USB HID usage table

This usage table lets usbhidctl decode the HID data correctly for the APC RS/XS1000's.

This work was obtained from riccardo@torrini.org.

Sample output is available both with and without the table.

Note that the default /usr/share/misc/usb_hid_usages already contains entries for these a Power Device (132 or 0x84) and a Battery System (133 or 0x85). It is interesting that usbhidctl shows the APC as using 0xff84 and 0xff84 for their values. The HID Power Devices specification indicates 0x84 and 0x85. There is at least one macro in /usr/include/dev/usb/usbhid.h which removes the high order bits. Perhaps we need to do that when using the values. Perhaps this macro:

```
#define HID_USAGE2(p,u) (((p) \leq 16) | u)
```

The file is available without HTML formatting here.

```
# $NetBSD: usb hid usages,v 1.3 1999/07/02 15:46:53 simonb Exp $
  $FreeBSD: src/share/misc/usb hid usages,v 1.1.2.1 2000/07/02 13:13:55 n hibma Exp $
# USB HID usage table
# Syntax:
  - lines that do not start with a white space give the number and name of
     a usage page.
   - lines that start with a white space give the number and name of
     a usage with the last given page.
     If the number is * then the line matches all usages and the name
     is a printf formatting string that will be given the usage number.
        Generic Desktop
        0x00
                Undefined
        0x01
                Pointer
        0x02
                Mouse
        0x03
                Reserved
        0x04
                Joystick
        0x05
                Game Pad
        0x06
                Keyboard
                Keypad
        0x07
                Multi-axis Controller
        80x0
        0x30
                Χ
                Υ
        0x31
        0x32
                Ζ
        0x33
                Rx
        0x34
                Ry
        0x35
                Rz
                Slider
        0x36
        0x37
                Dial
        0x38
                Wheel
        0x39
                Hat Switch
                Counted Buffer
        0x3A
        0x3B
                Byte Count
        0x3C
                Motion Wakeup
        0x40
                ٧x
        0x41
                ۷y
        0x42
                ٧z
        0x43
                Vbrx
        0x44
                Vbry
                Vbrx
        0x45
        0x46
                Vno
                System Control
        08x0
```

```
0x81
        System Power Down
0x82
        System Sleep
0x83
        System Wake Up
0x84
        System Context Menu
0x85
        System Main Menu
0x86
        System App Menu
0x87
        System Menu Help
        System Menu Exit
88x0
        System Menu Select
0x89
A8x0
        System Menu Right
0x8B
        System Menu Left
0x8C
        System Menu Up
0x8D
        System Menu Down
        D-pad Up
0x90
0x91
        D-pad Down
        D-pad Right
0x92
0x93
        D-pad Left
Simulation Controls
0x00
        Undefined
0x01
        Flight Simulation Device
0x02
        Automobile Simulation Device
0x03
        Tank Simulation Device
        Spaceship Simulation Device
0x04
        Submarine Simulation Device
0x05
0x06
        Sailing Simulation Device
0x07
        Motorcycle Simulation Device
80x0
        Sports Simulation Device
0x09
        Airplane Simulation Device
        Helicopter Simulation Device
0x0A
0x0B
        Magic Carpet Simulation Device
        Bicycle
0x0C
        Flight Control Stick
0x20
0x21
        Flight Stick
0x22
        Cyclic Control
0x23
        Cyclic Trim
0x24
        Flight Yoke
0x25
        Track Control
0x26
        Driving Control
0xB0
        Aileron
        Aileron Trim
0xB1
0xB2
        Anti-Torque Control
        Auto-pilot Enable
0xB3
0xB4
        Chaff Release
0xB5
        Collective Control
        Dive Brake
0xB6
0xB7
        Electronic Counter Measures
0xB8
        Elevator
0xB9
        Elevator Trim
0xBA
        Rudder
0xBB
        Throttle
        Flight Communication
0xBC
0xBD
        Flare Release
0xBE
        Landing Gear
0xBF
        Toe Brake
0xC0
        Trigger
0xC1
        Weapons Arm
0xC2
        Weapons Select
0xC3
        Wing Flaps
0xC4
        Accelerator
0xC5
        Brake
0xC6
        Clutch
0xC7
        Shifter
0xC8
        Steering
0xC9
        Turret Direction
0xCA
        Barrel Elevation
```

