### 驱动 INF 阅读术

之前的文章中已经介绍了,驱动INF规定着驱动适合哪些硬件、安装驱动时复制哪些文件、注册表添加哪些键值、增加哪些服务等等,本文将以INTEL ICH7~ICH10 AHC INF为例向大家介绍如何读驱动INF。

INTEL ICH7~ICH10 AHCI磁盘控制器驱动INF如下:

#### [version]

CatalogFile=iaAHCI.cat Signature="\$WINDOWS NT\$"

Class=hdc

ClassGuid={4D36E96A-E325-11CE-BFC1-08002BE10318}

Provider=%INTEL%

DriverVer=07/20/2008,8.5.0.1032

[DestinationDirs]

DefaultDestDir = 12; DIRID\_DRIVERS

CopyFullPort = 12;

#### [CopyFullPort]

iaStor.sys

#### [SourceDisksNames]

1 = %DiskName%,,,

#### [SourceDisksFiles]

iaStor.sys= 1

### [ControlFlags]

ExcludeFromSelect=\*

#### [Manufacturer]

%INTEL%=INTEL\_HDC,ntamd64

# [INTEL\_HDC]

%PCI\VEN\_8086&DEV\_2681&CC\_0106.DeviceDesc% = iaStor\_Inst, PCI\VEN\_8086&DEV\_2681&CC\_0106
%PCI\VEN\_8086&DEV\_27C1&CC\_0106.DeviceDesc% = iaStor\_Inst, PCI\VEN\_8086&DEV\_27C1&CC\_0106
%PCI\VEN\_8086&DEV\_27C5&CC\_0106.DeviceDesc% = iaStor\_mobl\_Inst, PCI\VEN\_8086&DEV\_27C5&CC\_0106
%PCI\VEN\_8086&DEV\_2821&CC\_0106.DeviceDesc% = iaStor\_Inst, PCI\VEN\_8086&DEV\_2821&CC\_0106
%PCI\VEN\_8086&DEV\_2829&CC\_0106.DeviceDesc% = iaStor\_mobl\_Inst, PCI\VEN\_8086&DEV\_2829&CC\_0106
%PCI\VEN\_8086&DEV\_2922&CC\_0106.DeviceDesc% = iaStor\_Inst, PCI\VEN\_8086&DEV\_2922&CC\_0106
%PCI\VEN\_8086&DEV\_2929&CC\_0106.DeviceDesc% = iaStor\_mobl\_Inst, PCI\VEN\_8086&DEV\_2929&CC\_0106
%PCI\VEN\_8086&DEV\_3402&CC\_0106.DeviceDesc% = iaStor\_Inst, PCI\VEN\_8086&DEV\_3402&CC\_0106
%PCI\VEN\_8086&DEV\_3A22&CC\_0106.DeviceDesc% = iaStor\_Inst, PCI\VEN\_8086&DEV\_3A22&CC\_0106
%PCI\VEN\_8086&DEV\_3A22&CC\_0106.DeviceDesc% = iaStor\_Inst, PCI\VEN\_8086&DEV\_3A22&CC\_0106

# [INTEL\_HDC.ntamd64]

%PCI\VEN\_8086&DEV\_2681&CC\_0106.DeviceDesc% = iaStor\_Inst, PCI\VEN\_8086&DEV\_2681&CC\_0106
%PCI\VEN\_8086&DEV\_27C1&CC\_0106.DeviceDesc% = iaStor\_Inst, PCI\VEN\_8086&DEV\_27C1&CC\_0106
%PCI\VEN\_8086&DEV\_27C5&CC\_0106.DeviceDesc% = iaStor\_mobl\_Inst, PCI\VEN\_8086&DEV\_27C5&CC\_0106
%PCI\VEN\_8086&DEV\_2821&CC\_0106.DeviceDesc% = iaStor\_Inst, PCI\VEN\_8086&DEV\_2821&CC\_0106
%PCI\VEN\_8086&DEV\_2829&CC\_0106.DeviceDesc% = iaStor\_mobl\_Inst, PCI\VEN\_8086&DEV\_2829&CC\_0106
%PCI\VEN\_8086&DEV\_2922&CC\_0106.DeviceDesc% = iaStor\_Inst, PCI\VEN\_8086&DEV\_2922&CC\_0106
%PCI\VEN\_8086&DEV\_2929&CC\_0106.DeviceDesc% = iaStor\_mobl\_Inst, PCI\VEN\_8086&DEV\_2929&CC\_0106
%PCI\VEN\_8086&DEV\_3402&CC\_0106.DeviceDesc% = iaStor\_Inst, PCI\VEN\_8086&DEV\_3402&CC\_0106
%PCI\VEN\_8086&DEV\_3A22&CC\_0106.DeviceDesc% = iaStor\_Inst, PCI\VEN\_8086&DEV\_3A22&CC\_0106
%PCI\VEN\_8086&DEV\_3A22&CC\_0106.DeviceDesc% = iaStor\_Inst, PCI\VEN\_8086&DEV\_3A22&CC\_0106

