

# Lenovo Flex 2-14 Computer with Microsoft Windows 8.1

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# Lenovo Flex 2-14 Computer



# Lenovo Flex 2-14 Computer

- ▶ Lenovo Flex 2-14 Computer
  - ▶ Flex Laptop: can be a laptop or a notebook
  - ▶ 14-inch 1366x768 LED screen
  - ▶ Solid State Hard Drive (SSHD): 256 GB
  - ▶ Memory: 8 GB
  - ▶ LAN: 100/100Mbps
  - ▶ CPU: Intel I7-4510U
  - ▶ Battery: 4 Cell 6 Hours
- ▶ Very Fast Computer
  - ▶ Instantaneous from Sleep Mode
  - ▶ Startup takes 4 sec to Login Screen
  - ▶ User Login takes 20 sec
  - ▶ Restart 30 sec to Login Screen
  - ▶ Shutdown 2 sec if no App is Open
  - ▶ Open App 2 sec if no Data
  - ▶ Open App 4 sec with Data



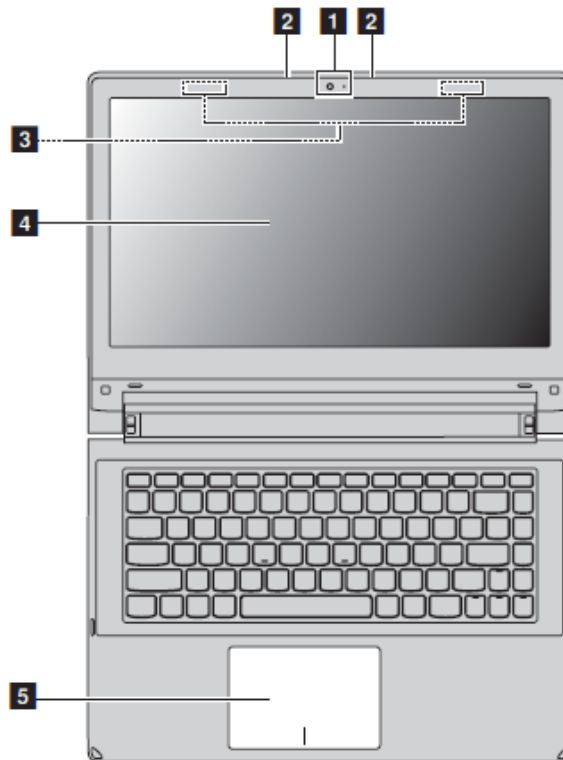
# Lenovo Flex 2-14 Computer

- ▶ Lenovo Flex 2-14 Computer
  - ▶ Ports:
    - ▶ 2 USB 2.0 Ports
    - ▶ 1 USB 3.0 Port
    - ▶ 1 Ethernet port
    - ▶ Headphone/Mic Jack
    - ▶ HDMI Out
    - ▶ SD/MMC Card Reader
    - ▶ Note: No VGA nor Printer Port
  - ▶ Bluetooth
  - ▶ Wi-Fi, 100Mbps
  - ▶ Webcam: 720p Front-Facing Camera
  - ▶ Backlit Keyboard
  - ▶ Weight: 4.4 Pounds
  - ▶ Size: 13.25 x 9.50 x 0.85 Inches
  - ▶ OS: Windows 8.1 64 bit
  - ▶ Cost: \$1,000
    - ▶ \$1,300 with Microsoft Office, Norton Antivirus, Mouse and Tax



# Front View of Lenovo Flex 2-14 Laptop

■ Flex 2-14/Flex 2-14D



- 1 Integrated camera**
- 2 Built-in microphone**

Use the camera for video communication.

Captures sound which can be used for video conferencing, voice narration, or audio recording.

**Note:** Some models only have one built-in microphone.

- 3 Wireless antennas**
- 4 Display**
- 5 Touch pad**

Connect to the wireless adapter to receive and send wireless radio.

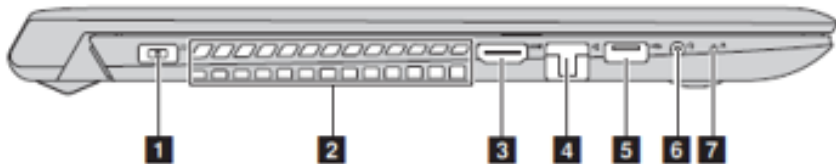
Provides brilliant visual output.