2

```
0xCC
                 Ballast
        0xCD
                 Bicycle Crank
        0xCE
                 Handle Bars
        0xCF
                 Front Brake
        0xD0
                 Rear Brake
3
        VR Controls
        0x00
                 Unidentified
        0x01
                 Belt
        0 \times 02
                 Body Suit
        0x03
                 Flexor
                 Glove
        0x04
        0x05
                 Head Tracker
        0x06
                 Head Mounted Display
        0x07
                 Hand Tracker
        0x08
                 Oculometer
                 Vest
        0x09
                 Animatronic Device
        0x0A
        0x20
                 Stereo Enable
        0x21
                 Display Enable
4
        Sports Controls
        0x00
                 Unidentified
        0x01
                 Baseball Bat
        0x02
                 Golf Club
        0x03
                 Rowing Machine
        0x04
                 Treadmill
        0x30
                 0ar
        0x31
                 Slope
        0x32
                 Rate
        0x33
                 Stick Speed
        0x34
                 Stick Face Angle
        0x35
                 Stick Heel/Toe
        0x36
                 Stick Follow Through
        0x37
                 Stick Tempo
        0x38
                 Stick Type
                 Stick Height
        0x39
        0x50
                 Putter
                 1 Iron
        0x51
                 2 Iron
        0x52
                 3 Iron
        0x53
        0x54
                 4 Iron
        0x55
                 5 Iron
        0x56
                 6 Iron
        0x57
                 7 Iron
        0x58
                 8 Iron
        0x59
                 9 Iron
        0x5A
                 10 Iron
        0x5B
                 11 Iron
        0x5C
                 Sand Wedge
                 Loft Wedge
        0x5D
        0x5E
                 Power Wedge
        0x5F
                 1 Wood
        0x60
                 3 Wood
        0x61
                 5 Wood
                 7 Wood
        0x62
                 9 Wood
        0x63
5
        Game Controls
        0 \times 00
                 Undefined
                 3D Game Controller
        0x01
                 Pinball Device
        0x02
        0x03
                 Gun Device
        0x20
                 Point of View
        0x21
                 Turn Right/Left
```

Dive Plane

0xCB

```
0x22
        Pitch Right/Left
0x23
        Roll Forward/Backward
0x24
        Move Right/Left
0x25
        Move Forward/Backward
0x26
        Move Up/Down
0x27
        Lean Right/Left
0x28
        Lean Forward/Backward
0x29
        Height of POV
0x2A
        Flipper
0x2B
        Secondary Flipper
        Bump
0x2C
0x2D
        New Game
0x2E
        Shoot Ball
0x2F
        Player
0x30
        Gun Bolt
        Gun Clip
0x31
0x32
        Gun Selector
        Gun Single Shot
0x33
0x34
        Gun Burst
0x35
        Gun Automatic
0x36
        Gun Safety
0x37
        Gamepad Fire/Jump
0x39
        Gamepad Trigger
Keyboard
0x00
        Reserved (no event indicated)
0x01
        Keyboard ErrorRollOver
0 \times 02
        Keyboard POSTFail
0x03
        Keyboard ErrorUndefined
0x04
        Keyboard a and A
        Keyboard b and B
0x05
0x06
        Keyboard c and C
0x07
        Keyboard d and D
        Keyboard e and E
0x08
        Keyboard f and F
0x09
        Keyboard g and G
0x0A
0x0B
        Keyboard h and H
        Keyboard i and I
0x0C
0 \times 0 D
        Keyboard j and J
        Keyboard k and K
0x0E
        Keyboard l and L
0x0F
        Keyboard m and M
0x10
0x11
        Keyboard n and N
0x12
        Keyboard o and 0
0x13
        Keyboard p and P
        Keyboard q and Q
0x14
0x15
        Keyboard r and R
0x16
        Keyboard s and S
0x17
        Keyboard t and T
0x18
        Keyboard u and U
0x19
        Keyboard v and V
        Keyboard w and W
0x1A
0x1B
        Keyboard x and X
0x1C
        Keyboard y and Y
0x1D
        Keyboard z and Z
0x1E
        Keyboard 1 and !
0x1F
        Keyboard 2 and @
0x20
        Keyboard 3 and #
0x21
        Keyboard 4 and $
        Keyboard 5 and %
0x22
0x23
        Keyboard 6 and ^
0x24
        Keyboard 7 and &
        Keyboard 8 and *
0x25
        Keyboard 9 and (
0x26
0x27
        Keyboard 0 and )
0x28
        Keyboard Return (ENTER)
```