# [iaStor\_Inst]

AddReg = iaStor\_Temp\_parameters\_AddReg CopyFiles=CopyFullPort FeatureScore=0x80

## [iaStor\_Inst.HW]

AddReg = iaStorSecurity.AddReg

# [iaStor\_mobl\_Inst]

AddReg = iaStor\_Temp\_parameters\_AddReg CopyFiles=CopyFullPort FeatureScore=0x80

#### [iaStor\_mobl\_Inst.HW]

AddReg = iaStorSecurity.AddReg

### [iaStorSecurity.AddReg]

HKR,,,Security,,"D:P(A;;FA;;;SY)(A;;FA;;;BA)(A;;FRFW;;;BU)"

### [iaStor\_Temp\_parameters\_AddReg]

#### [iaStor Inst.Services]

AddService = iaStor, %SPSVCINST\_ASSOCSERVICE%, iaStor\_Service\_Inst, iaStor\_EventLog\_Inst

### [iaStor\_mobl\_Inst.Services]

AddService = iaStor, %SPSVCINST\_ASSOCSERVICE%, iaStor\_mobl\_Service\_Inst, iaStor\_EventLog\_Inst

#### [iaStor\_Service\_Inst]

DisplayName = %\*PNP0600.DeviceDesc%

ServiceType = %SERVICE\_KERNEL\_DRIVER%

StartType = %SERVICE\_BOOT\_START%

ErrorControl = %SERVICE\_ERROR\_NORMAL%

ServiceBinary = %12%\iaStor.sys LoadOrderGroup = SCSI Miniport

AddReg = iaStor\_parameters\_AddReg

#### [iaStor mobl Service Inst]

DisplayName = %\*PNP0600.DeviceDesc%

ServiceType = %SERVICE\_KERNEL\_DRIVER%

StartType = %SERVICE\_BOOT\_START%

ErrorControl = %SERVICE\_ERROR\_NORMAL%

ServiceBinary = %12%\iaStor.sys LoadOrderGroup = SCSI Miniport

AddReg = iaStor\_mobl\_parameters\_AddReg

#### [iaStor\_parameters\_AddReg]

HKR,,Tag,%REG\_DWORD%,25

 $HKR, Parameters, queue Priority Enable, \%REG\_DWORD\%, 0$ 

HKR,Parameters,BusType,0x00010001,0x0000003

HKR,Parameters\Port0,%AN%,0x00010001,0

HKR,Parameters\Port0,%LPM%,0x00010001,0

 $HKR, Parameters \\ \label{eq:hcm} Port0, \\ \%LPMSTATE\%, \\ 0x00010001, \\ 0$ 

HKR,Parameters\Port0,%LPMDSTATE%,0x00010001,1

HKR,Parameters\Port0,%GTF%,0x00010001,0

 $HKR, Parameters \backslash Port0, \%DIPM\%, 0x00010001, 0$ 

HKR,Parameters\Port1,%AN%,0x00010001,0

HKR,Parameters\Port1,%LPM%,0x00010001,0

 $HKR, Parameters \backslash Port1, \% LPMSTATE\%, 0x00010001, 0$ 

HKR,Parameters\Port1,%LPMDSTATE%,0x00010001,1

 $HKR, Parameters \backslash Port1, \%GTF\%, 0x00010001, 0$ 

HKR,Parameters\Port1,%DIPM%,0x00010001,0

HKR,Parameters\Port2,%AN%,0x00010001,0

HKR,Parameters\Port2,%LPM%,0x00010001,0

 $HKR, Parameters \\ \label{eq:hkr} Port2, \\ \%LPMSTATE\%, \\ 0x00010001, \\ 0$ 

HKR,Parameters\Port2,%LPMDSTATE%,0x00010001,1

 $HKR, Parameters \backslash Port2, \%GTF\%, 0x00010001, 0$ 

HKR,Parameters\Port2,%DIPM%,0x00010001,0

HKR,Parameters\Port3,%AN%,0x00010001,0

 $HKR, Parameters \backslash Port 3, \% LPM\%, 0x00010001, 0$ 

HKR,Parameters\Port3,%LPMSTATE%,0x00010001,0

HKR,Parameters\Port3,%LPMDSTATE%,0x00010001,1

HKR,Parameters\Port3,%GTF%,0x00010001,0

HKR,Parameters\Port3,%DIPM%,0x00010001,0

HKR, Parameters \Port4, %AN%, 0x00010001,0

HKR,Parameters\Port4,%LPM%,0x00010001,0

 $HKR, Parameters \verb|\Port4|, \%LPMSTATE\%|, 0x00010001|, 0$ 

 $HKR, Parameters \verb|\Port4|, \&LPMDSTATE\%|, 0x00010001|, 1$ 

 $HKR, Parameters \backslash Port4, \%GTF\%, 0x00010001, 0$ 

HKR,Parameters\Port4,%DIPM%,0x00010001,0

 $HKR, Parameters \backslash Port5, \% AN\%, 0x00010001, 0$ 

 $HKR, Parameters \backslash Port5, \%LPM\%, 0x00010001, 0$ 

HKR,Parameters\Port5,%LPMSTATE%,0x00010001,0 HKR,Parameters\Port5,%LPMDSTATE%,0x00010001,1