The touch pad functions as a conventional mouse.

# Side View of Lenovo Flex 2-14 Laptop

## ■ Left-side view

### ■ Flex 2-14/Flex 2-14D



**1 AC power adapter jack** Connects the AC power adapter.

**2 Ventilation slots** Dissipate internal heat.

#### ⓘ Attention:

- Make sure that none of the ventilation slots are blocked or else overheating of the computer may occur.

**3 HDMI port** Connects to devices with HDMI input such as a TV or a display.

**4 RJ-45 port** Connects the computer to an Ethernet network.

**5 USB 3.0 port** Connects to USB devices. For details, see "Connecting USB devices" on page 11.

**6 Combo audio jack** Connects to headsets.

#### Notes:

- The combo audio jack does not support conventional microphones.
- The recording function may not be supported if third-party headphones or headsets are connected, due to different industry standards.

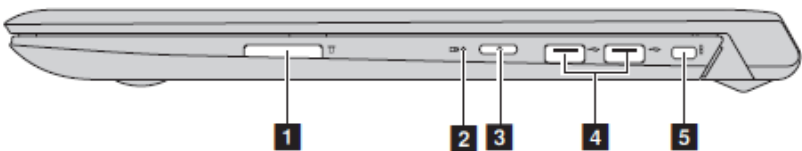
**7 Novo button** When the computer is off, press this button to start the Lenovo OneKey Recovery system or the BIOS setup utility, or to enter the boot menu.

**Note:** For details, see "Chapter 3, Lenovo OneKey Recovery system" on page 30.

# Side View of Lenovo Flex 2-14 Laptop

■ Right-side view

■ Flex 2-14/Flex 2-14D



**1 Memory card slot** Insert memory cards (not supplied) here. For details, see “Using memory cards (not supplied)” on page 17.

Note: No VGA Display Port

- 2 Battery status indicator**
- 3 Power button** Press this button to turn on the computer.

Indicator	Indicator status	Charge Status	Meaning
Battery status indicator	On (solid white)	Discharging	The battery has more than 20% charge.
	Solid amber	Discharging	The battery has between 5% and 20% charge.
	Fast blinking amber	Charging/Discharging	The battery has less than 5% charge.
	Slow blinking amber	Charging	The battery is being charged. When battery charge reaches 20%, the blinking color changes to white.
	Slow blinking white	Charging	The battery has between 20% and 80% charge and is still charging. When the battery reaches 80% charge the light will stop blinking, but charging will continue until the battery is fully charged.
Power status indicator	On (solid white)	—	The computer is powered on.
	Blinking	—	The computer is in sleep mode.
	Off	—	The computer is powered off.













- 4 USB ports** Connect to USB devices. For details, see “Connecting USB devices” on page 11.
- 5 Kensington slot** Attach a security lock (not supplied) here to help protect your computer from theft and unauthorized use. You can attach a security lock to your computer to help prevent it from being removed without your permission. For details on installing the security lock, please refer to the instructions shipped with the security lock that you have purchased.

# Lenovo Flex 2-14 Laptop Hotkeys

## ■ Hotkeys

You can access certain system settings quickly by pressing the appropriate hotkeys.



 : Mutes/unmutes the sound.	 : Enables/disables airplane mode.
 : Decreases the volume level.	 : Switches the active program.
 : Increases the volume level.	 : Turns on/off the backlight of the display.
 : Closes the currently active window.	 : Projects to a connected display.
 : Refreshes the desktop or the currently active window.	 : Decreases display brightness.
 : Enables/disables the touch pad and the touch pad buttons.	 : Increases display brightness.

