: 0x003A

Error Information Handle: Not Provided

Total Width: Unknown

Data Width: Unknown

Size: No Module Installed

Form Factor: Unknown

Set: None

Locator: ChannelB-DIMM0

Bank Locator: BANK 2

Type: Unknown

Type Detail: None

Speed: Unknown

Manufacturer: Not Specified

Serial Number: Not Specified

Asset Tag: Not Specified

Part Number: Not Specified

Rank: Unknown

Configured Memory Speed: Unknown

Minimum Voltage: Unknown

Maximum Voltage: Unknown

Configured Voltage: Unknown

Memory Technology: <OUT OF SPEC>

Memory Operating Mode Capability: None

Firmware Version: Not Specified

Module Manufacturer ID: Unknown

Module Product ID: Unknown

Memory Subsystem Controller Manufacturer ID: Unknown

Memory Subsystem Controller Product ID: Unknown

Non-Volatile Size: None

Volatile Size: None

Cache Size: None

Logical Size: None

2.3 Результат выполнения команды: stress-ng ram test

stress-ng: info: [2437] disabled 'oom-pipe' as it may hang or reboot the machine (enable it with the --pathological option)

stress-ng: info: [2437] dispatching hogs: 4 atomic, 4 bad-altstack, 4 bsearch, 4 context, 4 full, 4 heapsort, 4 hsearch, 4 judy, 4 lockbus, 4 lsearch, 4 malloc, 4 matrix, 4 matrix-3d, 4 mcontend, 4 membarrier, 4 memcpy, 4 memfd, 4 memrate, 4 memthrash, 4 mergesort, 4 mincore, 4 null, 4 numa, 4 pipe, 4 pipeherd, 4 qsort, 4 radixsort, 4 remap, 4 resources, 4 rmap, 4 shellsort, 4 skiplist, 4 stack, 4 stackmmap, 4 str, 4 stream, 4 tlb-shootdown, 4 tmpfs, 4 tree, 4 tsearch, 4 vm, 4 vm-addr, 4 vm-rw, 4 vm-segv, 4 wcs, 4 zero, 4 zlib

stress-ng: info: [18162] stress-ng-memrate: write64: 3005.34 MB/sec

stress-ng: info: [18162] stress-ng-memrate: read64: 3213.77 MB/sec

stress-ng: info: [18163] stress-ng-memrate: write64: 2969.04 MB/sec

stress-ng: info: [18162] stress-ng-memrate: write32: 2910.53 MB/sec

stress-ng: info: [18161] stress-ng-memrate: write64: 3218.41 MB/sec

stress-ng: info: [18162] stress-ng-memrate: read32: 3113.42 MB/sec

stress-ng: info: [18163] stress-ng-memrate: read64: 3247.06 MB/sec

stress-ng: info: [18162] stress-ng-memrate: write16: 2480.16 MB/sec

stress-ng: info: [18161] stress-ng-memrate: read64: 2967.21 MB/sec

stress-ng: info: [18163] stress-ng-memrate: write32: 3028.44 MB/sec

stress-ng: info: [18162] stress-ng-memrate: read16: 3242.51 MB/sec

stress-ng: info: [18161] stress-ng-memrate: write32: 2851.68 MB/sec

stress-ng: info: [18163] stress-ng-memrate: read32: 3217.68 MB/sec

stress-ng: info: [18162] stress-ng-memrate: write8: 1712.75 MB/sec

stress-ng: info: [18161] stress-ng-memrate: read32: 2908.01 MB/sec

stress-ng: info: [18163] stress-ng-memrate: write16: 2242.42 MB/sec

stress-ng: info: [18162] stress-ng-memrate: read8: 1906.39 MB/sec

stress-ng: info: [18161] stress-ng-memrate: write16: 2548.44 MB/sec

stress-ng: info: [18163] stress-ng-memrate: read16: 2541.39 MB/sec

stress-ng: info: [18161] stress-ng-memrate: read16: 3176.82 MB/sec

stress-ng: info: [18163] stress-ng-memrate: write8: 1828.57 MB/sec

stress-ng: info: [18161] stress-ng-memrate: write8: 1718.54 MB/sec

stress-ng: info: [18163] stress-ng-memrate: read8: 2070.05 MB/sec

stress-ng: info: [18161] stress-ng-memrate: read8: 2013.07 MB/sec

stress-ng: info: [18160] stress-ng-memrate: write64: 3029.60 MB/sec

stress-ng: info: [18160] stress-ng-memrate: read64: 3295.28 MB/sec

stress-ng: info: [18160] stress-ng-memrate: write32: 3045.66 MB/sec

stress-ng: info: [18160] stress-ng-memrate: read32: 3283.08 MB/sec

stress-ng: info: [18160] stress-ng-memrate: write16: 2130.57 MB/sec

stress-ng: info: [18160] stress-ng-memrate: read16: 2630.99 MB/sec

stress-ng: info: [18160] stress-ng-memrate: write8: 1784.90 MB/sec

stress-ng: info: [18160] stress-ng-memrate: read8: 2084.60 MB/sec

stress-ng: info: [18169] stress-ng-memthrash: starting 1 thread on each of the 4 stressors on a 4 CPU system

stress-ng: info: [18211] stress-ng-numa: system has 1 of a maximum 1024 memory NUMA nodes

stress-ng: info: [18229] stress-ng-pipeherd: 0.32 context switches per bogo operation (139192.01 per second)

stress-ng: info: [18227] stress-ng-pipeherd: 0.32 context switches per bogo operation (148633.10 per second)

stress-ng: info: [18226] stress-ng-pipeherd: 0.33 context switches per bogo operation (144169.66 per second)

stress-ng: info: [18228] stress-ng-pipeherd: 0.33 context switches per bogo operation (144576.60 per second)

stress-ng: info: [81548] stress-ng-stream: stressor loosely based on a variant of the STREAM benchmark code

stress-ng: info: [81548] stress-ng-stream: do NOT submit any of these results to the STREAM benchmark results

stress-ng: info: [81548] stress-ng-stream: Using CPU cache size of 4096K

stress-ng: info: [81551] stress-ng-stream: memory rate: 2936.49 MB/sec, 1174.60 Mflop/sec (instance 3)

stress-ng: info: [81550] stress-ng-stream: memory rate: 2845.80 MB/sec, 1138.32 Mflop/sec (instance 2)

stress-ng: info: [81549] stress-ng-stream: memory rate: 2835.74 MB/sec, 1134.29 Mflop/sec (instance 1)

stress-ng: info: [81548] stress-ng-stream: memory rate: 2605.03 MB/sec, 1042.01 Mflop/sec (instance 0)

stress-ng: info: [577827] stress-ng-zlib: instance 1: compression ratio: 15.17% (6.43 MB/sec)

stress-ng: info: [577829] stress-ng-zlib: instance 3: compression ratio: 15.20% (6.37 MB/sec)

stress-ng: info: [577828] stress-ng-zlib: instance 2: compression ratio: 15.17% (6.23 MB/sec)

stress-ng: info: [577826] stress-ng-zlib: instance 0: compression ratio: 15.54% (6.39 MB/sec)

stress-ng: info: [2437] successful run completed in 2827.78s (47 mins, 7.78 secs)

stress-ng: info: [2437] stressor bogo ops real time usr time sys time bogo ops/s bogo ops/s

