DRAFT DOCUMENT

The feature has 1 function:

[0x2200] MousePointer Basic Optical Sensors

MousePointerInfo = [0]GetMousePointerInfo()

Event
None

GetMousePointerInfo
Returns information about the mouse pointer, like resolution, need for sensor orientation tuning, need for acceleration, etc.. basically all information needed by SetPoint UI for pointer/cursor settings.

Returns
SensorResolution [16bits] Returns the sensor resolution, in 1 DPI steps (0...65'536 DPI)
Flags [8bits] Various informative bits, see definition below.

SensorResolution:

This value gives the typical sensor resolution on a standard surface, in real life; the optical sensor resolution can change up to +/- 20% the indicated resolution depending on the surface.

Flags:

bit 7	6	5	4	3	2	1	0
reserved	reserved	reserved	reserved	Suggest vertical orientation tuning (trackball)	Suggest OS ballistics*	Pointer acceleration bit1 *	Pointer acceleration bit0 *

Pointer acceleration [2bits]
00 = none,
01 = low,
02 = med,
03 = high

The device informs which ballistics curve is more appropriate given its physical characteristics. If the host SW has several ballistics curves, (up to 4) the host can choose a default curve based on this information. If the host does not provide multiple ballistics, then this information is to be ignored.

Suggest OS ballistics   [1bit]
0 : If the host SW can override the OS native ballistics, then this setting suggests that it is OK to do so.
1 : The device suggests that the OS native ballistics is used.

Suggest vertical tuning   [1bit]
0 = No vertical tuning   (Standard mice)
1 = Provide vertical tuning (orientation)   (Trackball)

When suggest vertical tunning bit is set, the host SW can provide a mechanism for the user to fine tune its X and Y movement vs the cursor movement on the screen. This is typically required for trackballs.

Report format

Byte 0	1	2	3	4	...	15
Sensor ResolutionMSB	Sensor ResolutionLSB	Flags	reserved	reserved	reserved	reserved

SW Response Error Exception
None

Remarks