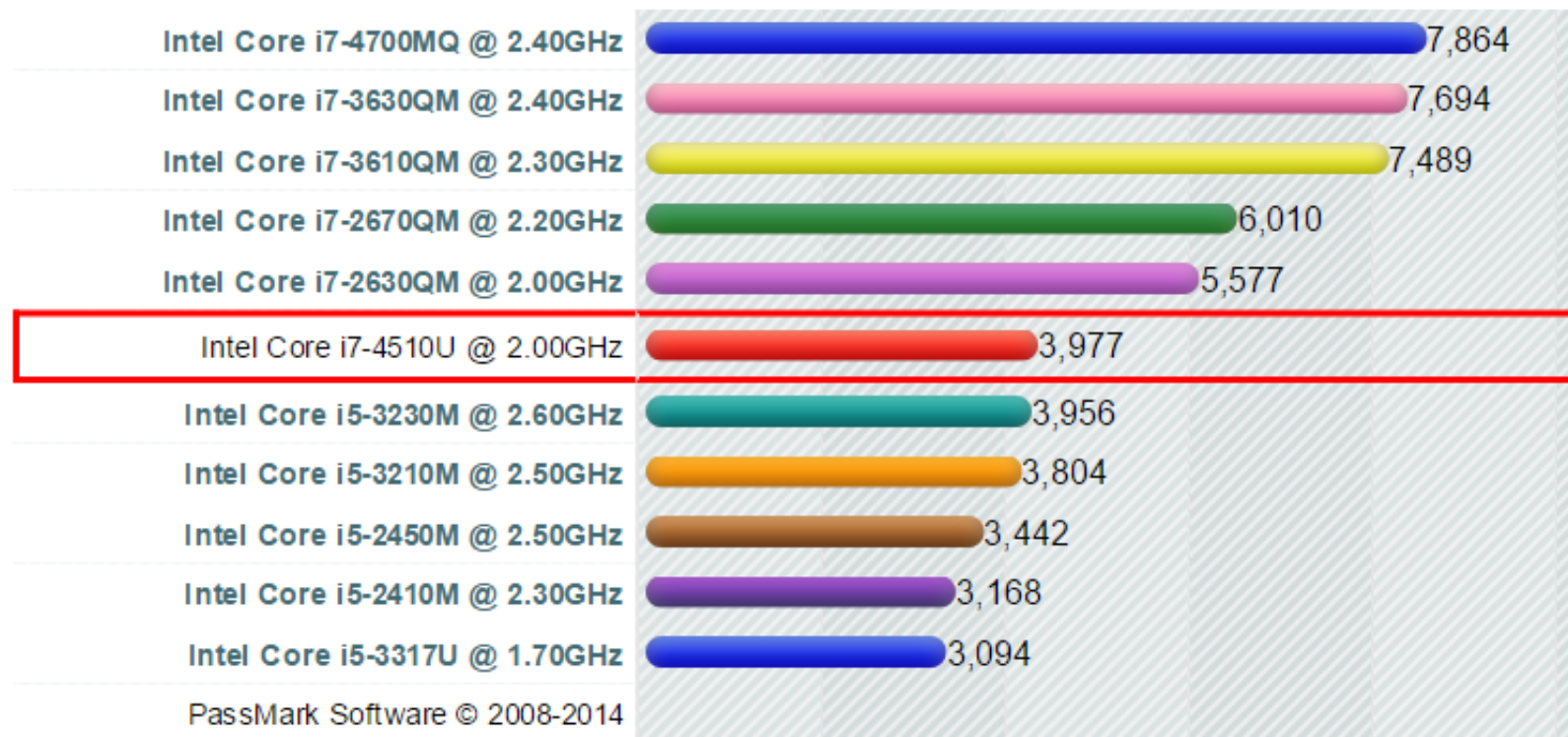
# Intel i7-4510 Processor

- ▶ ULV (ultra low voltage) dual-core Processor
  - ▶ For Ultrabooks
  - ▶ Launched in Q2 2014
- ▶ Haswell architecture and is manufactured in 22nm
- ▶ 2 Cores
- ▶ Due to Hyper-Threading the two cores can handle up to four threads in parallel
- ▶ Each core offers a base speed of 2.0 GHz

# CPU Performance

## CPU Mark Relative to Top 10 Common CPUs

*As of 28th of October 2014 - Higher results represent better performance*



# Comparison of Solid State Drives vs Hard Disk Drives

SDD	HDD
Less Power 2-3 Watts	More Power 6-7 Watts
More Expensive \$0.50/Gigabyte	Cheaper \$0.15/Gigabyte
Limited Capacity 128-512GB This Computer 256GB	High Capacity 500GB-2TB
No Noise or Vibration	Audible clicks and spinning
4 Times Faster than 7200 RPM HDD	7200 RPM HDD Slower than SDD
Safe from effects of magnets	Magnets can erase data
Mean Time to Failure 2 Million Hours	Mean Time to Failure 1.5 Million Hours
No Need to Defragment	Requires Regular Defragmentation