 $HKR, Parameters \backslash Port5, \%GTF\%, 0x00010001, 0$ 

HKR Parameters\Port5 %NIPM% 0v00010001 0

#### [iaStor\_mobl\_parameters\_AddReg]

HKR,,Tag,%REG\_DWORD%,25

 $HKR, Parameters, queue Priority Enable, \%REG\_DWORD\%, 0$ 

HKR,Parameters,BusType,0x00010001,0x0000003

HKR,Parameters\Port0,%AN%,0x00010001,0

HKR,Parameters\Port0,%LPM%,0x00010001,1

 $HKR, Parameters \\ Port0, \\ \%LPMSTATE\%, \\ 0x00010001, \\ 0$ 

 $HKR, Parameters \backslash Port0, \%LPMDSTATE\%, 0x00010001, 1$ 

HKR,Parameters\Port0,%GTF%,0x00010001,1

HKR,Parameters\Port0,%DIPM%,0x00010001,1

 $HKR, Parameters \backslash Port1, \%AN\%, 0x00010001, 0$ 

HKR,Parameters\Port1,%LPM%,0x00010001,1

HKR,Parameters\Port1,%LPMSTATE%,0x00010001,0

HKR,Parameters\Port1,%LPMDSTATE%,0x00010001,1

HKR,Parameters\Port1,%GTF%,0x00010001,1

HKR,Parameters\Port1,%DIPM%,0x00010001,1

HKR,Parameters\Port2,%AN%,0x00010001,0

HKR,Parameters\Port2,%LPM%,0x00010001,1

 $HKR, Parameters \backslash Port2, \% LPMSTATE\%, 0x00010001, 0$ 

 $HKR, Parameters \verb|\Port2|, \&LPMDSTATE\%|, 0x00010001|, 1$ 

HKR,Parameters\Port2,%GTF%,0x00010001,1

HKR,Parameters\Port2,%DIPM%,0x00010001,1

 $HKR, Parameters \backslash Port 3, \% AN\%, 0x00010001, 0$ 

 $HKR, Parameters \backslash Port 3, \% LPM\%, 0x00010001, 1$ 

HKR,Parameters\Port3,%LPMSTATE%,0x00010001,0

HKR,Parameters\Port3,%LPMDSTATE%,0x00010001,1

HKR,Parameters\Port3,%GTF%,0x00010001,1

HKR,Parameters\Port3,%DIPM%,0x00010001,1

HKR,Parameters\Port4,%AN%,0x00010001,0

HKR,Parameters\Port4,%LPM%,0x00010001,1

HKR,Parameters\Port4,%LPMSTATE%,0x00010001,0

HKR,Parameters\Port4,%LPMDSTATE%,0x00010001,1

HKR,Parameters\Port4,%GTF%,0x00010001,1

 $HKR, Parameters \verb|\Port4|, \$DIPM \$|, 0x00010001, 1$ 

HKR,Parameters\Port5,%AN%,0x00010001,0 HKR,Parameters\Port5,%LPM%,0x00010001,1

HKR,Parameters\Port5,%LPMSTATE%,0x00010001,0

HKR,Parameters\Port5,%LPMDSTATE%,0x00010001,1

HKR,Parameters\Port5,%GTF%,0x00010001,1

HKR,Parameters\Port5,%DIPM%,0x00010001,1