7

```
0x29
        Keyboard ESCAPE
0x2A
        Keyboard DELETE (Backspace)
0x2B
        Keyboard Tab
0x2C
        Keyboard Spacebar
0x2D
        Keyboard - and (underscore)
0x2E
        Keyboard = and +
0x2F
        Keyboard [ and {
        Keyboard ] and }
0x30
        Keyboard \ and |
0x31
        Keyboard Non-US # and ~
0x32
0x33
        Keyboard ; and :
        Keyboard ' and "
0x34
0x35
        Keyboard Grave Accent and Tilde
0x36
        Keyboard, and <
0x37
        Keyboard . and >
0x38
        Keyboard / and ?
        Keyboard Caps Lock
0x39
0x3A
        Keyboard F1
        Keyboard F2
0x3B
0x3C
        Keyboard F3
0x3D
        Keyboard F4
0x3E
        Keyboard F5
0x3F
        Keyboard F6
0x40
        Keyboard F7
0x41
        Keyboard F8
0x42
        Keyboard F9
0x43
        Keyboard F10
0x44
        Keyboard F11
0x45
        Keyboard F12
0x46
        Keyboard PrintScreen
        Keyboard Scroll Lock
0x47
0x48
        Keyboard Pause
0x49
        Keyboard Insert
0x4A
        Keyboard Home
0x4B
        Keyboard PageUp
        Keyboard Delete Forward
0x4C
0x4D
        Keyboard End
        Keyboard PageDown
0x4E
0x4F
        Keyboard RightArrow
        Keyboard LeftArrow
0x50
        Keyboard DownArrow
0x51
        Keyboard UpArrow
0x52
0x53
        Keypad Num Lock and Clear
0x54
        Keypad /
0x55
        Keypad *
        Keypad -
0x56
0x57
        Keypad +
0x58
        Keypad ENTER
0x59
        Keypad 1 and End
0x5A
        Keypad 2 and Down Arrow
0x5B
        Keypad 3 and PageDn
        Keypad 4 and Left Arrow
0x5C
        Keypad 5
0x5D
0x5E
        Keypad 6 and Right Arrow
        Keypad 7 and Home
0x5F
0x60
        Keypad 8 and Up Arrow
        Keypad 9 and PageUp
0x61
0x62
        Keypad 0 and Insert
0x63
        Keypad . and Delete
        Keyboard Non-US \ and |
0x64
0x65
        Keyboard Application
        Keyboard Power
0x66
        Keypad =
0x67
        Keyboard F13
0x68
0x69
        Keyboard F14
0x6A
        Keyboard F15
```

```
0x6B
        Keyboard F16
0x6C
        Keyboard F17
0x6D
        Keyboard F18
0x6E
        Keyboard F19
0x6F
        Keyboard F20
0x70
        Keyboard F21
0x71
        Keyboard F22
        Keyboard F23
0x72
0x73
        Keyboard F24
0x74
        Keyboard Execute
0x75
        Keyboard Help
0x76
        Keyboard Menu
0x77
        Keyboard Select
0x78
        Keyboard Stop
0x79
        Keyboard Again
0x7A
        Keyboard Undo
0x7B
        Keyboard Cut
0x7C
        Keyboard Copy
        Keyboard Paste
0x7D
0x7E
        Keyboard Find
0x7F
        Keyboard Mute
0x80
        Keyboard Volume Up
0x81
        Keyboard Volume Down
0x82
        Keyboard Locking Caps Lock
0x83
        Keyboard Locking Num Lock
0x84
        Keyboard Locking Scroll Lock
0x85
        Keypad Comma
        Keypad Equal Sign
0x86
0x87
        Keyboard International1
        Keyboard International2
88x0
        Keyboard International3
0x89
A8x0
        Keyboard International4
0x8B
        Keyboard International5
0x8C
        Keyboard International6
0x8D
        Keyboard International7
0x8E
        Keyboard International8
0x8F
        Keyboard International9
0x90
        Keyboard LANG1
0x91
        Keyboard LANG2
        Keyboard LANG3
0x92
        Keyboard LANG4
0x93
        Keyboard LANG5
0x94
0x95
        Keyboard LANG6
0x96
        Keyboard LANG7
0x97
        Keyboard LANG8
0x98
        Keyboard LANG9
0x99
        Keyboard Alternate Erase
0x9A
        Keyboard SysReq/Attention
0x9B
        Keyboard Cancel
0x9C
        Keyboard Clear
0x9D
        Keyboard Prior
        Keyboard Return
0x9E
0x9F
        Keyboard Separator
0xA0
        Keyboard Out
0xA1
        Keyboard Oper
0xA2
        Keyboard Clear/Again
0xA3
        Keyboard CrSel/Props
0xA4
        Keyboard ExSel
0xE0
        Keyboard LeftControl
        Keyboard LeftShift
0xE1
0xE2
        Keyboard LeftAlt
0xE3
        Keyboard Left GUI
        Keyboard RightControl
0xE4
        Keyboard RightShift
0xE5
0xE6
        Keyboard RightAlt
```

Keyboard Right GUI

0xE7

```
8
        LEDs
        0x00
                 Undefined
        0x01
                 Num Lock
        0x02
                 Caps Lock
        0x03
                 Scroll Lock
        0x04
                 Compose
        0x05
                 Kana
        0x06
                 Power
        0x07
                 Shift
                 Do Not Disturb
        80x0
        0x09
                 Mute
                 Tone Enable
        0x0A
        0x0B
                 High Cut Filter
        0x0C
                 Low Cut Filter
        0 \times 0 D
                 Equalizer Enable
        0x0E
                 Sound Field On
        0x0F
                 Surround Field On
        0x10
                 Repeat
        0x11
                 Stereo
        0x12
                 Sampling Rate Detect
        0x13
                 Spinning
        0x14
                 CAV
                 CLV
        0x15
        0x16
                 Recording Format Detect
        0x17
                 Off-Hook
        0x18
                 Rina
        0x19
                 Message Waiting
        0x1A
                 Data Mode
        0x1B
                 Battery Operation
        0x1C
                 Battery OK
        0x1D
                 Battery Low
        0x1E
                 Speaker
                 Head Set
        0x1F
        0x20
                 Hold
        0x21
                 Microphone
        0x22
                 Coverage
        0x23
                 Night Mode
        0x24
                 Send Calls
        0x25
                 Call Pickup
        0x26
                 Conference
        0x27
                 Stand-by
        0x28
                 Camera On
        0x29
                 Camera Off
        0x2A
                 On-Line
                 Off-Line
        0x2B
        0x2C
                 Busy
        0x2D
                 Ready
        0x2E
                 Paper-Out
        0x2F
                 Paper-Jam
        0x30
                 Remote
        0x31
                 Forward
        0x32
                 Reverse
        0x33
                 Stop
        0x34
                 Rewind
                 Fast Forward
        0x35
        0x36
                 Play
        0x37
                 Pause
        0x38
                 Record
        0x39
                 Error
                 Usage Selected Indicator
        0x3A
        0x3B
                 Usage In Use Indicator
                 Usage Multi Mode Indicator
        0x3C
                 Indicator On
        0x3D
                 Indicator Flash
        0x3E
        0x3F
                 Indicator Slow Blink
```

```
Indicator Fast Blink
0x40
0x41
        Indicator Off
0x42
        Flash On Time
        Slow Blink On Time
0x43
0x44
        Slow Blink Off Time
0x45
        Fast Blink On Time
0x46
        Fast Blink Off Time
0x47
        Usage Indicator Color
0x48
        Red
0x49
        Green
0x4A
        Amber
        Generic Indicator
0x4B
0x4C
        System Suspend
0x4D
        External Power Connected
0x4C-FFFF
                 Reserved
Button
0x00
        No Button Pressed
        Button %d
Ordinal
0x00
        Unused
        Instance %d
Telephony
0x00
        Unassigned
0x01
        Phone
0 \times 02
        Answering Machine
0x03
        Message Controls
0x04
        Handset
0x05
        Headset
0x06
        Telephony Key Pad
0x07
        Programmable Button
0x20
        Hook Switch
0x21
        Flash
0x22
        Feature
0x23
        Hold
0x24
        Redial
0x25
        Transfer
0x26
        Drop
        Park
0x27
        Forward Calls
0x28
0x29
        Alternate Function
0x2A
        Line
0x2B
        Speaker Phone
        Conference
0x2C
0x2D
        Ring Enable
0x2E
        Ring Select
0x2F
        Phone Mute
0x30
        Caller ID
0x50
        Speed Dial
0x51
        Store Number
        Recall Number
0x52
0x53
        Phone Directory
0x70
        Voice Mail
0x71
        Screen Calls
        Do Not Disturb
0x72
0x73
        Message
0x74
        Answer On/Off
0x90
        Inside Dial Tone
        Outside Dial Tone
0x91
0x92
        Inside Ring Tone
        Outside Ring Tone
0x93
        Priority Ring Tone
0x94
0x95
        Inside Ringback
```