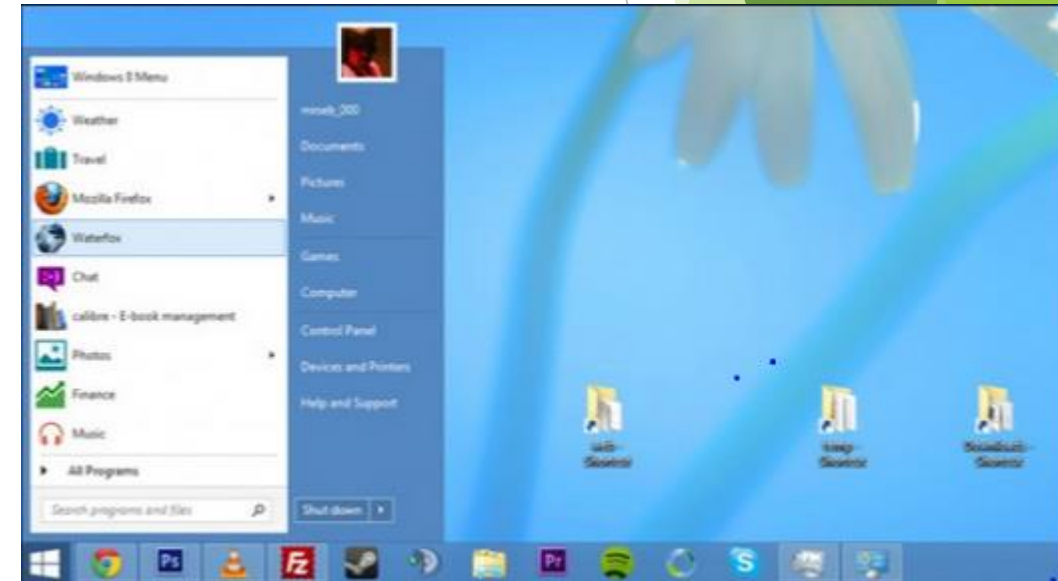




# Microsoft Windows 8.1

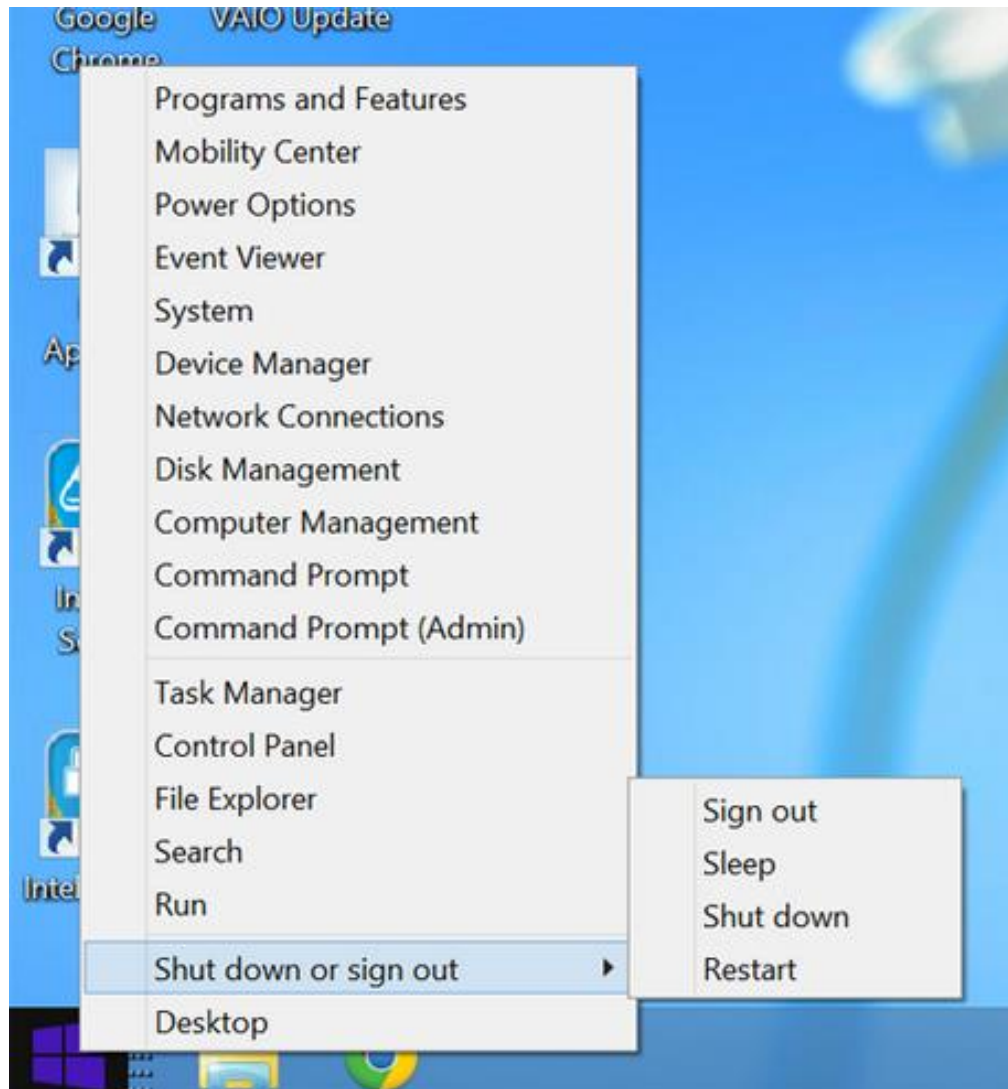
# Microsoft Windows 8.1 vs Windows 8

- ▶ Somewhat more Oriented to a Mouse/Keyboard Computer than Windows 8
- ▶ If no touch screen, then Boots as a Mouse/Keyboard Computer
- ▶ Search and Shutdown Buttons added to Start Screen
- ▶ Thumbnail Toolbar at the Bottom of Start Screen?
- ▶ Title Bar for Apps so you can close them by selection the “x”



# Start Menu

## Right Click Windows Screen Button



# Windows 8.1 Keys

## ► Windows Key