# [iaStor\_EventLog\_Inst]

AddReg = iaStor\_EventLog\_AddReg

# [iaStor\_EventLog\_AddReg]

 $HKR,, EventMessageFile, \%REG\_EXPAND\_SZ\%, "\%SystemRoot\%\System32\IoLogMsg.dll; \%SystemRoot\%\System32\IoLogMsg.dll; \%SystemRoot\%\System32\IoLogMsg.dll, \%SystemRoot\%\System32\IoLogMsg.dll, \%SystemRoot\%\System32\IoLogMsg.dll, \%System32\IoLogMsg.dll, \%System32\$ 

## [Strings]

DiskName = "Intel Matrix Storage Manager Driver"

\*PNP0600.DeviceDesc = "Intel AHCI Controller"

PCI\VEN\_8086&DEV\_2681&CC\_0106.DeviceDesc = "Intel(R) ESB2 SATA AHCI Controller"

PCI\VEN\_8086&DEV\_27C1&CC\_0106.DeviceDesc = "Intel(R) ICH7R/DH SATA AHCI Controller"

PCI\VEN\_8086&DEV\_27C5&CC\_0106.DeviceDesc = "Intel(R) ICH7M/MDH SATA AHCI Controller"

PCI\VEN\_8086&DEV\_2821&CC\_0106.DeviceDesc = "Intel(R) ICH8R/DH/DO SATA AHCI Controller"

PCI\VEN\_8086&DEV\_2829&CC\_0106.DeviceDesc = "Intel(R) ICH8M-E/M SATA AHCI Controller"
PCI\VEN\_8086&DEV\_2922&CC\_0106.DeviceDesc = "Intel(R) ICH9R/DO/DH SATA AHCI Controller"

PCI\VEN\_8086&DEV\_2922&CC\_0106.DeviceDesc = "Intel(R) ICH9R/DO/DH SATA AHCI Controller PCI\VEN\_8086&DEV\_2929&CC\_0106.DeviceDesc = "Intel(R) ICH9M-E/M SATA AHCI Controller"

PCI\VEN\_8086&DEV\_3A02&CC\_0106.DeviceDesc = "Intel(R) ICH10D/DO SATA AHCI Controller"
PCI\VEN\_8086&DEV\_3A22&CC\_0106.DeviceDesc = "Intel(R) ICH10R SATA AHCI Controller"

INTEL="Intel" AN="AN"

LPM="LPM"

LPMSTATE="LPMSTATE"

LPMDSTATE="LPMDSTATE"

GTF="GTF"

DIPM="DIPM"

 SERVICE\_KERNEL\_DRIVER
 = 1

 SERVICE\_BOOT\_START
 = 0

 SERVICE\_ERROR\_NORMAL
 = 1

 REG\_EXPAND\_SZ
 = 0x00020000

 REG\_DWORD
 = 0x00010001

看着挺长的一个驱动,而且貌似很复杂。不过看似复杂的东西,却有着很精密而且有章可循的规律。我们一段段的来分析这个驱动INF。

### 1、Version段

#### [version]

CatalogFile=iaAHCI.cat Signature="\$WINDOWS NT\$"

Class=hdc

ClassGuid={4D36E96A-E325-11CE-BFC1-08002BE10318}

Provider=%INTEL%

DriverVer=07/20/2008,8.5.0.1032

CatalogFile,规定本驱动的认证文件是什么,例如例子中的是"iaAHCI.cat",有了这个信息,在本驱动安装时,系统会去与本驱动同层的目录下寻找"iaAHCI.cat"文件以验了认证。如果您已经对驱动进行了修改,那么是肯定通不过认证的,所以这一行可以删除或注释掉。

