ELEC 694
COMP 694

Topics Not Chosen

Scott Cutler
cutler@rice.edu
4/10/2013

Current Roster

- Ryan Artecona

- Jianbo Chen

- Rob Bauer

- Ahmed Haque

- Enoch Chang

- Zhiyong Tan

Schedule for Spring 2013

- **01/09/13** **Introduction and Accelerating Technology***(Cutler)*
- **01/16/13** **Disruptive Technologies** *(Cutler)*
- **01/23/13** **Creating and Delivering Great Presentations** *(Volz)*
- **01/30/13** **Consumer Medical Electronics** *(Ahmed Haque)*
- **02/06/13** **Identity Theft / Phishing** *(Enoch Chang)*
- **02/13/13** **Internet of Things** *(Ryan Artecona)*
- 02/20/13 *No Class – family emergency*
- 02/27/13 *No Class - Rice midterm recess*
- **03/06/13** **Storage** *(Jianbo Chen)*
- 03/13/13 *No Class – family emergency*
- **03/20/13** **HTML 5** *(Zhiyong Tan)*
- **03/27/13** **Ecosystem Group Discussion** *(All)*
- **04/03/13** **Internet Video** *(Rob Bauer)*
- **04/10/13** **Topics Not Chosen** *(Cutler)* - **Prep for Final Projects** *(All)*
- **04/17/13** **Final Projects - Final Papers Due** *(All)*
- 04/21/13? Possible Optional Off-site (a.k.a. end of semester party)

Next Week's Mini-Discussion

- Some weeks, we will have a short group discussion on a topic rather than Events of the Week.
- Purpose is an exercise in thinking beyond the top level issues of a topic.
- I expect roughly 30 minutes of research and thought
- Our final mini-discussion is this week. Next week we have:

Events of the Week

Presented by All

Final Paper

- Everyone has to submit a paper on any of the topic from the list
  - 99% chose same topic as presentation!
- Roughly 20 pages; but can be more or less
- Covers same material as presentations with a stronger emphasis on the future and what other technologies impact or are impacted by chosen topic.
- Submit electronically – save trees
- ***Can be started and submitted at ANY time***
  - Due April 17

Final Projects

- At the April 3rd class, you will be assigned to one of two teams.
- You will be given a topic covering a technology with a 10 year horizon.
- The April 10th class will start with a discussion on Topics Not Chosen (I will present) followed by prep time for final project.
- April 17th class will consist of two 15-20 minute group presentations on final topic.

Final Projects

- Topic:
  - Automobile Electronics in the year 2020
- Team A
  - Ahmed Haque
  - Ryan Artecona
  - Zhiyong Tan
- Team B
  - Enoch Chang
  - Jianbo Chen
  - Rob Bauer

Seminar #12

- Final projects– Teams A and B
  - Logistics
    - Wednesday, April 17, 9:30 – 11:00, DH-2014
- Mini-Discussion – Final Events of the Week
- One-on-One meetings:
  - None !

Topics Not Chosen

Scott Cutler
4/10/2013

Candidate Topics – Spring 2013

- Advanced Computer Inputs – Kinect, Touch Screens
- ARM vs. x86 for mainstream usage and/or Intel vs. NVIDIA
- ~~Automotive Electronics beyond the engine including GPS, XM audio, XM data, cellular data~~
- Cloud Computing
- ~~Consumer Medical Devices / Electronic Medical Records (consumer)~~
- Digital Living Room - AirPlay and dLNA, networked receivers
- ~~HTML 5~~
- ~~Identity theft / phishing~~
- Intellectual Property, patent trolls, law suits, DRM for movies / TV ad revenue model
- ~~Internet of things, Embedded cellular data modems, Ultra low powered computing~~
- ~~Internet Video / Netflix / Google TV, Apple TV, repurposed game machines~~
- Main Stream Processors and Chipsets / Parallel, multi-core technology for consumer uses
- NFC and Mobile Payments
- Shared Metered 4G LTE Data Plans
- Social Media – specifically Facebook long term or quick rise/fall or Twitter business model
- ~~Storage – SATA, Solid State Drives, Flash, RAID, Backup, disk in the clouds~~
- Voice Recognition Assistants
- Windows 8 / 8RT