- **Desktop:** it takes you to the *Start* screen. If you press it again it takes you back to the *Desktop*.
- **Windows 8.1 app:** it takes you to the *Start* screen. Press it again and it takes you back to the app.

## ► Ctrl + Tab

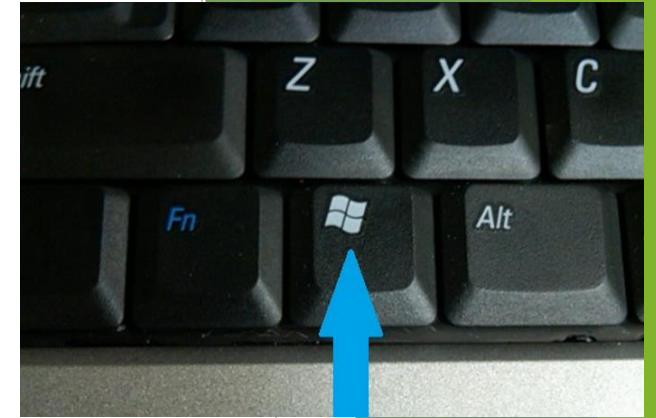
- **Start:** it switches between the *Start* screen and the *Apps* view

## ► Windows Key + type an app name

- **Desktop:** it takes you to the *Start* screen and searches for installed apps using the name you typed in.

## ► Escape Key

- **Start:** it switches to *Desktop*.