Priority Ringback

9

10

11

0x96

```
0x97
        Line Busy Tone
0x98
        Reorder Tone
0x99
        Call Waiting Tone
        Confirmation Tone 1
0x9A
0x9B
        Confirmation Tone 2
0x9C
        Tones Off
0xB0
        Phone Key 0
        Phone Key 1
0xB1
        Phone Key 2
0xB2
0xB3
        Phone Key 3
0xB4
        Phone Key 4
0xB5
        Phone Key 5
0xB6
        Phone Key 6
0xB7
        Phone Key 7
        Phone Key 8
0xB8
0xB9
        Phone Key 9
        Phone Key Star
0xBA
        Phone Key Pound
0xBB
0xBC
        Phone Key A
0xBD
        Phone Key B
0xBE
        Phone Key C
0xBF
        Phone Key D
Consumer
0 \times 00
        Unassigned
0x01
        Consumer Control
0x02
        Numeric Key Pad
0x03
        Programmable Buttons
0x20
        +10
0x21
        +100
0x22
        AM/PM
0x30
        Power
0x31
        Reset
0x32
        Sleep
        Sleep After
0x33
0x34
        Sleep Mode
0x35
        Illumination
0x36
        Function Buttons
0x40
        Menu
        Menu Pick
0x41
        Menu Up
0x42
        Menu Down
0x43
0x44
        Menu Left
0x45
        Menu Right
0x46
        Menu Escape
        Menu Value Increase
0x47
0x48
        Menu Value Decrease
0x60
        Data On Screen
0x61
        Closed Caption
        Closed Caption Select
0x62
0x63
        VCR/TV
        Broadcast Mode
0x64
        Snapshot
0x65
0x66
        Still
0x80
        Selection
0x81
        Assign Selection
0x82
        Mode Step
0x83
        Recall Last
0x84
        Enter Channel
0x85
        Order Movie
0x86
        Channel
0x87
        Media Selection
        Media Select Computer
88x0
        Media Select TV
0x89
        Media Select WWW
A8x0
0x8B
        Media Select DVD
```

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```
0x8C
        Media Select Telephone
        Media Select Program Guide
0x8D
0x8E
        Media Select Video Phone
0x8F
        Media Select Games
        Media Select Messages
0x90
0x91
        Media Select CD
0x92
        Media Select VCR
0x93
        Media Select Tuner
0x94
        Quit
0x95
        Help
0x96
        Media Select Tape
0x97
        Media Select Cable
0x98
        Media Select Satellite
0x99
        Media Select Security
0x9A
        Media Select Home
0x9B
        Media Select Call
0x9C
        Channel Increment
0x9D
        Channel Decrement
        Media Select SAP
0x9E
0xA0
        VCR Plus
0xA1
        0nce
0xA2
        Daily
0xA3
        Weekly
0xA4
        Monthly
0xB0
        Play
0xB1
        Pause
0xB2
        Record
        Fast Forward
0xB3
0xB4
        Rewind
0xB5
        Scan Next Track
        Scan Previous Track
0xB6
0xB7
        Stop
0xB8
        Eject
0xB9
        Random Play
0xBA
        Select DisC
        Enter Disc
0xBB
0xBC
        Repeat
0xBD
        Tracking
0xBE
        Track Normal
        Slow Tracking
0xBF
        Frame Forward
0xC0
        Frame Back
0xC1
0xC2
        Mark
0xC3
        Clear Mark
0xC4
        Repeat From Mark
0xC5
        Return To Mark
0xC6
        Search Mark Forward
0xC7
        Search Mark Backwards
0xC8
        Counter Reset
0xC9
        Show Counter
0xCA
        Tracking Increment
        Tracking Decrement
0xCB
        Volume
0xE0
0xE1
        Balance
0xE2
        Mute
0xE3
        Bass
        Treble
0xE4
0xE5
        Bass Boost
0xE6
        Surround Mode
0xE7
        Loudness
0xE8
        MPX
0xE9
        Volume Up
        Volume Down
0xEA
        Speed Select
0xF0
0xF1
        Playback Speed
```

0xF2

Standard Play