stress-ng: info: [2437] (secs) (secs) (secs) (real time) (usr+sys time)

stress-ng: info: [2437] atomic 11561755 60.00 239.63 0.00 192696.05 48248.36

stress-ng: info: [2437] bad-altstack 2225 60.06 0.76 0.77 37.05 1454.25

stress-ng: info: [2437] bsearch 53879 60.00 239.62 0.00 897.96 224.85

stress-ng: info: [2437] context 820472 60.00 120.34 119.27 13674.54 3424.20

stress-ng: info: [2437] full 24583401 60.00 150.49 85.67 409723.56 104096.38

stress-ng: info: [2437] heapsort 619 60.00 239.50 0.00 10.32 2.58

stress-ng: info: [2437] hsearch 536204 60.00 239.52 0.00 8936.73 2238.66

stress-ng: info: [2437] judy 2286 60.05 236.07 3.10 38.07 9.56

stress-ng: info: [2437] lockbus 891471 60.00 237.69 0.06 14856.81 3749.62

stress-ng: info: [2437] lsearch 1004 60.00 239.59 0.00 16.73 4.19

stress-ng: info: [2437] malloc 435260015 60.03 237.92 0.52 7250930.19 1825448.81

stress-ng: info: [2437] matrix 484080 60.00 239.56 0.00 8068.00 2020.70

stress-ng: info: [2437] matrix-3d 22076 60.00 238.50 0.06 367.91 92.54

stress-ng: info: [2437] mcontend 47670 60.00 238.73 0.29 794.47 199.44

stress-ng: info: [2437] membarrier 32306 60.01 4.27 0.00 538.36 7565.81

stress-ng: info: [2437] memcpy 37755 60.00 237.32 0.02 629.23 159.08

stress-ng: info: [2437] memfd 4268 60.01 1.82 235.32 71.12 18.00

stress-ng: info: [2437] memrate 298 60.02 238.88 0.45 4.96 1.25

stress-ng: info: [2437] memthrash 11950 60.50 237.28 0.56 197.52 50.24

stress-ng: info: [2437] mergesort 3499 60.00 238.94 0.01 58.32 14.64

stress-ng: info: [2437] mincore 662201 60.00 29.48 210.10 11036.69 2764.01

stress-ng: info: [2437] null 41162583 60.00 25.37 214.07 686043.57 171911.89

stress-ng: info: [2437] numa 1884 60.06 26.34 211.12 31.37 7.93

stress-ng: info: [2437] pipe 52363868 60.00 38.23 201.19 872728.07 218711.34

stress-ng: info: [2437] pipeherd 106810617 60.03 24.00 215.43 1779415.09 446103.73

stress-ng: info: [2437] qsort 1155 60.00 239.39 0.00 19.25 4.82

stress-ng: info: [2437] radixsort 1796 60.00 238.41 0.01 29.93 7.53

stress-ng: info: [2437] remap 38402 60.00 6.79 232.45 640.00 160.52

stress-ng: info: [2437] resources 47177 60.77 11.26 187.12 776.32 237.81

stress-ng: info: [2437] rmap 64 60.00 0.00 0.10 1.07 640.00

stress-ng: info: [2437] shellsort 1769 60.00 237.04 0.03 29.48 7.46

stress-ng: info: [2437] skiplist 929779 60.00 238.27 0.02 15496.30 3901.88

stress-ng: info: [2437] stack 731184 62.37 3.40 83.27 11722.93 8436.41

stress-ng: info: [2437] stackmmap 1148 60.02 0.74 9.03 19.13 117.50

stress-ng: info: [2437] str 5664998 60.00 238.34 0.03 94416.98 23765.57

stress-ng: info: [2437] stream 16820 60.01 231.17 0.21 280.30 72.69

stress-ng: info: [2437] tlb-shootdown 21253 60.00 41.22 192.95 354.20 90.76

stress-ng: info: [2437] tmpfs 304 60.04 137.94 98.14 5.06 1.29

stress-ng: info: [2437] tree 147 60.00 235.59 0.09 2.45 0.62

stress-ng: info: [2437] tsearch 1590 60.05 236.12 0.08 26.48 6.73

stress-ng: info: [2437] vm 1608519 60.01 233.41 1.88 26805.82 6836.33

stress-ng: info: [2437] vm-addr 300 60.63 232.14 4.74 4.95 1.27

stress-ng: info: [2437] vm-rw 41803 60.00 0.34 231.59 696.67 180.24

stress-ng: info: [2437] vm-segv 411190 60.00 92.16 142.78 6853.17 1750.19

stress-ng: info: [2437] wcs 3278684 60.00 238.27 0.02 54644.78 13759.22

stress-ng: info: [2437] zero 5709575 60.00 27.47 199.33 95159.66 25174.49

stress-ng: info: [2437] zlib 13683 60.02 237.67 0.27 227.99 57.51

3 Тестирование жестких дисков

3.1 Результат выполнения команды ls -l /dev

crw-------. 1 root root 2, 61 фев 17 16:39 ptysd

brw-rw----. 1 root disk 8, 0 фев 17 16:39 sda

brw-rw----. 1 root disk 8, 1 фев 17 16:39 sda1

brw-rw----. 1 root disk 8, 2 фев 17 16:39 sda2

crw-------. 1 root root 3, 61 фев 17 16:39 ttysd

crw-------. 1 root root 10, 130 фев 17 16:39 watchdog

crw-------. 1 root root 246, 0 фев 17 16:39 watchdog0

3.2 Результат выполнения команды df -h

Файловая система Размер Использовано Дост Использовано% Cмонтировано в

devtmpfs 7,8G 0 7,8G 0% /dev

tmpfs 7,8G 0 7,8G 0% /dev/shm

tmpfs 3,1G 3,6M 3,1G 1% /run

/dev/mapper/ro\_redos-root 36G 6,9G 28G 21% /

/dev/mapper/ro\_redos-home 18G 124M 17G 1% /home

/dev/sda1 976M 159M 750M 18% /boot

tmpfs 1,6G 120K 1,6G 1% /run/user/1000

3.3 Результат выполнения команды smartctl --info для каждого диска

SMART for /dev/sda

smartctl 7.1 2019-12-30 r5022 [x86\_64-linux-5.15.10-1.el7.x86\_64] (local build)

Copyright (C) 2002-19, Bruce Allen, Christian Franke, www.smartmontools.org

=== START OF INFORMATION SECTION ===

Device Model: CIS 2S T380 64GB W

Serial Number: 200800000116

LU WWN Device Id: d 000000 000000000

Firmware Version: A008024d

User Capacity: 64 023 257 088 bytes [64,0 GB]

Sector Size: 512 bytes logical/physical

Rotation Rate: Solid State Device

Form Factor: 2.5 inches

Device is: Not in smartctl database [for details use: -P showall]

ATA Version is: ACS-2 (minor revision not indicated)

SATA Version is: SATA 3.2, 6.0 Gb/s (current: 6.0 Gb/s)

Local Time is: Thu Feb 17 17:28:34 2022 MSK

SMART support is: Available - device has SMART capability.