<http://www.7tutorials.com/35-keyboard-shortcuts-increase-your-productivity-windows-81>

# Windows 8.1 Keys (cont)



- ▶ **Windows Key + E** Launches *File Explorer* both from the *Desktop* and the *Start* screen
- ▶ **Windows Key + R** Launches the Run command to run programs or commands
- ▶ **Windows Key + X** Launches a hidden menu with many useful shortcuts. This menu is also named the *WinX* menu or the power user's *Start Menu*
- ▶ **Windows Key + L** Locks your Windows 8.1 PC and go to the *Lock screen*
- ▶ **Windows Key + P** Opens the *Project* sidebar for extending your image to a second screen
- ▶ **Windows Key + F1** (Need to used the Fn key) Launches the *Windows Help and Support* documentation provided by Microsoft

# Windows 8.1 Keys (cont)



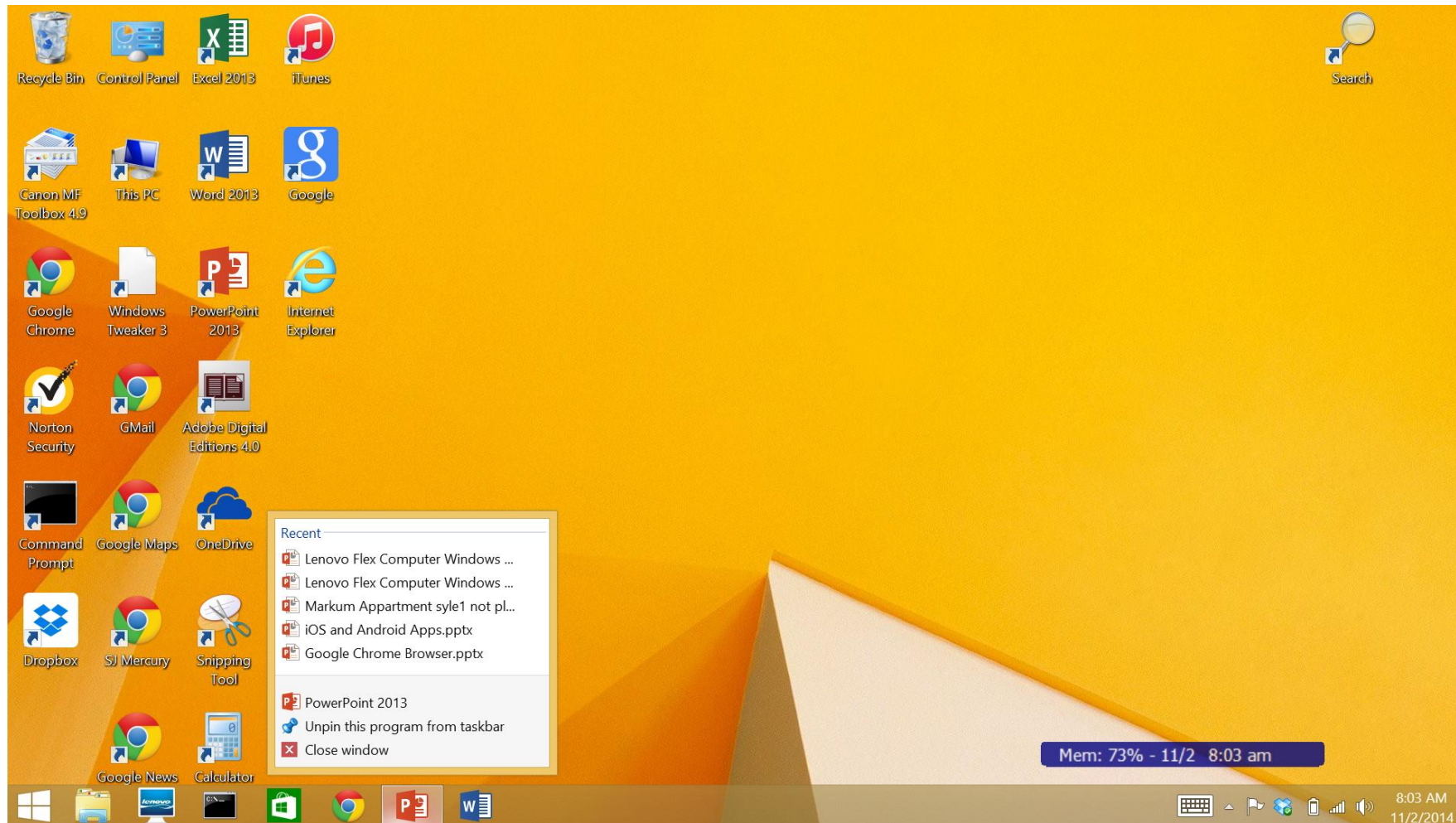
- ▶ **Windows Key + C** Displays the Charms bar.
- ▶ **Windows Key + Q** Launches the *General Search*
- ▶ **Windows Key + F** Launches the *Files Search*. You can use this to search for files on your PC and **OneDrive**.
- ▶ **Windows Key + W** Launches the *Windows Settings Search*. You can use this to search for specific operating system settings
- ▶ **Windows Key + I** Displays the *Settings* charm.
  - ▶ **Desktop** access the *Control Panel Personalization options* the *System* information section and the *Windows Help and Support* module. Access to the WiFi settings volume and brightness control notifications power buttons and keyboard settings
  - ▶ **Start screen** access the *Start* screen personalization options tiles settings and the online help