```
0xF3
        Long Play
0xF4
        Extended Play
0xF5
        Slow
0x100
        Fan Enable
0x101
        Fan Speed
0x102
        Light
0x103
        Light Illumination Level
0x104
        Climate Control Enable
0x105
        Room Temperature
0x106
        Security Enable
        Fire Alarm
0×107
0x108
        Police Alarm
0x150
        Balance Right
        Balance Left
0x151
0x152
        Bass Increment
0x153
        Bass Decrement
0x154
        Treble Increment
        Treble Decrement
0x155
        Speaker System
0x160
        Channel Left
0x161
0x162
        Channel Right
0x163
        Channel Center
0x164
        Channel Front
0x165
        Channel Center Front
0x166
        Channel Side
0x167
        Channel Surround
        Channel Low Frequency Enhancement
0x168
0x169
        Channel Top
0x16A
        Channel Unknown
0x170
        Sub-channel
        Sub-channel Increment
0×171
        Sub-channel Decrement
0x172
        Alternate Audio Increment
0x173
0x174
        Alternate Audio Decrement
0x180
        Application Launch Buttons
        AL Launch Button Configuration Tool
0x181
0x182
        AL Programmable Button Configuration
        AL Consumer Control Configuration
0x183
0x184
        AL Word Processor
        AL Text Editor
0x185
        AL Spreadsheet
0x186
        AL Graphics Editor
0x187
0x188
        AL Presentation App
0x189
        AL Database App
0x18A
        AL Email Reader
        AL Newsreader
0x18B
        AL Voicemail
0x18C
0x18D
        AL Contacts/Address Book
        AL Calendar/Schedule
0x18E
0x18F
        AL Task/Project Manager
0x190
        AL Log/Journal/Timecard
        AL Checkbook/Finance
0x191
0x192
        AL Calculator
0x193
        AL A/V Capture/Playback
        AL Local Machine Browser
0x194
0x195
        AL LAN/WAN Browser
0x196
        AL Internet Browser
0x197
        AL Remote Networking/ISP Connect
0x198
        AL Network Conference
0x199
        AL Network Chat
0×19A
        AL Telephony/Dialer
0x19B
        AL Logon
0x19C
        AL Logoff
        AL Logon/Logoff
0x19D
        AL Terminal Lock/Screensaver
0x19E
```

0x19F

AL Control Panel

```
0x1A0
        AL Command Line Processor/Run
0x1A1
        AL Process/Task Manager
0×1A2
        AL Select Tast/Application
0x1A3
        AL Next Task/Application
0×1A4
        AL Previous Task/Application
0x1A5
        AL Preemptive Halt Task/Application
0x200
        Generic GUI Application Controls
        AC New
0x201
        AC Open
0x202
        AC Close
0x203
0x204
        AC Exit
0x205
        AC Maximize
0x206
        AC Minimize
0x207
        AC Save
        AC Print
0x208
        AC Properties
0x209
        AC Undo
0x21A
0x21B
        AC Copy
        AC Cut
0x21C
        AC Paste
0x21D
        AC Select All
0x21E
0x21F
        AC Find
0x220
        AC Find and Replace
0x221
        AC Search
0x222
        AC Go To
0x223
        AC Home
0x224
        AC Back
0x225
        AC Forward
        AC Stop
0x226
0x227
        AC Refresh
        AC Previous Link
0x228
       AC Next Link
AC Bookmarks
0x229
0x22A
0x22B
        AC History
0x22C
        AC Subscriptions
0x22D
        AC Zoom In
0x22E
        AC Zoom Out
0x22F
        AC Zoom
0x230
       AC Full Screen View
        AC Normal View
0x231
        AC View Toggle
0x232
        AC Scroll Up
0x233
       AC Scroll Down
AC Scroll
0x234
0x235
0x236
       AC Pan Left
0x237
        AC Pan Right
0x238
        AC Pan
        AC New Window
0x239
0x23A
        AC Tile Horizontally
        AC Tile Vertically
0x23B
0x23C
        AC Format
Digitizer
0×00
        Undefined
0x01
        Digitizer
0x02
        Pen
0x03
        Light Pen
0x04
        Touch Screen
0x05
        Touch Pad
0x06
        White Board
0x07
        Coordinate Measuring Machine
        3-D Digitizer
80x0
        Stereo Plotter
0x09
0x0A
        Articulated Arm
0x0B
        Armature
```

Multiple Point Digitizer

13

0x0C

