# USB drives and Portable Applications

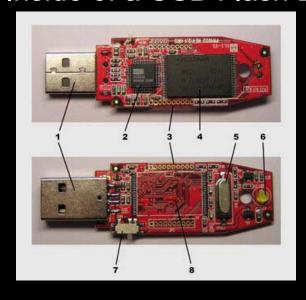
## What are USB Flash Drives...

- Or USB sticks...
- Or thumb drives...
- Or pen drives...
- Or USB key drives...
- Or memory sticks...
- Or "that thing that has all my stuff on it?"...

### NAND Flash memory

- NAND flash architecture was introduced by Toshiba in 1989.
- The memory is accessed in blocks much like hard drives and floppy disks.
- The use of it in a USB interface device was developed my M-Systems in 1998 and first released to the market in 2001 by IBM.

## The Inside of a USB Flash Drive



#### A Breakthrough

- In 2004 Sandisk and its subsidiary, M-Systems created the U3 Specifiaction, and the portable application platform is born.
- The U3 platform runs software directly from a USB flash drive.
- The "OS" is loaded in the computers memory and is deleted on removal of the drive.
- Software has to be designed specifically for the mobile platform to work.
- Applications and Manufacturers of compatible USB drives can be found at <a href="http://www.u3.com/">http://www.u3.com/</a>

#### Portable Applications

- www.portableapps.com
- The installer includes the platform program launcher and several common applications.
- New applications can be downloaded from their site.
- The suite can be installed on ANY USB flash drive.
- ALL software is open source.





