Multi-touch

Technology & Products

Sebastian Knödel - 18/01/2011
Technology

Resistive or capacitive

Optical
OpticInfrared

Frustrated Total Internal Reflection (FTIR)

Diffused Illumination (DI)

MS Surface 2.0

MS Surface 1.0
Optical Infrared

VERTICAL AND HORIZONTAL INFARED BEAMS

NextWindow

HP Touch Smart

A finger touches the screen and disrupts the beams.

The x,y location of the point of contact is calculated by the controller and transmitted to the PC.
Capacitive

Small amount of voltage is applied to the four corners of the touch screen.

A finger touches the screen and draws a minute amount of current to the point of contact, creating a voltage drop.

The x,y location of the point of contact is calculated by the controller and transmitted to the PC.

- N-Trig
- Dell Latitude XT
- Apple iPhone
- Diamond Touch
Resistive

Touch creates contact between resistive circuit layers, closing a switch.

Controller determines between layers to get touch coordinates.
Surface Acoustic Wave
Misc

- 2$ Multi-touch
- MTMini
- Wii
- Trackpad
Techno Resumé

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Software Standards

• TUIO protocol
  – multitouchindustry standard

• Microsoft Touch
  – Windows 7 integrated
Microsoft Surface

MS Surface 2.0
Not yet available
Samsung SUR40

40"
1080p LCD HD screen,
2.9GHz AMD Athlon II X2 processor, and
Radeon HD 6700M

MS Surface 1.0
Not available anymore
~8000$
GestureTek

- Illuminate Multi-Touch
- GestTable
- Illuminate Display
- Illuminate Kiosk
Smart Table

36"L×291/8"W×253/4"H
Immersion

39"
~10000€
Magic X Table

32”
Prix ?
Multitouch Cornerstone - cell

46” LCD. Depth 299 mm, weight 37 kg
NextWindow

- Overlay Touch
  - 32”-70”
- All-in-one solution
HP TouchSmart – N-Trig

HP TouchSmart

900€
17” – 23”
PQLabs

Available Sizes: 32", 40", 42", 46", 47", 50", 52", 55", 57", 60", 65" (Custom sizes available upon request)

~2000€
Dell Latitude XT

Taille de l'écran: 31 cm (12,1")
Écran tactile multipoint
2 579 €
Stantum

Slate PC
15.4”
France

- Immersion
- Stantum
- TangibleDisplay
- instore-solution
- INTUILLab

- TactiNeo
- Tactiliaagency
- Onslatouch
- createmultimedia