Signature, 大概的意思是驱动版本签名, 没有修改的意义。

Class,驱动类别,规定本驱动属于哪类驱动,驱动类别可以到"HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\Control\Class"注册表键值下详细查看。不过建议不是型,以免出现混乱。只要通过这个知道本驱动属于哪类驱动即可。

ClassGuid,驱动类别的Guid,查看上面所说的那个注册表键值,就会看到以Guid命名的各个类别。ClassGuid规定的类Guid与Class规定的类是相互对应的。 Provider,驱动供应商,等号后是%INTEL%,而%INTEL%是个可变的字符串,至于%INTEL%到底等于什么,在驱动INF的最末端"String"段中有着详细规定,随后我会DriverVer,驱动版本,包括驱动日期和版本号,注意,这个格式是固定的,可以修改,但不要修改DriverVer的格式。

## 2、DestinationDirs段

# [DestinationDirs]

DefaultDestDir = 12 CopyFullPort = 12

DefaultDestDir,设定默认将文件复制到哪个文件夹,"12"一般代表"Windows\System32\Drivers"文件夹。CopyFullPort,当复制CopyFullPort段规定的文件时,将文件复制到"12"也就是"Windows\System32\Drivers"文件夹

# 3、CopyFullPort

# [CopyFullPort]

iaStor.sys

复制当前目录下的iaStor.sys文件到目标文件夹,而目标文件夹已经在刚才的DestinationDirs段中规定了。

## 4、SourceDisksNames

# [SourceDisksNames]

1 = %DiskName%,,,

由于我们这个是磁盘控制器的驱动,所以这个段是用于启动软盘的,意思是读取文件时从磁盘名为%DiskName%的存储器中读取,%DiskName%和version段中的%INT变的名字,具体名字是什么在String段中规定。

并规定1代表源磁盘

无论我们是做PNP的驱动,还是将来做SRS驱动,只要不做启动软盘,一般就不用修改这段内容。

# 5、SourceDisksFiles

## [SourceDisksFiles]

iaStor.sys= 1

规定源磁盘中的文件。

6、ControlFlags

### [ControlFlags]

ExcludeFromSelect=\*

这个看字面意思,应该是被排除选择的硬件ID。但\*的意思应当是一个都不排除。所以这一段具体什么意思我也没搞太清楚,不过修改这一段也的确没什么大意思。所以这一理。

7、Manufacturer

### [Manufacturer]

%INTEL%=INTEL\_HDC,ntamd64

字面意思似乎是规定的制造商,但实际上这个的意义很大。特别是等号后面的部分。

%INTEL%=INTEL HDC,ntamd64

将会到下面的INTEL\_HDC和INTEL\_HDC. ntamd64段中搜索合适的驱动。一般到INTEL\_HDC段下寻找合适的HWID,而如果是64位系统则到INTEL\_HDC. ntamd64段下寻找合适的HWID。

8、INTEL\_HDC和INTEL\_HDC.ntamd64段

### [INTEL\_HDC]

%PCI\VEN\_8086&DEV\_2681&CC\_0106.DeviceDesc% = iaStor\_Inst, PCI\VEN\_8086&DEV\_2681&CC\_0106
%PCI\VEN\_8086&DEV\_27C1&CC\_0106.DeviceDesc% = iaStor\_Inst, PCI\VEN\_8086&DEV\_27C1&CC\_0106
%PCI\VEN\_8086&DEV\_27C5&CC\_0106.DeviceDesc% = iaStor\_mobl\_Inst, PCI\VEN\_8086&DEV\_27C5&CC\_0106
%PCI\VEN\_8086&DEV\_2821&CC\_0106.DeviceDesc% = iaStor\_Inst, PCI\VEN\_8086&DEV\_2821&CC\_0106
%PCI\VEN\_8086&DEV\_2829&CC\_0106.DeviceDesc% = iaStor\_mobl\_Inst, PCI\VEN\_8086&DEV\_2829&CC\_0106
%PCI\VEN\_8086&DEV\_2922&CC\_0106.DeviceDesc% = iaStor\_Inst, PCI\VEN\_8086&DEV\_2922&CC\_0106
%PCI\VEN\_8086&DEV\_2929&CC\_0106.DeviceDesc% = iaStor\_mobl\_Inst, PCI\VEN\_8086&DEV\_2929&CC\_0106
%PCI\VEN\_8086&DEV\_2929&CC\_0106.DeviceDesc% = iaStor\_Inst, PCI\VEN\_8086&DEV\_2929&CC\_0106
%PCI\VEN\_8086&DEV\_3A02&CC\_0106.DeviceDesc% = iaStor\_Inst, PCI\VEN\_8086&DEV\_3A02&CC\_0106
%PCI\VEN\_8086&DEV\_3A22&CC\_0106.DeviceDesc% = iaStor\_Inst, PCI\VEN\_8086&DEV\_3A22&CC\_0106

