

Info 2 - Test d'audition (non préparée) du 11 mai 2009 : Corrigé.
surlignées **en jaune** : les idées-clés qui devaient apparaître dans le résumé

http://news.bbc.co.uk/2/hi/programmes/click_online/8539295.stm

USB 3 promises 10x faster data transfers

(Ian Hardy, BBC Click, 26 February 2010)

Transcript

Yes, USB ports are everywhere. **Four billion** shipped globally **in 2009** alone. So it's a fair bet that a few million computer users may be very interested in the latest version, now colour-coded blue. This is the upgrade to Hi-Speed USB 2, the **new SuperSpeed USB 3**.

0:20 *Jeff Ravencraft, President (USB Implementation Forum) :*

" - It's ten times faster than Hi-Speed USB is today and that means **5-Gigabit per second** signal rate versus 480 Megabits per second with a Hi-Speed USB."

0:34 It will also tax your computer far less. **CPU utilization is a mere 1 or 2%**, compared to 30 to 50 % for USB 2. So even huge transfers won't have a major impact on overall computer performance. - Not that moving files takes that long anyway :

0:53 *John O'Neill (Symwave) :*

" - Let's say you have 25 Gig of data, photos, videos, home movies maybe, and that would take approximately 15 minutes to transfer with USB 2. On USB 3, that will take less than a minute."

1:06 It's important to know these figures are **perfect-world scenarios**. Actual transfer speeds vary, depending on hard drive rotation [speed] and the type of PCI-Express card being used amongst other things.

1:20 New cables allow for **two-way data transfer at higher power**, so more demanding peripherals can be plugged in to the PC. Charging up gadgets is also quicker and USB 3 is **backwards-compatible**.

1:37 But it also opens up some **new possibilities**. This **kiosk** can **rent** and download a Blu-Ray quality **movie** to a flash drive in seconds, an impulse **purchase** perfect for supermarkets and **petrol stations**.

1:49 With USB 3.0 promising to have such a big impact over the next few years, there are inevitably going to be **connection casualties**. Both FireWire and e-SATA have the potential of falling into that category.

2:04 **Hard-drive manufacturers** say they'll have to take a close look at the connections they provide, especially on high-capacity models.

2:11 *Seema Lindskog (Western Digital) :*

" - **e-SATA** is becoming less and less popular with consumers and so we're seeing it in fewer and fewer computers, so it's definitely something we're **phasing**

out more in terms of our... our hard drives that we're offering."

2:26 Western Digital, Buffalo Technology and others have already put USB 3 products into retail stores. The earliest adopters of the technology are likely to be **video editors and photographers** who routinely need to **transfer large files** between computers and clients in a rush.

2:46 But that's a job currently handled by **FireWire** otherwise known as i.LINK or [IEEE] 1394 which is commonly found on hard drives, video cameras and computers, especially those made by **Apple** which **developed the technology in 1995**.

3:02 Ironically **the future of FireWire in the consumer market may ultimately rest with Apple's decision to incorporate USB 3 or not**. The company killed off FireWire in iPods **early on** and has removed it from lower-end laptops recently.

3:21 *Bill Rose (1394 Trade Association) :*

" - If Apple was to announce tomorrow they were **dropping** 1394, that would not be a great thing for the FireWire community."

3:30 Meanwhile **Intel** is working on a **small fiber optic connection** that may lead to the further miniaturization of gadgets. The project is named **Light Peak** and the goal is **to replace many of today's cables with just one that is many times faster than even USB 3**.

3:46 *Jason Ziller (Intel) :*

" - Fiber optics has been used for a while in data centres, and in telecom, you know, if you make a long distance phone call today, it's likely going over a fiber optic link but this is the **first time** they are actually taking it down into, you know, **mainstream** er... consumer devices."

4:01 What seems assured is that we will soon be **synch[roniz]ing** our phones in **seconds** instead of minutes and backing up video collections in minutes instead of hours.

The **challenge** for USB 3 is to become widely adopted **before other technologies** like FireWire 3200 and Light Peak reach the point of public release. **4:24**

(les mots **soulignés** avaient été expliqués avant le test)

Voir page suivante : squelette de résumé.

Squelette de résumé :

(Répartition des points : 6 + 4 + 4 + 2 = total 16 points, ramenés sur 4 pour l'attribution du bonus)

1. USB 3 : caractéristiques / avantages

- vitesse (idéale) : 5 Gbps
- → ex d'application : borne de téléchargement rapide pour location de films
- consomme 1-2% des ressources CPU (><USB 2 : 30-50)
- nv câbles : transfert bidirectionnel , puissance >
- compatibilité avec norme antérieure

2. Concurrence USB 3 → e-SATA et FireWire menacés ?

- un fabricant de DD : « e-SATA en voie de disparition »
- vitesse USB 3 OK pr transfert rapide de très gds fichiers par professionnels de l'image = marché traditionnel de FireWire / i-LINK (norme ? Apple, 1995, mais abandonnée sur iPod et crt portables)
- avenir de FireWire entre les mains d'Apple : compromis si Apple adopte USB 3

3. Perspectives d'avenir : Intel's Light Peak

- connexion basée sur fibre optique
- bcp + rapide qu'USB 3
- 1 seul pt câble en remplacerait 1 gd nb
- (1^{ère} incursion de la fibre optique ds domaine de l'informatique pr le tout-venant)

4. Conclusion

- certitude : avenir assuré pour toute technologie de transfert rapide
- MAIS USB 3 se généralisera-t-il avant l'arrivée sur le marché de FireWire 3200 et de Light Peak ?