```
Free Space Wand
        0x20
                 Stylus
        0x21
                 Puck
        0x22
                 Finger
        0x30
                 Tip Pressure
        0x31
                 Barrel Pressure
        0x32
                 In Range
        0x33
                 Touch
        0x34
                 Untouch
        0x35
                 Tap
        0x36
                 Quality
        0x37
                 Data Valid
        0x38
                 Transducer Index
        0x39
                 Tablet Function Keys
        0x3A
                 Program Change Keys
        0x3B
                 Battery Strength
        0x3C
                 Invert
        0x3D
                X Tilt
                Y Tilt
        0x3E
        0x3F
                Azimuth
        0x40
                 Altitude
        0x41
                 Twist
        0x42
                 Tip Switch
        0x43
                 Secondary Tip Switch
        0x44
                 Barrel Switch
        0x45
                 Eraser
        0x46
                 Tablet Pick
15
        Physical Interface Device
16
        Unicode
                Unicode Char u%04x
20
        Alphnumeric Display
        0x00
                Undefined
        0x01
                 Alphanumeric Display
        0x20
                 Display Attributes Report
        0x21
                 ASCII Character Set
        0x22
                Data Read Back
        0x23
                 Font Read Back
                 Display Control Report
        0x24
                 Clear Display
        0x25
        0x26
                Display Enable
        0x27
                 Screen Saver Delay
        0x28
                 Screen Saver Enable
        0x29
                 Vertical Scroll
        0x2A
                Horizontal Scroll
        0x2B
                 Character Report
        0x2C
                 Display Data
        0x2D
                 Display Status
                 Stat Not Ready
        0x2E
        0x2F
                 Stat Ready
                 Err Not a loadable character
        0x30
                 Err Font data cannot be read
        0x31
        0x32
                 Cursor Position Report
        0x33
                Row
        0x34
                Column
        0x35
                Rows
        0x36
                 Columns
        0x37
                 Cursor Pixel Positioning
                 Cursor Mode
        0x38
                 Cursor Enable
        0x39
                 Cursor Blink
        0x3A
                 Font Report
        0x3B
                 Font Data
        0x3C
        0x3D
                 Character Width
```

 $0 \times 0 D$

```
0x3E
                Character Height
        0x3F
                Character Spacing Horizontal
        0x40
                Character Spacing Vertical
                Unicode Character Set
        0x41
128
        Monitor
        0 \times 00
                Undefined
        0x01
                Monitor Control
                EDID Information
        0x02
                VDIF Information
        0x03
        0x04
                VESA Version
        0x05
                On Screen Display
        0x06
                Auto Size Center
        0x07
                Polarity Horz Synch
        80x0
                Polarity Vert Synch
        0x09
                Sync Type
        0x0A
                Screen Position
        0x0B
                Horizontal Frequency
        0x0C
                Vertical Frequency
129
        Monitor Enumerated Values
        0x00
                unassigned
                ENUM %d
130
        VESA Virtual Controls
        0x10
                Brightness
        0x12
                Contrast
        0x16
                Video Gain Red
        0x18
                Video Gain Green
                Video Gain Blue
        0x1A
                Focus
        0x1C
                Horizontal Position
        0x20
        0x22
                Horizontal Size
                Horizontal Pincushion
        0x24
        0x26
                Horizontal Pincushion Balance
        0x28
                Horizontal Misconvergence
        0x2A
                Horizontal Linearity
        0x2C
                Horizontal Linearity Balance
        0x30
                Vertical Position
        0x32
                Vertical Size
                Vertical Pincushion
        0x34
                Vertical Pincushion Balance
        0x36
                Vertical Misconvergence
        0x38
        0x3A
                Vertical Linearity
        0x3C
                Vertical Linearity Balance
        0x40
                Parallelogram Distortion
                Trapezoidal Distortion
        0x42
                Tilt
        0x44
        0x46
                Top Corner Distortion Control
                Top Corner Distortion Balance
        0x48
        0x4A
                Bottom Corner Distortion Control
        0x4C
                Bottom Corner Distortion Balance
                Moiré Horizontal
        0x56
                Moiré Vertical
        0x58
        0x5E
                 Input Level Select
        0x60
                Input Source Select
                Stereo Mode
        0x62
                Video Black Level Red
        0x6C
        0x6E
                Video Black Level Green
        0x70
                Video Black Level Blue
131
        VESA Command
        0x00
                Undefined
        0x01
                Settings
        0x02
                Degauss
```

132 Power Device 0×00 Undefined 0x01 iName PresentStatus 0x02 0x03 ChangedStatus 0x04 **UPS** 0x05 PowerSupply 0x10 BatterySystem BatterySystemID 0x11 0x12 Battery 0x13 BattervID 0×14 Charger 0x15 ChargerID 0x16 PowerConverter 0x17 PowerConverterID 0x18 OutletSystem 0x19 OutletSystemID 0x1A Input InputID 0x1B 0x1C Output 0x1D OutputID 0x1E Flow 0x1F FlowID 0x20 Outlet 0x21 OutletID 0x22 Gang 0x23 GangID 0x24 Sink 0x25 SinkID 0x30 Voltage 0x31 Current 0x32 Frequency 0x33 **ApparentPower** 0x34 ActivePower 0x35 PercentLoad 0x36 Temperature 0x37 Humidity 0x40 ConfigVoltage 0x41 ConfigCurrent 0x42 ConfigFrequency 0x43 ConfigApparentPower ConfigActivePower 0x44 0x45 ConfigPercentLoad 0x46 ConfigTemperature 0x47 ConfigHumidity 0x50 SwitchOnControl SwitchOffControl 0x51 0x52 ToggleControl 0x53 LowVoltageTransfer 0x54 HighVoltageTransfer 0x55 DelayBeforeReboot 0x56 DelayBeforeStartup 0x57 DelayBeforeShutdown 0x58 Test 0x59 Vendorspecificcommand 0x60 Present 0x61 Good InternalFailure 0x62 0x63 VoltageOutOfRange 0x64 FrequencyOutOfRange Overload 0x65 0x66 OverCharged OverTemperature 0x67 ShutdownRequested 0x68

0x69

0x6A

ShutdownImminent

VendorSpecificAnswerValid