SMART support is: Enabled

3.4 Результат выполнения команды hdparm –Tt для каждого диска

Speed for /dev/sda

/dev/sda:

Timing cached reads: 14846 MB in 2.00 seconds = 7433.63 MB/sec

Timing buffered disk reads: 1082 MB in 3.00 seconds = 360.25 MB/sec

4 Проверка PCI устройств

4.1 Результат выполнения команды lspci

00:00.0 Host bridge: Intel Corporation Device 3e35 (rev 0c)

00:02.0 VGA compatible controller: Intel Corporation UHD Graphics 620 (Whiskey Lake) (rev 02)

00:08.0 System peripheral: Intel Corporation Xeon E3-1200 v5/v6 / E3-1500 v5 / 6th/7th/8th Gen Core Processor Gaussian Mixture Model

00:12.0 Signal processing controller: Intel Corporation Cannon Point-LP Thermal Controller (rev 30)

00:14.0 USB controller: Intel Corporation Cannon Point-LP USB 3.1 xHCI Controller (rev 30)

00:14.2 RAM memory: Intel Corporation Cannon Point-LP Shared SRAM (rev 30)

00:16.0 Communication controller: Intel Corporation Cannon Point-LP MEI Controller #1 (rev 30)

00:17.0 SATA controller: Intel Corporation Cannon Point-LP SATA Controller [AHCI Mode] (rev 30)

00:1d.0 PCI bridge: Intel Corporation Cannon Point-LP PCI Express Root Port #10 (rev f0)

00:1f.0 ISA bridge: Intel Corporation Cannon Point-LP LPC Controller (rev 30)

00:1f.3 Audio device: Intel Corporation Cannon Point-LP High Definition Audio Controller (rev 30)

00:1f.4 SMBus: Intel Corporation Cannon Point-LP SMBus Controller (rev 30)

00:1f.5 Serial bus controller [0c80]: Intel Corporation Cannon Point-LP SPI Controller (rev 30)

00:1f.6 Ethernet controller: Intel Corporation Ethernet Connection (6) I219-LM (rev 30)

01:00.0 Ethernet controller: Intel Corporation I210 Gigabit Network Connection (rev 03)

4.2 Результат выполнения команды lspci -k

00:00.0 Host bridge: Intel Corporation Device 3e35 (rev 0c)

DeviceName: Onboard - Other

Subsystem: Intel Corporation Device 7270

Kernel driver in use: skl\_uncore

00:02.0 VGA compatible controller: Intel Corporation UHD Graphics 620 (Whiskey Lake) (rev 02)

DeviceName: Onboard - Video

Subsystem: Intel Corporation Device 2212

Kernel driver in use: i915

Kernel modules: i915

00:08.0 System peripheral: Intel Corporation Xeon E3-1200 v5/v6 / E3-1500 v5 / 6th/7th/8th Gen Core Processor Gaussian Mixture Model

DeviceName: Onboard - Other

Subsystem: Intel Corporation Device 7270

00:12.0 Signal processing controller: Intel Corporation Cannon Point-LP Thermal Controller (rev 30)

DeviceName: Onboard - Other

Subsystem: Intel Corporation Device 7270

Kernel driver in use: intel\_pch\_thermal

Kernel modules: intel\_pch\_thermal

00:14.0 USB controller: Intel Corporation Cannon Point-LP USB 3.1 xHCI Controller (rev 30)

DeviceName: Onboard - Other

Subsystem: Intel Corporation Device 7270

Kernel driver in use: xhci\_hcd

00:14.2 RAM memory: Intel Corporation Cannon Point-LP Shared SRAM (rev 30)

DeviceName: Onboard - Other

Subsystem: Intel Corporation Device 7270

00:16.0 Communication controller: Intel Corporation Cannon Point-LP MEI Controller #1 (rev 30)

DeviceName: Onboard - Other

Subsystem: Intel Corporation Device 7270

Kernel driver in use: mei\_me

Kernel modules: mei\_me

00:17.0 SATA controller: Intel Corporation Cannon Point-LP SATA Controller [AHCI Mode] (rev 30)

DeviceName: Onboard - SATA

Subsystem: Intel Corporation Device 7270

Kernel driver in use: ahci

Kernel modules: ahci

00:1d.0 PCI bridge: Intel Corporation Cannon Point-LP PCI Express Root Port #10 (rev f0)

Kernel driver in use: pcieport

00:1f.0 ISA bridge: Intel Corporation Cannon Point-LP LPC Controller (rev 30)

DeviceName: Onboard - Other

Subsystem: Intel Corporation Device 7270

00:1f.3 Audio device: Intel Corporation Cannon Point-LP High Definition Audio Controller (rev 30)

DeviceName: Onboard - Sound

Subsystem: Intel Corporation Device 7270

Kernel driver in use: snd\_hda\_intel

Kernel modules: snd\_hda\_intel, snd\_soc\_skl, snd\_sof\_pci\_intel\_cnl

00:1f.4 SMBus: Intel Corporation Cannon Point-LP SMBus Controller (rev 30)

DeviceName: Onboard - Other

Subsystem: Intel Corporation Device 7270

Kernel driver in use: i801\_smbus

Kernel modules: i2c\_i801

00:1f.5 Serial bus controller [0c80]: Intel Corporation Cannon Point-LP SPI Controller (rev 30)

DeviceName: Onboard - Other

Subsystem: Intel Corporation Device 7270

00:1f.6 Ethernet controller: Intel Corporation Ethernet Connection (6) I219-LM (rev 30)

DeviceName: Onboard - Ethernet

Subsystem: Intel Corporation Device 0000

Kernel driver in use: e1000e

Kernel modules: e1000e

01:00.0 Ethernet controller: Intel Corporation I210 Gigabit Network Connection (rev 03)

Kernel driver in use: igb

Kernel modules: igb

5 Проверка SCSI устройств

Результат выполнения команды lsscsi

[0:0:0:0] disk ATA CIS 2S T380 64GB 024d /dev/sda

6 Результат выполнения

команды lsusb

Bus 002 Device 001: ID 1d6b:0003 Linux Foundation 3.0 root hub

Bus 001 Device 002: ID 09da:90a0 A4Tech Co., Ltd. USB Device

Bus 001 Device 001: ID 1d6b:0002 Linux Foundation 2.0 root hub

7 Комплексная проверка аппаратной составляющей компьютера

7.1 Результат выполнения команды inxi -Fx

System:

Host: localhost.localdomain Kernel: 5.15.10-1.el7.x86\_64 x86\_64 bits: 64

compiler: gcc v: 2.30-73.el7) Desktop: MATE 1.24.1 info: mate-panel

wm: marco 1.24.1 dm: GDM 3.38.2.1

Distro: RED OS release MUROM (7.3.1) DESKTOP

Machine:

Type: Desktop Mobo: CINCOZE model: DI-1100 v: 1.0.00.001 serial: N/A

UEFI [Legacy]: American Megatrends v: 5.13 date: 10/12/2021

CPU:

Info: Dual Core model: Intel Core i3-8145UE bits: 64 type: MT MCP

arch: Kaby Lake note: check rev: C L1 cache: 128 KiB L2 cache: 4 MiB

L3 cache: 3.9 MiB

flags: avx avx2 lm nx pae sse sse2 sse3 sse4\_1 sse4\_2 ssse3 vmx

bogomips: 19200

Speed: 800 MHz min/max: 400/3900 MHz volts: 0.7 V ext-clock: 100 MHz

Core speeds (MHz): 1: 800 2: 800 3: 800 4: 800

Graphics:

Device-1: Intel UHD Graphics 620 driver: i915 v: kernel bus ID: 00:02.0

chip ID: 8086:3ea0

Display: server: X.Org 1.20.14 compositor: marco v: 1.24.1

driver: modesetting unloaded: fbdev,vesa resolution: 1920x1200~75Hz

s-dpi: 96

OpenGL: renderer: Mesa Intel UHD Graphics 620 (WHL GT2) v: 4.6 Mesa 20.2.4

direct render: Yes

Audio:

Device-1: Intel Cannon Point-LP High Definition Audio

driver: snd\_hda\_intel v: kernel bus ID: 00:1f.3 chip ID: 8086:9dc8

Sound Server: ALSA v: k5.15.10-1.el7.x86\_64

Network:

Device-1: Intel Ethernet I219-LM driver: e1000e v: kernel port: efa0

bus ID: 00:1f.6 chip ID: 8086:15bd

IF: eno1 state: down mac: 2c:94:64:05:2d:34

Device-2: Intel I210 Gigabit Network driver: igb v: kernel port: 3000

bus ID: 01:00.0 chip ID: 8086:1533

IF: enp1s0 state: up speed: 1000 Mbps duplex: full mac: 2c:94:64:05:2d:35

Drives:

Local Storage: total: 59.63 GiB used: 7.41 GiB (12.4%)

ID-1: /dev/sda model: CIS 2S T380 64GB W size: 59.63 GiB speed: 6.0 Gb/s

serial: 200800000116 rev: 024d temp: 50 C

Partition:

ID-1: / size: 36 GiB used: 6.9 GiB (19.2%) fs: ext4 dev: /dev/dm-0

mapped: ro\_redos-root

ID-2: /boot size: 975.9 MiB used: 158.8 MiB (16.3%) fs: ext4

dev: /dev/sda1

ID-3: /home size: 17.57 GiB used: 123.5 MiB (0.7%) fs: ext4 dev: /dev/dm-2

mapped: ro\_redos-home

Swap:

ID-1: swap-1 type: partition size: 3.82 GiB used: 245.2 MiB (6.3%)

priority: -2 dev: /dev/dm-1 mapped: ro\_redos-swap

Sensors:

System Temperatures: cpu: 54.0 C mobo: N/A

Fan Speeds (RPM): N/A

Info:

Processes: 191 Uptime: 49m wakeups: 0 Memory: 15.49 GiB

used: 759.9 MiB (4.8%) Init: systemd v: 246 runlevel: 5

target: graphical.target Compilers: gcc: N/A Packages: rpm: 1925

Shell: sh (sudo) default: Bash v: 5.0.17 running in: mate-terminal

inxi: 3.2.00

7.2 Результат выполнения команды 7za b -mm=\*

7-Zip (a) [64] 17.04 : Copyright (c) 1999-2021 Igor Pavlov : 2017-08-28

p7zip Version 17.04 (locale=ru\_RU.UTF-8,Utf16=on,HugeFiles=on,64 bits,4 CPUs Intel(R) Core(TM) i3-8145UE CPU @ 2.20GHz (806EC),ASM,AES-NI)

Intel(R) Core(TM) i3-8145UE CPU @ 2.20GHz (806EC)

CPU Freq: - - - - - - - 1024000000 -

RAM size: 15861 MB, # CPU hardware threads: 4

RAM usage: 901 MB, # Benchmark threads: 4

Method Speed Usage R/U Rating E/U Effec

KiB/s % MIPS MIPS % %

CPU 395 3433 13559

CPU 396 3433 13593

CPU 394 3434 13526 102 400

LZMA:x1 42010 390 3940 15358 117 454

124175 392 2577 10112 76 299

LZMA:x5:mt1 7309 385 2371 9131 70 270

118481 389 2566 9991 76 295

LZMA:x5:mt2 7896 392 2517 9865 74 292

117575 390 2541 9915 75 293

Deflate:x1 96793 389 3162 12290 94 363

331705 391 2638 10306 78 305

Deflate:x5 30387 392 2985 11700 88 346

333063 391 2643 10340 78 306

Deflate:x7 10995 392 3105 12183 92 360

321938 376 2658 9990 79 295

Deflate64:x5 28741 395 3142 12420 93 367

340655 399 2673 10656 79 315

BZip2:x1 18269 398 2774 11038 82 326

104294 395 2862 11306 85 334

BZip2:x5 13771 398 2890 11493 85 340

44907 398 2214 8815 65 261

BZip2:x5:mt2 14370 396 3026 11993 90 355

53342 396 2645 10470 78 310

BZip2:x7 4995 398 3250 12941 96 383

44911 398 2213 8808 65 260

PPMD:x1 13141 398 3418 13592 101 402

10493 399 3100 12358 92 365

PPMD:x5 7619 396 3257 12913 96 382

7151 397 3373 13401 100 396

Delta:4 1895264 399 2917 11645 86 344

1823079 399 2807 11201 83 331

BCJ 3780305 397 3902 15484 115 458

3799744 397 3921 15564 116 460

AES256CBC:1 418668 399 2577 10289 76 304

365068 397 2257 8972 67 265

AES256CBC:2 3130915 397 6455 25648 191 759

6431314 398 3313 13171 98 390

CRC32:1 1597046 399 2911 11626 86 344

CRC32:4 4531072 399 2533 10113 75 299

CRC32:8 8269585 399 2809 11214 83 332

CRC64 4183069 399 2145 8567 63 253

SHA256 360200 399 1840 7348 54 217

SHA1 1075396 399 2521 10066 75 298

BLAKE2sp

CPU 399 3393 13555

------------------------------------------------------

Tot: 392 2717 10660 80 315

7.3 Результат выполнения команды mtr -rw -c 3

Start: 2022-02-17T17:32:50+0300

HOST: localhost.localdomain Loss% Snt Last Avg Best Wrst StDev

1.|-- \_gateway 0.0% 3 0.7 0.7 0.6 0.8 0.1

7.4 Результат выполнения команды dmidecode для возможных устройств

# dmidecode 3.2

Getting SMBIOS data from sysfs.

SMBIOS 3.2.0 present.

Table at 0x8CAC1000.

Handle 0x0000, DMI type 0, 26 bytes

BIOS Information

Vendor: American Megatrends Inc.

Version: 5.13

Release Date: 10/12/2021

Address: 0xF0000

Runtime Size: 64 kB

ROM Size: 16 MB

Characteristics:

PCI is supported

BIOS is upgradeable

BIOS shadowing is allowed

Boot from CD is supported

Selectable boot is supported

BIOS ROM is socketed

EDD is supported

5.25"/1.2 MB floppy services are supported (int 13h)

3.5"/720 kB floppy services are supported (int 13h)

3.5"/2.88 MB floppy services are supported (int 13h)

Print screen service is supported (int 5h)

8042 keyboard services are supported (int 9h)

Serial services are supported (int 14h)

Printer services are supported (int 17h)

ACPI is supported

USB legacy is supported

BIOS boot specification is supported

Targeted content distribution is supported

UEFI is supported

BIOS Revision: 5.13

Handle 0x0001, DMI type 1, 27 bytes

System Information

Manufacturer: CINCOZE

Product Name: DI-1100

Version: 1.0.00.001

Serial Number: Default string

UUID: 03000200-0400-0500-0006-000700080009

Wake-up Type: Power Switch

SKU Number: Default string

Family: Default string

Handle 0x0002, DMI type 2, 15 bytes

Base Board Information

Manufacturer: CINCOZE

Product Name: DI-1100

Version: 1.0.00.001

Serial Number: Default string

Asset Tag: Default string

Features:

Board is a hosting board

Board is replaceable

Location In Chassis: Default string

Chassis Handle: 0x0003

Type: Motherboard

Contained Object Handles: 0

Handle 0x0003, DMI type 3, 22 bytes

Chassis Information

Manufacturer: Default string

Type: Desktop

Lock: Not Present

Version: Default string

Serial Number: Default string

Asset Tag: Default string

Boot-up State: Safe

Power Supply State: Safe

Thermal State: Safe

Security Status: None

OEM Information: 0x00000000

Height: Unspecified

Number Of Power Cords: 1

Contained Elements: 0

SKU Number: Default string

Handle 0x0004, DMI type 8, 9 bytes

Port Connector Information

Internal Reference Designator: J1A1

Internal Connector Type: None

External Reference Designator: PS2Mouse

External Connector Type: PS/2

Port Type: Mouse Port

Handle 0x0005, DMI type 8, 9 bytes

Port Connector Information

Internal Reference Designator: J1A1

Internal Connector Type: None

External Reference Designator: Keyboard

External Connector Type: PS/2

Port Type: Keyboard Port

Handle 0x0006, DMI type 8, 9 bytes

Port Connector Information

Internal Reference Designator: J2A1

Internal Connector Type: None

External Reference Designator: TV Out

External Connector Type: Mini Centronics Type-14

Port Type: Other

Handle 0x0007, DMI type 8, 9 bytes

Port Connector Information

Internal Reference Designator: J2A2A

Internal Connector Type: None

External Reference Designator: COM A

External Connector Type: DB-9 male

Port Type: Serial Port 16550A Compatible

Handle 0x0008, DMI type 8, 9 bytes

Port Connector Information

Internal Reference Designator: J2A2B

Internal Connector Type: None

External Reference Designator: Video

External Connector Type: DB-15 female

Port Type: Video Port

Handle 0x0009, DMI type 8, 9 bytes

Port Connector Information

Internal Reference Designator: J3A1

Internal Connector Type: None

External Reference Designator: USB1

External Connector Type: Access Bus (USB)

Port Type: USB

Handle 0x000A, DMI type 8, 9 bytes

Port Connector Information

Internal Reference Designator: J3A1

Internal Connector Type: None

External Reference Designator: USB2

External Connector Type: Access Bus (USB)

Port Type: USB

Handle 0x000B, DMI type 8, 9 bytes

Port Connector Information

Internal Reference Designator: J3A1

Internal Connector Type: None

External Reference Designator: USB3

External Connector Type: Access Bus (USB)

Port Type: USB

Handle 0x000C, DMI type 8, 9 bytes

Port Connector Information

Internal Reference Designator: J9A1 - TPM HDR

Internal Connector Type: Other

External Reference Designator: Not Specified

External Connector Type: None

Port Type: Other

Handle 0x000D, DMI type 8, 9 bytes

Port Connector Information

Internal Reference Designator: J9C1 - PCIE DOCKING CONN

Internal Connector Type: Other

External Reference Designator: Not Specified

External Connector Type: None

Port Type: Other

Handle 0x000E, DMI type 8, 9 bytes

Port Connector Information

Internal Reference Designator: J2B3 - CPU FAN

Internal Connector Type: Other

External Reference Designator: Not Specified

External Connector Type: None

Port Type: Other

Handle 0x000F, DMI type 8, 9 bytes

Port Connector Information

Internal Reference Designator: J6C2 - EXT HDMI

Internal Connector Type: Other

External Reference Designator: Not Specified

External Connector Type: None

Port Type: Other

Handle 0x0010, DMI type 8, 9 bytes

Port Connector Information

Internal Reference Designator: J3C1 - GMCH FAN

Internal Connector Type: Other

External Reference Designator: Not Specified

External Connector Type: None

Port Type: Other

Handle 0x0011, DMI type 8, 9 bytes

Port Connector Information

Internal Reference Designator: J1D1 - ITP

Internal Connector Type: Other

External Reference Designator: Not Specified

External Connector Type: None

Port Type: Other

Handle 0x0012, DMI type 8, 9 bytes

Port Connector Information

Internal Reference Designator: J9E2 - MDC INTPSR

Internal Connector Type: Other

External Reference Designator: Not Specified

External Connector Type: None

Port Type: Other

Handle 0x0013, DMI type 8, 9 bytes

Port Connector Information

Internal Reference Designator: J9E4 - MDC INTPSR

Internal Connector Type: Other

External Reference Designator: Not Specified

External Connector Type: None

Port Type: Other

Handle 0x0014, DMI type 8, 9 bytes

Port Connector Information

Internal Reference Designator: J9E3 - LPC HOT DOCKING

Internal Connector Type: Other

External Reference Designator: Not Specified

External Connector Type: None

Port Type: Other

Handle 0x0015, DMI type 8, 9 bytes

Port Connector Information

Internal Reference Designator: J9E1 - SCAN MATRIX

Internal Connector Type: Other

External Reference Designator: Not Specified

External Connector Type: None

Port Type: Other

Handle 0x0016, DMI type 8, 9 bytes

Port Connector Information

Internal Reference Designator: J9G1 - LPC SIDE BAND

Internal Connector Type: Other

External Reference Designator: Not Specified

External Connector Type: None

Port Type: Other

Handle 0x0017, DMI type 8, 9 bytes

Port Connector Information

Internal Reference Designator: J8F1 - UNIFIED

Internal Connector Type: Other

External Reference Designator: Not Specified

External Connector Type: None

Port Type: Other

Handle 0x0018, DMI type 8, 9 bytes

Port Connector Information

Internal Reference Designator: J6F1 - LVDS

Internal Connector Type: Other

External Reference Designator: Not Specified

External Connector Type: None

Port Type: Other

Handle 0x0019, DMI type 8, 9 bytes

Port Connector Information

Internal Reference Designator: J2F1 - LAI FAN

Internal Connector Type: Other

External Reference Designator: Not Specified

External Connector Type: None

Port Type: Other

Handle 0x001A, DMI type 8, 9 bytes

Port Connector Information

Internal Reference Designator: J2G1 - GFX VID

Internal Connector Type: Other

External Reference Designator: Not Specified

External Connector Type: None

Port Type: Other

Handle 0x001B, DMI type 8, 9 bytes

Port Connector Information

Internal Reference Designator: J1G6 - AC JACK

Internal Connector Type: Other

External Reference Designator: Not Specified

External Connector Type: None

Port Type: Other

Handle 0x001C, DMI type 9, 17 bytes

System Slot Information

Designation: J6B2

Type: x16 PCI Express

Current Usage: In Use

Length: Long

ID: 0

Characteristics:

3.3 V is provided

Opening is shared

PME signal is supported

Bus Address: 0000:00:01.0

Handle 0x001D, DMI type 9, 17 bytes

System Slot Information

Designation: J6B1

Type: x1 PCI Express

Current Usage: In Use

Length: Short

ID: 1

Characteristics:

3.3 V is provided

Opening is shared

PME signal is supported

Bus Address: 0000:00:1c.3

Handle 0x001E, DMI type 9, 17 bytes

System Slot Information

Designation: J6D1

Type: x1 PCI Express

Current Usage: In Use

Length: Short

ID: 2

Characteristics:

3.3 V is provided

Opening is shared

PME signal is supported

Bus Address: 0000:00:1c.4

Handle 0x001F, DMI type 9, 17 bytes

System Slot Information

Designation: J7B1

Type: x1 PCI Express

Current Usage: In Use

Length: Short

ID: 3

Characteristics:

3.3 V is provided

Opening is shared

PME signal is supported

Bus Address: 0000:00:1c.5

Handle 0x0020, DMI type 9, 17 bytes

System Slot Information

Designation: J8B4

Type: x1 PCI Express

Current Usage: In Use

Length: Short

ID: 4

Characteristics:

3.3 V is provided

Opening is shared

PME signal is supported

Bus Address: 0000:00:1c.6

Handle 0x0021, DMI type 10, 6 bytes

On Board Device Information

Type: Video

Status: Enabled

Description: To Be Filled By O.E.M.