# [INTEL\_HDC.ntamd64]

%PCI\VEN\_8086&DEV\_2681&CC\_0106.DeviceDesc% = iaStor\_Inst, PCI\VEN\_8086&DEV\_2681&CC\_0106
%PCI\VEN\_8086&DEV\_27C1&CC\_0106.DeviceDesc% = iaStor\_Inst, PCI\VEN\_8086&DEV\_27C1&CC\_0106
%PCI\VEN\_8086&DEV\_27C5&CC\_0106.DeviceDesc% = iaStor\_mobl\_Inst, PCI\VEN\_8086&DEV\_27C5&CC\_0106
%PCI\VEN\_8086&DEV\_2821&CC\_0106.DeviceDesc% = iaStor\_Inst, PCI\VEN\_8086&DEV\_2821&CC\_0106
%PCI\VEN\_8086&DEV\_2829&CC\_0106.DeviceDesc% = iaStor\_mobl\_Inst, PCI\VEN\_8086&DEV\_2829&CC\_0106
%PCI\VEN\_8086&DEV\_2922&CC\_0106.DeviceDesc% = iaStor\_Inst, PCI\VEN\_8086&DEV\_2922&CC\_0106
%PCI\VEN\_8086&DEV\_2929&CC\_0106.DeviceDesc% = iaStor\_mobl\_Inst, PCI\VEN\_8086&DEV\_2929&CC\_0106
%PCI\VEN\_8086&DEV\_2929&CC\_0106.DeviceDesc% = iaStor\_Inst, PCI\VEN\_8086&DEV\_2929&CC\_0106
%PCI\VEN\_8086&DEV\_3A02&CC\_0106.DeviceDesc% = iaStor\_Inst, PCI\VEN\_8086&DEV\_3A02&CC\_0106
%PCI\VEN\_8086&DEV\_3A22&CC\_0106.DeviceDesc% = iaStor\_Inst, PCI\VEN\_8086&DEV\_3A22&CC\_0106

这两段上面一段是32位系统的,下面是64位系统的,虽然较长,但仔细观察其键都遵循如下特点:字符变量=驱动添加字段,HWID

每一个HWID对应一个描述它的字符变量,字符变量在String段中有规定,这个描述HWID的字符变量会在驱动安装好后显示在设备管理器中。驱动添加字段,这个描述了该HWID的硬件驱动要以下述哪种段规定的方式添加驱动文件、服务、注册表。 HWID,规定了该驱动适合哪种HWID的硬件。

总体来说,驱动中的这一段是最重要的,如果你有合适的HWID也可以添加在其中,但一定要保证你添加的HWID是可用的。 MOD驱动,很大程度上是在MOD这一段。

9、iaStor\_Inst

### [iaStor\_Inst]

 $AddReg = iaStor\_Temp\_parameters\_AddReg$ 

CopyFiles=CopyFullPort

FeatureScore=0x80

[iaStor\_Inst.HW]

AddReg = iaStorSecurity.AddReg

[iaStor Inst.Services]

AddService = iaStor, %SPSVCINST\_ASSOCSERVICE%, iaStor\_Service\_Inst, iaStor\_EventLog\_Inst

iaStor\_Inst,就是我们在上面HWID段里所规定的要执行的添加驱动文件、驱动服务的设定段。会首先执行iaStor\_Inst段所规定的内容,随后执行iaStor\_Inst.HW里规定的行iaStor\_Inst.Services段里规定的内容。也就是说iaStor\_Inst代表了所有与iaStor\_Inst相关的段。

iaStor\_Inst段中,AddReg将会执行iaStor\_Temp\_parameters\_AddReg段规定的添加注册表的活动;CopyFiles将会执行CopyFullPort段中规定的复制文件活动;FeatureSci值,这个具体什么作用不是很清楚。

iaStor\_Inst.HW段中,AddReg将会执行iaStorSecurity.AddReg段规定的添加注册表的活动。

iaStor\_Inst.Services段中,AddService是以"iaStor,%SPSVCINST\_ASSOCSERVICE%, iaStor\_Service\_Inst, iaStor\_EventLog\_Inst"为参数来添加一个服务,服务名为"iaStor %SPSVCINST\_ASSOCSERVICE%是一个字符串变量,执行iaStor\_Service\_Inst添加注册表中的服务,执行iaStor\_EventLog\_Inst添加EventLog(系统日志)。

