Dmidecode - собираем информацию о "начинке" сервера

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Понадобилось как-то узнать подробно, из каких комплектующих собран удаленный сервер, работающий под управлением **FreeBSD**. Вывода **/var/run/dmesg.boot** в моем случаем было явно недостаточно... В таких ситуациях на помощь приходит утилита **dmidecode**. С ее помощью можно получить детальную информацию о материнской плате, процессоре, оперативной памяти и тд.

Установка утилиты выполняется из системы портов и проблем не вызывает:

```
# cd /usr/ports/sysutils/dmidecode && make install clean && rehash
```

По завершению установки (которая, кстати, выполняется довольно шустро) советую ознакомиться со страницами руководства:

```
# man dmidecode
```

Ну и, собственно, теперь можно "пожинать плоды". Вывод информации о "железе" (обрезал вывод, поскольку вывод информации предоставляется довольно много):

```
# dmidecode | less

# dmidecode 2.11
SMBIOS 2.3 present.
61 structures occupying 2340 bytes.
Table at 0x000FA380.

Handle 0x0000, DMI type 0, 20 bytes
BIOS Information
        Vendor: American Megatrends Inc.
        Version: 080010
        Release Date: 10/19/2004
        Address: 0xF0000
        Runtime Size: 64 kB
        ROM Size: 1024 kB
        Characteristics:
                ISA is supported
                PCI is supported
                PNP is supported
                APM is supported
                BIOS is upgradeable
                BIOS shadowing is allowed
                ESCD support is available
                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)
                CGA/mono video services are supported (int 10h)
```

```
        ACPI is supported
        USB legacy is supported
        AGP is supported
        LS-120 boot is supported
        ATAPI Zip drive boot is supported
        BIOS boot specification is supported
        Function key-initiated network boot is supported

Handle 0x0001, DMI type 1, 25 bytes
System Information
Manufacturer: Supermicro
Product Name: X6DVA
Version: 1234567890
Serial Number: 1234567890
UUID: 00020003-0004-0005-0006-000700080009
Wake-up Type: Power Switch

Handle 0x0002, DMI type 2, 8 bytes
Base Board Information
Manufacturer: Supermicro
Product Name: X6DVA
Version: 1234567890
Serial Number: 1234567890


* * *

Handle 0x0038, DMI type 17, 27 bytes
Memory Device
    Array Handle: 0x002C
    Error Information Handle: Not Provided
    Total Width: 128 bits
    Data Width: 128 bits
    Size: 512 MB
    Form Factor: DIMM
    Set: None
    Locator: DIMM2
    Bank Locator: BANK1
    Type: DDR
    Type Detail: Synchronous
    Speed: Unknown
    Manufacturer: Manufacturer5
    Serial Number: SerNum5
    Asset Tag: AssetTagNum5
    Part Number: PartNum5

Handle 0x0039, DMI type 20, 19 bytes
Memory Device Mapped Address
    Starting Address: 0x00000000000
    Ending Address: 0x000200003FF
    Range Size: 524289 kB
    Physical Device Handle: 0x0038
    Memory Array Mapped Address Handle: 0x002D
    Partition Row Position: 1
    Interleave Position: 2
    Interleaved Data Depth: 1

Handle 0x003A, DMI type 32, 20 bytes
System Boot Information
```

```
        Status: No errors detected

Handle 0x003B, DMI type 38, 18 bytes
IPMI Device Information
        Interface Type: Unknown
        Specification Version: 0.0
        I2C Slave Address: 0x00
        NV Storage Device Address: 0
        Base Address: 0x0000000000000000 (Memory-mapped)
        Register Spacing: Successive Byte Boundaries

Handle 0x003C, DMI type 127, 4 bytes
End Of Table
```

Как видите, информация довольно обширная. Чтобы конкретизировать получаемую инфорамацию, необходимо указывать соответствующие ключи. Ключи можно узнать на странице man-руководства. Например, чтобы вывести информацию о процессорах (в моем случае их два). Пример такого запроса:

```
# dmidecode --type 4
  # dmidecode 2.11
SMBIOS 2.3 present.

Handle 0x0004, DMI type 4, 35 bytes
Processor Information
        Socket Designation: CPU 1
        Type: Central Processor
        Family: Pentium 4
        Manufacturer: Intel
        ID: 41 0F 00 00 FF FB EB BF
        Signature: Type 0, Family 15, Model 4, Stepping 1
        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) Xeon(TM) CPU 2.80GHz
    Voltage: 3.3 V 2.9 V
    External Clock: 800 MHz
    Max Speed: 2800 MHz
    Current Speed: 2800 MHz
    Status: Populated, Enabled
    Upgrade: Socket 478
    L1 Cache Handle: 0x0005
    L2 Cache Handle: 0x0006
    L3 Cache Handle: 0x0007
    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.

Handle 0x0008, DMI type 4, 35 bytes
Processor Information
    Socket Designation: CPU 2
    Type: Central Processor
    Family: Pentium 4
    Manufacturer: Intel
    ID: 41 0F 00 00 FF FB EB BF
    Signature: Type 0, Family 15, Model 4, Stepping 1
    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) Xeon(TM) CPU 2.80GHz
    Voltage: 3.3 V 2.9 V
    External Clock: 800 MHz
    Max Speed: 2800 MHz
    Current Speed: 2800 MHz
    Status: Populated, Enabled
    Upgrade: Socket 478
```

```
L1 Cache Handle: 0x0009
L2 Cache Handle: 0x000A
L3 Cache Handle: 0x000B
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.
```

Теперь дело за малым - "повыдергивать" из вывода **dmidecode** необходимую информацию.

Источник (получено *2025-03-15 11:02*):
http://muff.kiev.ua/content/dmidecode-sobiraem-informatsiyu-o-nachinke-servera