Handle 0x0022, DMI type 11, 5 bytes

OEM Strings

String 1: Default string

Handle 0x0023, DMI type 12, 5 bytes

System Configuration Options

Option 1: Default string

Handle 0x0024, DMI type 32, 20 bytes

System Boot Information

Status: No errors detected

Handle 0x0025, DMI type 34, 11 bytes

Management Device

Description: LM78-1

Type: LM78

Address: 0x00000000

Address Type: I/O Port

Handle 0x0026, DMI type 26, 22 bytes

Voltage Probe

Description: LM78A

Location: Motherboard

Status: OK

Maximum Value: Unknown

Minimum Value: Unknown

Resolution: Unknown

Tolerance: Unknown

Accuracy: Unknown

OEM-specific Information: 0x00000000

Nominal Value: Unknown

Handle 0x0027, DMI type 36, 16 bytes

Management Device Threshold Data

Lower Non-critical Threshold: 1

Upper Non-critical Threshold: 2

Lower Critical Threshold: 3

Upper Critical Threshold: 4

Lower Non-recoverable Threshold: 5

Upper Non-recoverable Threshold: 6

Handle 0x0028, DMI type 35, 11 bytes

Management Device Component

Description: Default string

Management Device Handle: 0x0025

Component Handle: 0x0026

Threshold Handle: 0x0027

Handle 0x0029, DMI type 28, 22 bytes

Temperature Probe

Description: LM78A

Location: Motherboard

Status: OK

Maximum Value: Unknown

Minimum Value: Unknown

Resolution: Unknown

Tolerance: Unknown

Accuracy: Unknown

OEM-specific Information: 0x00000000

Nominal Value: Unknown

Handle 0x002A, DMI type 36, 16 bytes

Management Device Threshold Data

Lower Non-critical Threshold: 1

Upper Non-critical Threshold: 2

Lower Critical Threshold: 3

Upper Critical Threshold: 4

Lower Non-recoverable Threshold: 5

Upper Non-recoverable Threshold: 6

Handle 0x002B, DMI type 35, 11 bytes

Management Device Component

Description: Default string

Management Device Handle: 0x0025

Component Handle: 0x0029

Threshold Handle: 0x002A

Handle 0x002C, DMI type 27, 15 bytes

Cooling Device

Temperature Probe Handle: 0x0029

Type: Power Supply Fan

Status: OK

Cooling Unit Group: 1

OEM-specific Information: 0x00000000

Nominal Speed: Unknown Or Non-rotating

Description: Cooling Dev 1

Handle 0x002D, DMI type 36, 16 bytes

Management Device Threshold Data

Lower Non-critical Threshold: 1

Upper Non-critical Threshold: 2

Lower Critical Threshold: 3

Upper Critical Threshold: 4

Lower Non-recoverable Threshold: 5

Upper Non-recoverable Threshold: 6

Handle 0x002E, DMI type 35, 11 bytes

Management Device Component

Description: Default string

Management Device Handle: 0x0025

Component Handle: 0x002C

Threshold Handle: 0x002D

Handle 0x002F, DMI type 27, 15 bytes

Cooling Device

Temperature Probe Handle: 0x0029

Type: Power Supply Fan

Status: OK

Cooling Unit Group: 1

OEM-specific Information: 0x00000000

Nominal Speed: Unknown Or Non-rotating

Description: Not Specified

Handle 0x0030, DMI type 36, 16 bytes

Management Device Threshold Data

Lower Non-critical Threshold: 1

Upper Non-critical Threshold: 2

Lower Critical Threshold: 3

Upper Critical Threshold: 4

Lower Non-recoverable Threshold: 5

Upper Non-recoverable Threshold: 6

Handle 0x0031, DMI type 35, 11 bytes

Management Device Component

Description: Default string

Management Device Handle: 0x0025

Component Handle: 0x002F

Threshold Handle: 0x0030

Handle 0x0032, DMI type 29, 22 bytes

Electrical Current Probe

Description: ABC

Location: Motherboard

Status: OK

Maximum Value: Unknown

Minimum Value: Unknown

Resolution: Unknown

Tolerance: Unknown

Accuracy: Unknown

OEM-specific Information: 0x00000000

Nominal Value: Unknown

Handle 0x0033, DMI type 36, 16 bytes

Management Device Threshold Data

Handle 0x0034, DMI type 35, 11 bytes

Management Device Component

Description: Default string

Management Device Handle: 0x0025

Component Handle: 0x0032

Threshold Handle: 0x0033

Handle 0x0035, DMI type 26, 22 bytes

Voltage Probe

Description: LM78A

Location: Power Unit

Status: OK

Maximum Value: Unknown

Minimum Value: Unknown

Resolution: Unknown

Tolerance: Unknown

Accuracy: Unknown

OEM-specific Information: 0x00000000

Nominal Value: Unknown

Handle 0x0036, DMI type 28, 22 bytes

Temperature Probe

Description: LM78A

Location: Power Unit

Status: OK

Maximum Value: Unknown

Minimum Value: Unknown

Resolution: Unknown

Tolerance: Unknown

Accuracy: Unknown

OEM-specific Information: 0x00000000

Nominal Value: Unknown

Handle 0x0037, DMI type 27, 15 bytes

Cooling Device

Temperature Probe Handle: 0x0036

Type: Power Supply Fan

Status: OK

Cooling Unit Group: 1

OEM-specific Information: 0x00000000

Nominal Speed: Unknown Or Non-rotating

Description: Cooling Dev 1

Handle 0x0038, DMI type 29, 22 bytes

Electrical Current Probe

Description: ABC

Location: Power Unit

Status: OK

Maximum Value: Unknown

Minimum Value: Unknown

Resolution: Unknown

Tolerance: Unknown

Accuracy: Unknown

OEM-specific Information: 0x00000000

Nominal Value: Unknown

Handle 0x0039, DMI type 39, 22 bytes

System Power Supply

Power Unit Group: 1

Location: To Be Filled By O.E.M.

Name: To Be Filled By O.E.M.

Manufacturer: To Be Filled By O.E.M.

Serial Number: To Be Filled By O.E.M.

Asset Tag: To Be Filled By O.E.M.

Model Part Number: To Be Filled By O.E.M.

Revision: To Be Filled By O.E.M.