这里,如果不想添加系统日志(例如在做SRS驱动时),可以把iaStor\_EventLog\_Inst参数去掉。

#### 10、iaStorSecurity.AddReg

#### [iaStorSecurity.AddReg]

HKR,,,Security,,,"D:P(A;;FA;;;SY)(A;;FA;;;BA)(A;;FRFW;;;BU)"

这一段的意思似乎是添加安全认证相关的注册表,如果驱动没有CAT文件或者在修改后通不过驱动认证,这一段是否就可以删除掉?如果要删除请删除之前与它相关的其

#### 11、iaStor\_Service\_Inst

# [iaStor\_Service\_Inst]

DisplayName = %\*PNP0600.DeviceDesc%
ServiceType = %SERVICE\_KERNEL\_DRIVER%
StartType = %SERVICE\_BOOT\_START%
ErrorControl = %SERVICE\_ERROR\_NORMAL%

ServiceBinary = %12%\iaStor.sys LoadOrderGroup = SCSI Miniport

AddReg = iaStor\_parameters\_AddReg

# 这个是在前面调用的服务添加段

DisplayName, 服务的显示名,这个和服务名不同。就像XP的Security Center服务,"Security Center"就是显示名,而其服务名则为"wscsvc"。

ServiceType,服务类型,String段规定了它的值。 StartType,服务启动类型,String段规定了它的值。

ErrorControl, 错误控制, String段规定了它的值。

ServiceBinary,驱动文件路径,%12%在之前规定了为system32。

LoadOrderGroup, 驱动服务所在组类型。

AddReg,为这个服务还要添加iaStor\_parameters\_AddRegduan段规定的键值,parameters—般规定添加服务运行或其他的一些参数之类