```
0x6C
                Switcheble
        0x6D
                Used
        0x6E
                Boost
        0x6F
                Buck
        0x70
                Initialized
        0x71
                Tested
133
        Battery System
        0x00
                Undefined
        0x01
                SMBBatteryMode
        0 \times 02
                SMBBatteryStatus
        0x03
                SMBAlarmWarning
        0x04
                SMBChargerMode
                SMBChargerStatus
        0x05
        0x06
                SMBChargerSpecInfo
        0x07
                SMBSelectorState
        0x08
                SMBSelectorPreset
        0x09
                SMBSelectorInfo
        0x10
                OptionalMfgFunction1
                OptionalMfgFunction2
        0x11
        0x12
                OptionalMfgFunction3
        0x13
                OptionalMfgFunction4
                OptionalMfgFunction5
        0x14
        0x15
                ConnectionToSMBus
        0x16
                OutputConnection
        0x17
                ChargerConnection
        0x18
                BatteryInsertion
        0x19
                Usenext
        0x1A
                0KToUse
        0x28
                ManufacturerAccess
        0x29
                RemainingCapacityLimit
        0x2A
                RemainingTimeLimit
        0x2B
                AtRate
        0x2C
                CapacityMode
        0x2D
                BroadcastToCharger
        0x2E
                PrimaryBattery
        0x2F
                ChargeController
        0x40
                TerminateCharge
        0x41
                TermminateDischarge
        0x42
                BelowRemainingCapacityLimit
                RemainingTimeLimitExpired
        0x43
        0x44
                Charging
        0x45
                Discharging
        0x46
                FullyCharged
        0x47
                FullyDischarged
        0x48
                ConditionningFlag
        0x49
                AtRate0K
        0x4A
                SMBErrorCode
                NeedReplacement
        0x4B
        0x60
                AtRateTimeToFull
        0x61
                AtRateTimeToEmpty
        0x62
                AverageCurrent
        0x63
                Maxerror
                RelativeStateOfCharge
        0x64
        0x65
                AbsoluteStateOfCharge
        0x66
                RemainingCapacity
                FullChargeCapacity
        0x67
        0x68
                RunTimeToEmpty
        0x69
                AverageTimeToEmpty
                AverageTimeToFull
        0x6A
        0x6B
                CycleCount
                BattPackModelLevel
        0x80
                InternalChargeController
        0x81
        0x82
                PrimaryBatterySupport
        0x83
                DesignCapacity
```

0x6B

SwitchOn/Off

```
0x85
                 ManufacturerDate
        0x86
                 SerialNumber
        0x87
                 iManufacturerName
        88x0
                 iDevicename
        0x89
                 iDeviceChemistery
        A8x0
                 iManufacturerData
        0x8B
                 Rechargeable
                 WarningCapacityLimit
        0x8C
                 CapacityGranularity1
        0x8D
        0x8E
                 CapacityGranularity2
        0xC0
                 InhibitCharge
        0xC1
                 EnablePolling
        0xC2
                 ResetToZero
        0xD0
                 ACPresent
                 BatteryPresent
        0xD1
        0xD2
                 PowerFail
        0xD3
                 AlarmInhibited
        0xD4
                 ThermistorUnderRange
        0xD5
                 ThermistorHot
        0xD6
                 ThermistorCold
        0xD7
                 ThermistorOverRange
        0xD8
                 VoltageOutOfRange
        0xD9
                 CurrentOutOfRange
                 CurrentNotRegulated
        0xDA
                 VoltageNotRegulated
        0xDB
        0xDC
                 MasterMode
        0xDD
                 ChargerBattery/HostControlled
        0xF0
                 ChargerSpecInfo
        0xF1
                 ChargerSpecRef
        0xF2
                 Level2
        0xF3
                 Level3
140
        Bar Code Scanner
141
        Scale Device
144
        Camera Control
145
        Arcade Device
# Some Micro$oft non-standard extensions
0xff00
        Microsoft
        0xe9
                 Base Up
        0xea
                 Base Down
                           (1.6.2003) Riccardo "VIC" Torrini
# APC non-standard page?
0xff84
          APC Power Device
        0 \times 00
                 Undefined
        0x01
                 iName
        0x02
                 PresentStatus
        0x03
                 ChangedStatus
        0x04
                 UPS
        0x05
                 PowerSupply
        0x10
                 BatterySystem
        0x11
                 BatterySystemID
        0x12
                 Battery
                 BatteryID
        0x13
        0x14
                 Charger
        0x15
                 ChargerID
                 PowerConverter
        0x16
        0x17
                 PowerConverterID
        0x18
                 OutletSystem
        0x19
                 OutletSystemID
        0x1A
                 Input
        0x1B
                 InputID
```

0x84

SpecificationInfo