Max Power Capacity: Unknown

Status: Present, OK

Type: Switching

Input Voltage Range Switching: Auto-switch

Plugged: Yes

Hot Replaceable: No

Input Voltage Probe Handle: 0x0035

Cooling Device Handle: 0x0037

Input Current Probe Handle: 0x0038

Handle 0x003A, DMI type 16, 23 bytes

Physical Memory Array

Location: System Board Or Motherboard

Use: System Memory

Error Correction Type: None

Maximum Capacity: 32 GB

Error Information Handle: Not Provided

Number Of Devices: 2

Handle 0x003D, DMI type 19, 31 bytes

Memory Array Mapped Address

Starting Address: 0x00000000000

Ending Address: 0x003FFFFFFFF

Range Size: 16 GB

Physical Array Handle: 0x003A

Partition Width: 1

Handle 0x003E, DMI type 221, 26 bytes

OEM-specific Type

Header and Data:

DD 1A 3E 00 03 01 00 07 00 65 40 00 02 00 00 00

00 EA 00 03 00 01 05 00 00 00

Strings:

Reference Code - CPU

uCode Version

TXT ACM version

Handle 0x003F, DMI type 221, 26 bytes

OEM-specific Type

Header and Data:

DD 1A 3F 00 03 01 00 07 00 65 40 00 02 00 0C 00

00 0A 00 03 04 0C 00 51 D9 06

Strings:

Reference Code - ME

MEBx version

ME Firmware Version

Corporate SKU

Handle 0x0040, DMI type 221, 82 bytes

OEM-specific Type

Header and Data:

DD 52 40 00 0B 01 00 07 00 65 40 00 02 03 FF FF

FF FF FF 04 00 FF FF FF 30 00 05 00 FF FF FF 30

00 06 00 FF FF FF FF FF 07 00 02 00 00 00 00 08

00 09 00 00 00 00 09 00 0A 00 00 00 00 0A 00 07

00 00 00 00 0B 00 06 00 00 00 00 0C 00 07 00 00

00 00

Strings:

Reference Code - CNL PCH

PCH-CRID Status

Disabled

PCH-CRID Original Value

PCH-CRID New Value

OPROM - RST - RAID

CNL PCH H A0 Hsio Version

CNL PCH H Ax Hsio Version

CNL PCH H Bx Hsio Version

CNL PCH LP B0 Hsio Version

CNL PCH LP Bx Hsio Version

CNL PCH LP Dx Hsio Version

Handle 0x0041, DMI type 221, 54 bytes

OEM-specific Type

Header and Data:

DD 36 41 00 07 01 00 07 00 65 40 00 02 00 00 07

01 6E 00 03 00 07 00 65 40 00 04 05 FF FF FF FF

FF 06 00 00 00 00 0C 00 07 00 00 00 00 0C 00 08

00 FF FF FF FF FF

Strings:

Reference Code - SA - System Agent

Reference Code - MRC

SA - PCIe Version

SA-CRID Status

Disabled

SA-CRID Original Value

SA-CRID New Value

OPROM - VBIOS

Handle 0x0042, DMI type 221, 12 bytes

OEM-specific Type

Header and Data:

DD 0C 42 00 01 01 00 04 00 00 00 00

Strings:

FSP Binary Version

Handle 0x0043, DMI type 7, 27 bytes

Cache Information

Socket Designation: L1 Cache

Configuration: Enabled, Not Socketed, Level 1

Operational Mode: Write Back

Location: Internal

Installed Size: 128 kB

Maximum Size: 128 kB

Supported SRAM Types:

Synchronous

Installed SRAM Type: Synchronous

Speed: Unknown

Error Correction Type: Parity

System Type: Unified

Associativity: 8-way Set-associative

Handle 0x0044, DMI type 7, 27 bytes

Cache Information

Socket Designation: L2 Cache

Configuration: Enabled, Not Socketed, Level 2

Operational Mode: Write Back

Location: Internal

Installed Size: 512 kB

Maximum Size: 512 kB

Supported SRAM Types:

Synchronous

Installed SRAM Type: Synchronous

Speed: Unknown

Error Correction Type: Single-bit ECC

System Type: Unified

Associativity: 4-way Set-associative

Handle 0x0045, DMI type 7, 27 bytes

Cache Information

Socket Designation: L3 Cache

Configuration: Enabled, Not Socketed, Level 3

Operational Mode: Write Back

Location: Internal

Installed Size: 4 MB

Maximum Size: 4 MB

Supported SRAM Types:

Synchronous

Installed SRAM Type: Synchronous

Speed: Unknown

Error Correction Type: Multi-bit ECC

System Type: Unified

Associativity: 16-way Set-associative

Handle 0x0046, DMI type 4, 48 bytes

Processor Information

Socket Designation: U3E1

Type: Central Processor

Family: Core i3

Manufacturer: Intel(R) Corporation

ID: EC 06 08 00 FF FB EB BF

Signature: Type 0, Family 6, Model 142, Stepping 12

Flags:

FPU (Floating-point unit on-chip)

VME (Virtual mode extension)

DE (Debugging extension)

PSE (Page size extension)

TSC (Time stamp counter)

MSR (Model specific registers)

PAE (Physical address extension)

MCE (Machine check exception)

CX8 (CMPXCHG8 instruction supported)

APIC (On-chip APIC hardware supported)

SEP (Fast system call)

MTRR (Memory type range registers)

PGE (Page global enable)

MCA (Machine check architecture)

CMOV (Conditional move instruction supported)

PAT (Page attribute table)

PSE-36 (36-bit page size extension)

CLFSH (CLFLUSH instruction supported)

DS (Debug store)

ACPI (ACPI supported)

MMX (MMX technology supported)

FXSR (FXSAVE and FXSTOR instructions supported)

SSE (Streaming SIMD extensions)

SSE2 (Streaming SIMD extensions 2)

SS (Self-snoop)

HTT (Multi-threading)

TM (Thermal monitor supported)

PBE (Pending break enabled)

Version: Intel(R) Core(TM) i3-8145UE CPU @ 2.20GHz

Voltage: 0.7 V

External Clock: 100 MHz

Max Speed: 8300 MHz

Current Speed: 2079 MHz

Status: Populated, Enabled

Upgrade: Socket BGA1528

L1 Cache Handle: 0x0043

L2 Cache Handle: 0x0044

L3 Cache Handle: 0x0045

Serial Number: To Be Filled By O.E.M.

Asset Tag: To Be Filled By O.E.M.

Part Number: To Be Filled By O.E.M.

Core Count: 2

Core Enabled: 2

Thread Count: 4

Characteristics:

64-bit capable

Multi-Core

Hardware Thread

Execute Protection

Enhanced Virtualization

Power/Performance Control

Handle 0x0047, DMI type 17, 84 bytes

Memory Device

Array Handle: 0x003A

Error Information Handle: Not Provided

Total Width: 64 bits

Data Width: 64 bits

Size: 16 GB

Form Factor: SODIMM

Set: None

Locator: ChannelA-DIMM0

Bank Locator: BANK 0

Type: DDR4

Type Detail: Synchronous

Speed: 2667 MT/s

Manufacturer: 8AD3

Serial Number: 00000000

Asset Tag: 9876543210

Part Number: CIR-W4SUSW2616G

Rank: 2

Configured Memory Speed: 2400 MT/s

Minimum Voltage: 1.2 V

Maximum Voltage: 1.2 V

Configured Voltage: 1.2 V

Memory Technology: DRAM

Memory Operating Mode Capability: Volatile memory

Firmware Version: Not Specified

Module Manufacturer ID: Bank 11, Hex 0xD3

Module Product ID: Unknown

Memory Subsystem Controller Manufacturer ID: Unknown

Memory Subsystem Controller Product ID: Unknown

Non-Volatile Size: None

Volatile Size: 16 GB

Cache Size: None

Logical Size: None

Handle 0x0048, DMI type 17, 84 bytes

Memory Device

Array Handle: 0x003A

Error Information Handle: Not Provided

Total Width: Unknown

Data Width: Unknown

Size: No Module Installed

Form Factor: Unknown

Set: None

Locator: ChannelB-DIMM0

Bank Locator: BANK 2

Type: Unknown

Type Detail: None

Speed: Unknown

Manufacturer: Not Specified

Serial Number: Not Specified

Asset Tag: Not Specified

Part Number: Not Specified

Rank: Unknown

Configured Memory Speed: Unknown

Minimum Voltage: Unknown

Maximum Voltage: Unknown

Configured Voltage: Unknown

Memory Technology: <OUT OF SPEC>

Memory Operating Mode Capability: None

Firmware Version: Not Specified

Module Manufacturer ID: Unknown

Module Product ID: Unknown

Memory Subsystem Controller Manufacturer ID: Unknown

Memory Subsystem Controller Product ID: Unknown

Non-Volatile Size: None

Volatile Size: None

Cache Size: None

Logical Size: None

Handle 0x0049, DMI type 20, 35 bytes

Memory Device Mapped Address

Starting Address: 0x00000000000

Ending Address: 0x003FFFFFFFF

Range Size: 16 GB

Physical Device Handle: 0x0047

Memory Array Mapped Address Handle: 0x003D

Partition Row Position: Unknown

Handle 0x004A, DMI type 130, 20 bytes

OEM-specific Type

Header and Data:

82 14 4A 00 24 41 4D 54 00 00 00 00 00 A5 AF 02

C0 00 00 00

Handle 0x004B, DMI type 131, 64 bytes

OEM-specific Type

Header and Data:

83 40 4B 00 31 00 00 00 0C 00 00 00 00 00 0A 00

F8 00 84 9D 00 00 00 00 01 00 00 00 00 00 0C 00

D9 06 51 00 00 00 00 00 FE 00 BD 15 00 00 00 00

00 00 00 00 22 00 00 00 76 50 72 6F 00 00 00 00

Handle 0x004C, DMI type 13, 22 bytes

BIOS Language Information

Language Description Format: Long

Installable Languages: 1

en|US|iso8859-1

Currently Installed Language: en|US|iso8859-1

Handle 0x004D, DMI type 41, 11 bytes

Onboard Device

Reference Designation: Onboard - Other

Type: Other

Status: Enabled

Type Instance: 1

Bus Address: 0000:00:00.0

Handle 0x004E, DMI type 41, 11 bytes

Onboard Device

Reference Designation: Onboard - Video

Type: Video

Status: Enabled

Type Instance: 1

Bus Address: 0000:00:02.0

Handle 0x004F, DMI type 41, 11 bytes

Onboard Device

Reference Designation: Onboard - Other

Type: Other

Status: Enabled

Type Instance: 2

Bus Address: 0000:00:08.0

Handle 0x0050, DMI type 41, 11 bytes

Onboard Device

Reference Designation: Onboard - Other

Type: Other

Status: Enabled

Type Instance: 3

Bus Address: 0000:00:12.0

Handle 0x0051, DMI type 41, 11 bytes

Onboard Device

Reference Designation: Onboard - Other

Type: Other

Status: Enabled

Type Instance: 4

Bus Address: 0000:00:14.0

Handle 0x0052, DMI type 41, 11 bytes

Onboard Device

Reference Designation: Onboard - Other

Type: Other

Status: Enabled

Type Instance: 5

Bus Address: 0000:00:14.2

Handle 0x0053, DMI type 41, 11 bytes

Onboard Device

Reference Designation: Onboard - Other

Type: Other

Status: Enabled

Type Instance: 6

Bus Address: 0000:00:16.0

Handle 0x0054, DMI type 41, 11 bytes

Onboard Device

Reference Designation: Onboard - SATA

Type: SATA Controller

Status: Enabled

Type Instance: 1

Bus Address: 0000:00:17.0

Handle 0x0055, DMI type 41, 11 bytes

Onboard Device

Reference Designation: Onboard - Other

Type: Other

Status: Enabled

Type Instance: 7

Bus Address: 0000:00:1f.0

Handle 0x0056, DMI type 41, 11 bytes

Onboard Device

Reference Designation: Onboard - Sound

Type: Sound

Status: Enabled

Type Instance: 1

Bus Address: 0000:00:1f.3

Handle 0x0057, DMI type 41, 11 bytes

Onboard Device

Reference Designation: Onboard - Other

Type: Other

Status: Enabled

Type Instance: 8

Bus Address: 0000:00:1f.4

Handle 0x0058, DMI type 41, 11 bytes

Onboard Device

Reference Designation: Onboard - Other

Type: Other

Status: Enabled

Type Instance: 9

Bus Address: 0000:00:1f.5

Handle 0x0059, DMI type 41, 11 bytes

Onboard Device

Reference Designation: Onboard - Ethernet

Type: Ethernet

Status: Enabled

Type Instance: 1

Bus Address: 0000:00:1f.6

Handle 0x005A, DMI type 221, 89 bytes

OEM-specific Type

Header and Data:

DD 59 5A 00 0C 01 00 00 00 00 A6 00 02 00 FF FF

FF FF FF 03 04 FF FF FF FF FF 05 06 FF FF FF FF

FF 07 08 FF FF FF FF FF 09 00 00 00 00 00 00 0A

00 FF FF FF FF FF 0B 00 FF FF 00 00 00 0C 00 FF

FF FF FF FF 0D 0E 01 04 03 00 00 0F 00 00 07 00

00 00 10 00 00 02 00 0E 00

Strings:

Lan Phy Version

Sensor Firmware Version

Debug Mode Status

Disabled

Performance Mode Status

Disabled

Debug Use USB(Disabled:Serial)

Disabled

ICC Overclocking Version

UNDI Version

EC FW Version

GOP Version

Royal Park Version

BP1.4.3.0\_RP03

Platform Version

Client Silicon Version

Handle 0x005B, DMI type 136, 6 bytes

OEM-specific Type

Header and Data:

88 06 5B 00 00 00

Handle 0x005C, DMI type 14, 23 bytes

Group Associations

Name: Firmware Version Info

Items: 6

0x003E (OEM-specific)

0x003F (OEM-specific)

0x0040 (OEM-specific)

0x0041 (OEM-specific)

0x0042 (OEM-specific)

0x005A (OEM-specific)

Handle 0x005D, DMI type 14, 8 bytes

Group Associations

Name: $MEI

Items: 1

0x0000 (OEM-specific)

Handle 0x005E, DMI type 219, 106 bytes

OEM-specific Type

Header and Data:

DB 6A 5E 00 01 04 01 55 02 00 90 06 81 10 80 30

00 00 00 04 40 00 00 00 00 00 00 02 00 40 00 02

FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF

FF FF FF FF FF FF FF FF 03 00 00 00 80 00 00 00

00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

00 04 00 00 00 00 00 00 00 00 00 00 00 00 00 00

00 00 00 00 00 00 00 00 00 00

Strings:

MEI1

MEI2

MEI3

MEI4

Handle 0x005F, DMI type 127, 4 bytes

End Of Table