# 12、iaStor\_parameters\_AddReg

## [iaStor\_parameters\_AddReg]

HKR,,Tag,%REG\_DWORD%,25

HKR, Parameters, queue Priority Enable, % REG\_DWORD%, 0

HKR,Parameters,BusType,0x00010001,0x00000003

HKR,Parameters\Port0,%AN%,0x00010001,0

HKR,Parameters\Port0,%LPM%,0x00010001,0

HKR,Parameters\Port0,%LPMSTATE%,0x00010001,0

HKR,Parameters\Port0,%LPMDSTATE%,0x00010001,1

HKR,Parameters\Port0,%GTF%,0x00010001,0

HKR,Parameters\Port0,%DIPM%,0x00010001,0

 $HKR, Parameters \backslash Port1, \% AN\%, 0x00010001, 0$ 

HKR,Parameters\Port1,%LPM%,0x00010001,0

HKR,Parameters\Port1,%LPMSTATE%,0x00010001,0

HKR,Parameters\Port1,%LPMDSTATE%,0x00010001,1

HKR,Parameters\Port1,%GTF%,0x00010001,0

HKR,Parameters\Port1,%DIPM%,0x00010001,0

HKR,Parameters\Port2,%AN%,0x00010001,0

HKR,Parameters\Port2,%LPM%,0x00010001,0

HKR,Parameters\Port2,%LPMSTATE%,0x00010001,0

HKR,Parameters\Port2,%LPMDSTATE%,0x00010001,1

HKR,Parameters\Port2,%GTF%,0x00010001,0

HKR,Parameters\Port2,%DIPM%,0x00010001,0

HKR,Parameters\Port3,%AN%,0x00010001,0

HKR,Parameters\Port3,%LPM%,0x00010001,0

HKR,Parameters\Port3,%LPMSTATE%,0x00010001,0

HKR,Parameters\Port3,%LPMDSTATE%,0x00010001,1

HKR,Parameters\Port3,%GTF%,0x00010001,0

HKR,Parameters\Port3,%DIPM%,0x00010001,0

HKR,Parameters\Port4,%AN%,0x00010001,0

HKR,Parameters\Port4,%LPM%,0x00010001,0

HKR,Parameters\Port4,%LPMSTATE%,0x00010001,0

HKR,Parameters\Port4,%LPMDSTATE%,0x00010001,1

HKR,Parameters\Port4,%GTF%,0x00010001,0

HKR,Parameters\Port4,%DIPM%,0x00010001,0 HKR,Parameters\Port5,%AN%,0x00010001,0

HKR,Parameters\Port5,%LPM%,0x00010001,0

HKR,Parameters\Port5,%LPMSTATE%,0x00010001,0

HKR,Parameters\Port5,%LPMDSTATE%,0x00010001,1

HKR,Parameters\Port5,%GTF%,0x00010001,0

HKR,Parameters\Port5,%DIPM%,0x00010001,0

# 添加PORT的执行参数。

# 13、EventLog

[iaStor\_EventLog\_Inst]

 $AddReg = iaStor\_EventLog\_AddReg$ 

[iaStor\_EventLog\_AddReg]

 $HKR,, EventMessageFile, \%REG\_EXPAND\_SZ\%, "\%SystemRoot\%\System32\IoLogMsg.dll; \%SystemRoot\%\System32\IoLogMsg.dll; \%SystemRoot\%\System32\IoLogMsg.dll, \%SystemRoot\%\System32\IoLogMsg.dll, \%SystemRoot\%\System32\IoLogMsg.dll, \%System32\IoLogMsg.dll, \%System32\$ 

这个就是在之前添加服务时被调用的EventLog添加段。

注: mobl的相关段与上述介绍十分相似,不再赘述

14、Strings段

```
[Strings]
```

DiskName = "Intel Matrix Storage Manager Driver"

\*PNP0600.DeviceDesc = "Intel AHCI Controller"

PCI\VEN\_8086&DEV\_2681&CC\_0106.DeviceDesc = "Intel(R) ESB2 SATA AHCI Controller"

PCI\VEN\_8086&DEV\_27C1&CC\_0106.DeviceDesc = "Intel(R) ICH7R/DH SATA AHCI Controller"

PCI\VEN\_8086&DEV\_27C5&CC\_0106.DeviceDesc = "Intel(R) ICH7M/MDH SATA AHCI Controller"

PCI\VEN\_8086&DEV\_2821&CC\_0106.DeviceDesc = "Intel(R) ICH8R/DH/DO SATA AHCI Controller"

PCI\VEN\_8086&DEV\_2829&CC\_0106.DeviceDesc = "Intel(R) ICH8M-E/M SATA AHCI Controller"

PCI\VEN\_8086&DEV\_2922&CC\_0106.DeviceDesc = "Intel(R) ICH9R/DO/DH SATA AHCI Controller"

PCI\VEN\_60000ADEV\_2922ACC\_0106.DeviceDeSC = III(e(R) ICH9R/DO/DH SATA AHCI COII(IOIle)

PCI\VEN\_8086&DEV\_2929&CC\_0106.DeviceDesc = "Intel(R) ICH9M-E/M SATA AHCI Controller"

PCI\VEN\_8086&DEV\_3A02&CC\_0106.DeviceDesc = "Intel(R) ICH10D/DO SATA AHCI Controller"

 $\label{eq:pciven_8086&dev_3A22&CC_0106.DeviceDesc} = "Intel(R) \ ICH10R \ SATA \ AHCI \ Controller"$ 

INTEL="Intel"

AN="AN"

LPM="LPM"

LPMSTATE="LPMSTATE"

LPMDSTATE="LPMDSTATE"

GTF="GTF"

DIPM="DIPM"

SPSVCINST\_ASSOCSERVICE = 0x00000002

SERVICE\_KERNEL\_DRIVER = 1

SERVICE\_BOOT\_START = 0

SERVICE\_ERROR\_NORMAL = 1

 $REG\_EXPAND\_SZ = 0x00020000$ 

 $REG_DWORD = 0x00010001$ 

我们之前所有用到的"%"包含字符串变量在这里都有对应的值,特别是HWID对应的这些字符串值,有兴趣可以改一下,可以添加一下自己的OEM,呵呵。

本文详细的介绍了驱动INF的基本形式,所有的驱动INF都基本遵循这个形式,但肯定不都是一模一样的,所以还要大家多多实践与摸索。

希望本文可以继续丰富大家的知识库!