```
0x1C
        Output
0x1D
        OutputID
0x1E
        Flow
        FlowID
0x1F
0x20
        Outlet
0x21
        OutletID
0x22
        Gang
0x23
        GangID
0x24
        Sink
0x25
        SinkID
0x30
        Voltage
0x31
        Current
0x32
        Frequency
0x33
        ApparentPower
0x34
        ActivePower
0x35
        PercentLoad
0x36
        Temperature
        Humidity
0x37
0x40
        ConfigVoltage
0x41
        ConfigCurrent
0x42
        ConfigFrequency
0x43
        ConfigApparentPower
0x44
        ConfigActivePower
0x45
        ConfigPercentLoad
0x46
        ConfigTemperature
0x47
        ConfigHumidity
0x50
        SwitchOnControl
0x51
        SwitchOffControl
0x52
        ToggleControl
0x53
        LowVoltageTransfer
0x54
        HighVoltageTransfer
0x55
        DelayBeforeReboot
0x56
        DelayBeforeStartup
        DelayBeforeShutdown
0x57
0x58
        Test
0x59
        Vendorspecificcommand
0x60
        Present
0x61
        Good
        InternalFailure
0x62
0x63
        VoltageOutOfRange
0x64
        FrequencyOutOfRange
        Overload
0x65
        OverCharged
0x66
0x67
        OverTemperature
0x68
        ShutdownRequested
0x69
        ShutdownImminent
0x6A
        VendorSpecificAnswerValid
0x6B
        SwitchOn/Off
0x6C
        Switcheble
0x6D
        Used
0x6E
        Boost
0x6F
        Buck
        Initialized
0x70
0x71
        Tested
  APC_Battery System
\overline{0} \times 00
        Undefined
0x01
        SMBBatteryMode
0x02
        SMBBatteryStatus
0x03
        SMBAlarmWarning
0x04
        SMBChargerMode
0x05
        SMBChargerStatus
        SMBChargerSpecInfo
0x06
        SMBSelectorState
0x07
80x0
        SMBSelectorPreset
```

SMBSelectorInfo

0xff85

0x09

- 0x10 OptionalMfgFunction1
- 0x11 OptionalMfgFunction2
- 0x12 OptionalMfgFunction3
- 0x13 OptionalMfgFunction4
- 0x14 OptionalMfgFunction5
- 0x15 ConnectionToSMBus
- 0x16 OutputConnection
- 0x17 ChargerConnection
- 0x18 BatteryInsertion
- 0x19 Usenext 0x1A OKToUse
- 0x28 ManufacturerAccess
- 0x29 RemainingCapacityLimit
- 0x2A RemainingTimeLimit
- 0x2B AtRate
- 0x2C CapacityMode
- 0x2D BroadcastToCharger
- 0x2E PrimaryBattery
- 0x2F ChargeController
- 0x40 TerminateCharge
- 0x41 TermminateDischarge
- 0x42 BelowRemainingCapacityLimit
- 0x43 RemainingTimeLimitExpired
- 0x44 Charging
- 0x45 Discharging
- 0x46 FullyCharged
- 0x47 FullyDischarged
- 0x48 ConditionningFlag
- 0x49 AtRateOK
- 0x4A SMBErrorCode
- 0x4B NeedReplacement
- 0x60 AtRateTimeToFull
- 0x61 AtRateTimeToEmpty
- 0x62 AverageCurrent
- 0x63 Maxerror
- 0x64 RelativeStateOfCharge
- 0x65 AbsoluteStateOfCharge
- 0x66 RemainingCapacity
- 0x67 FullChargeCapacity
- 0x68 RunTimeToEmpty
- 0x69 AverageTimeToEmpty
- 0x6A AverageTimeToFull
- 0x6B CycleCount
- 0x80 BattPackModelLevel
- 0x81 InternalChargeController
- 0x82 PrimaryBatterySupport
- 0x83 DesignCapacity
- 0x84 SpecificationInfo
- 0x85 ManufacturerDate
- 0x86 SerialNumber
- 0x87 iManufacturerName
- 0x88 iDevicename
- 0x89 iDeviceChemistery
- 0x8A iManufacturerData
- 0x8B Rechargeable
- 0x8C WarningCapacityLimit
- 0x8D CapacityGranularity1
- 0x8E CapacityGranularity2
- 0xC0 InhibitCharge
- 0xC1 EnablePolling
- 0xC2 ResetToZero
- 0xD0 ACPresent
- 0xD1 BatteryPresent
- 0xD2 PowerFail
- 0xD3 AlarmInhibited
- 0xD4 ThermistorUnderRange

0xD5	ThermistorHot
0xD6	ThermistorCold
0xD7	ThermistorOverRange
0xD8	VoltageOutOfRange
0xD9	CurrentOutOfRange
0xDA	CurrentNotRegulated
0xDB	VoltageNotRegulated
0xDC	MasterMode
0xDD	ChargerBattery/HostControlled
0xF0	ChargerSpecInfo
0xF1	ChargerSpecRef
0xF2	Level2
0xF3	Level3