Advanced Computer Inputs

ARM vs. x86 for mainstream usage and/or Intel vs. NVIDIA

Cloud Computing

amazon web services™

Google Apps

Windows Azure™

Digital Living Room - AirPlay and dLNA, networked receivers

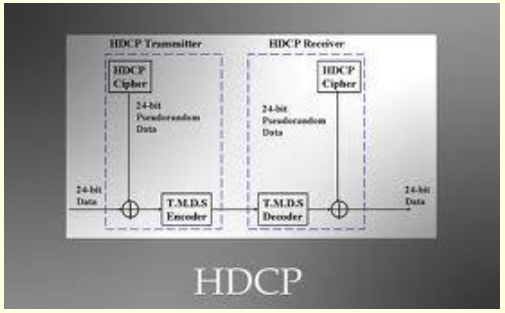
VSX-1123-K

- WiFi Ready with AirPlay, dLNA, HTC Connect & Pandora Music Streaming
- 7.2 Channels with Advanced Audio & 1080p Video Processing
- FREE Advanced Remote Control App for Apple & Select Android Devices, "iControlAV2012“
- Ultra HD (4K) Upscaling and Pass-Through

Digital Living Room - AirPlay and dLNA, networked receivers - 2

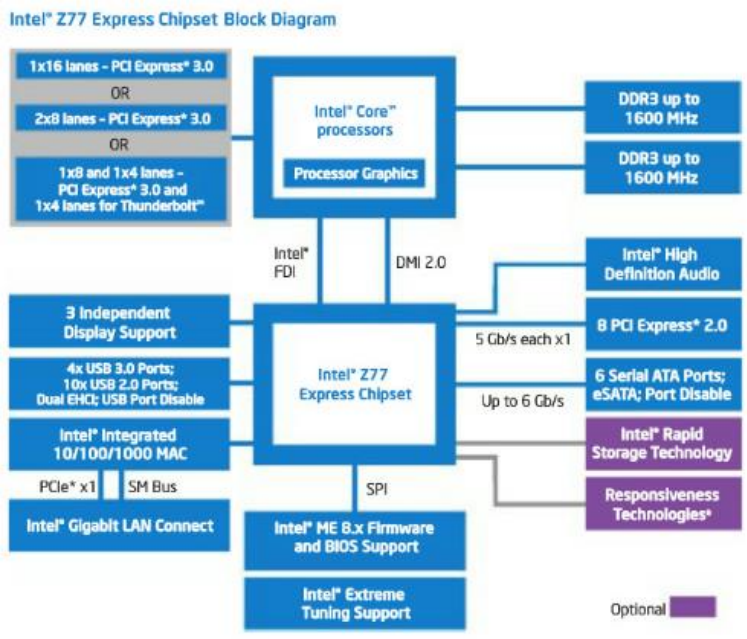
AirPlay
Broadcast live to your HDTV and speakers.