# Windows 8.1 Keys (cont)



- ▶ **Windows Key + H** Launches the *Share* charm
  - ▶ **Desktop:** share a desktop screenshot through the *Mail* app or other social network app that you have installed. When using it on the *Start* screen
  - ▶ **Start:** share a screenshot of the *Start* screen.
  - ▶ **Apps:** share data from Windows 8.1 apps that you are running
- ▶ **Windows Key + K** Displays the *Devices* charm
  - ▶ **Apps:** Play multimedia files print information from modern apps or show the information on your screen on another display or video projector.
- ▶ **Windows Key + Z**
  - ▶ **Start:** customization button at the bottom of the screen.
  - ▶ **Apps:** When using it in modern apps it displays different contextual options for each app

# Windows 8.1 Jump List



# Windows 8.1

## 64 Bit Operating System

- ▶ 1 Terabyte =  $10^{12}$  Bytes
- ▶ 32 Bit Addressing
  - ▶  $2^{32}=4,294,967,296$
  - ▶ =4 Billion or  $4 \times 10^9$  Bytes
  - ▶ =.004 Terabytes or 4,000 Megabytes
- ▶ 64 Bit Addressing
  - ▶  $2^{64}=18,446,744,073,709,551,616$
  - ▶ =18 Quintillion= $18 \times 10^{18}$
  - ▶ =18 Million Terabytes or 18 Exabytes

Metric prefixes							
Prefix	Symbol	1000 <sup>m</sup>	10 <sup>n</sup>	Decimal	English word		Since <sup>[n 1]</sup>
					short scale	long scale	
yotta	Y	1000 <sup>8</sup>	10 <sup>24</sup>	1 000 000 000 000 000 000 000 000	septillion	quadrillion	1991
zetta	Z	1000 <sup>7</sup>	10 <sup>21</sup>	1 000 000 000 000 000 000 000 000	sextillion	thousand trillion	1991
exa	E	1000 <sup>6</sup>	10 <sup>18</sup>	1 000 000 000 000 000 000 000	quintillion	trillion	1975
peta	P	1000 <sup>5</sup>	10 <sup>15</sup>	1 000 000 000 000 000 000	quadrillion	thousand billion	1975
tera	T	1000 <sup>4</sup>	10 <sup>12</sup>	1 000 000 000 000	trillion	billion	1960
giga	G	1000 <sup>3</sup>	10 <sup>9</sup>	1 000 000 000	billion	thousand million	1960
mega	M	1000 <sup>2</sup>	10 <sup>6</sup>	1 000 000	million		1960
kilo	k	1000 <sup>1</sup>	10 <sup>3</sup>	1 000	thousand		1795
hecto	h	1000 <sup>2/3</sup>	10 <sup>2</sup>	100	hundred		1795
deca	da	1000 <sup>1/3</sup>	10 <sup>1</sup>	10	ten		1795
		1000 <sup>0</sup>	10 <sup>0</sup>	1	one		–

# Issues with Windows 8.1

- ▶ Jump List only work if App is Pinned to the Task Bar
- ▶ Start Screen (Metro Screen) is not very useful if you are using a Mouse/Keyboard and not using the touch screen
- ▶ No Hard Copy Instruction Manual
- ▶ System Commands are there, but Hidden



# On to Windows 10 in 2015....

- ▶ Release middle of 2015
- ▶ Start Button Returns
- ▶ Tiles remain, but now attached to start menu
- ▶ Result: Desktop and Start Screens Merged