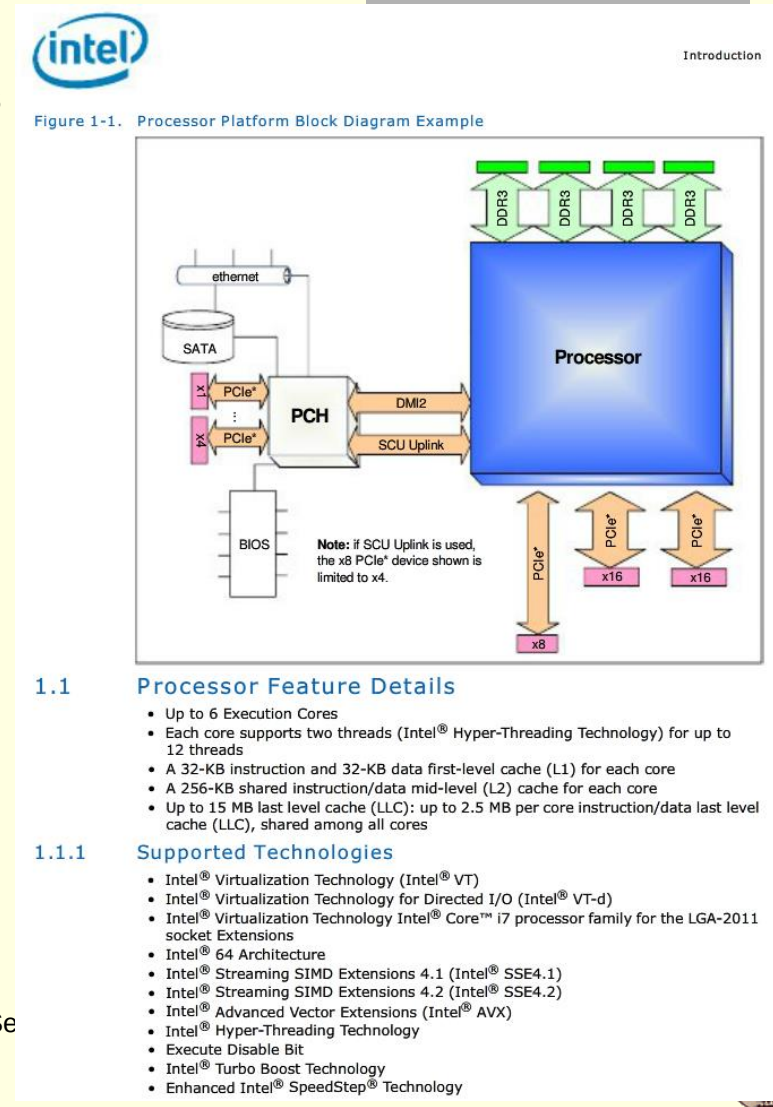
Intellectual Property, patent trolls, law suits, DRM for movies / TV ad revenue model



Main Stream Processors and Chipsets

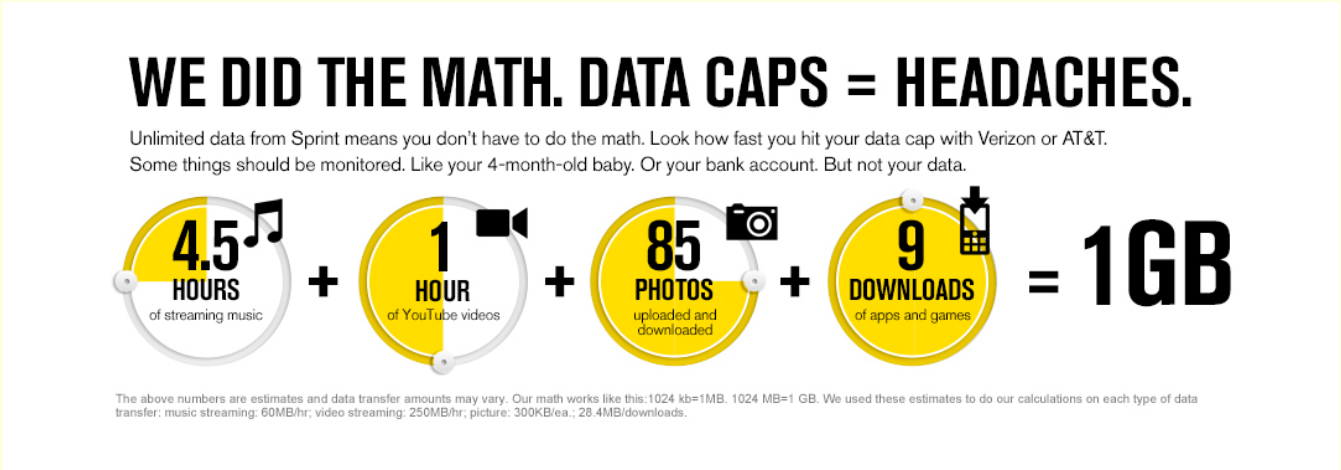
- 64 bit computing
- Parallel, multi-core technology for consumer uses





NFC and Mobile Payments

Shared Metered 4G LTE Data Plans



Social Media – specifically Facebook long term or quick rise/fall or Twitter business model

tumblr

Voice Recognition Assistants

DRAGON NATURALLYSPEAKING

Tellme. A Microsoft Subsidiary

Windows 8 / 8RT

Automotive Electronics

- ***I would not want to spoil all of your fun!***

So Many Technologies

Life is good!