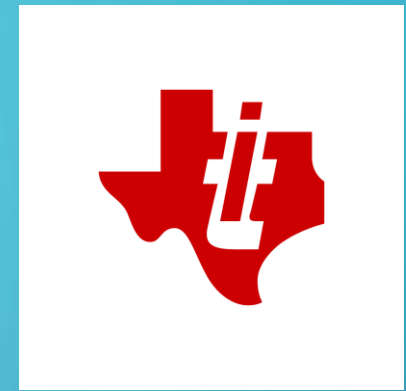# TEAM 1073F'S TEXAS INSTRUMENTS ELECTRONIC ONLINE CHALLENGE

THE DISASSEMBLY OF A COMPUTER TOWER.

HP COMPAQ DC7900 CONVERTIBLE MINITOWER

SUMMARY

- Our team chose to take the computer tower apart, one because it was what was available to us and two because we wanted to learn what was inside a piece of technology that we use every day. Since our school is a technology magnet, we as students use computers, tablets and laptops a lot. It was awesome to be able to dismantle and discover what makes the computer operate. We discovered a lot of large chips and small chips. There were a lot of ports and slots for memory and PCI. A lot of the chips were made by Intel but there were some other company's like Winbond and HP. A list of parts we could find on the motherboard 3 PCI slots, 1 PCI Express X16 slot, 1 PCI Express X4 slot, 1 PCI Express X1 slot, 1 CPU, 4 memory slots, 6 USB ports, 1 LAN connecter, 1 serial port, 1 VGA port, 1 keyboard connecter, 1 mouse connecter, 4 SATA ports, 1 Northbridge chip, 1 Southbridge chip,1 audio in, 1 audio out, 1 IC Interface and 1 CMOS. Some of the broad parts are 4 fans (1 System fan, 1 CPU fan, 1 GPU fans, 1 power supply cooling fan), 1 motherboard, 1 disk reader,1 power supply, 1 small heat sink, 1 large heat sink, 1 front I/O and Power/LED assembly, 1 RTC battery, 1 speaker, 1front bezel and 1acses panel.

SIDE PANEL UNOPENED.
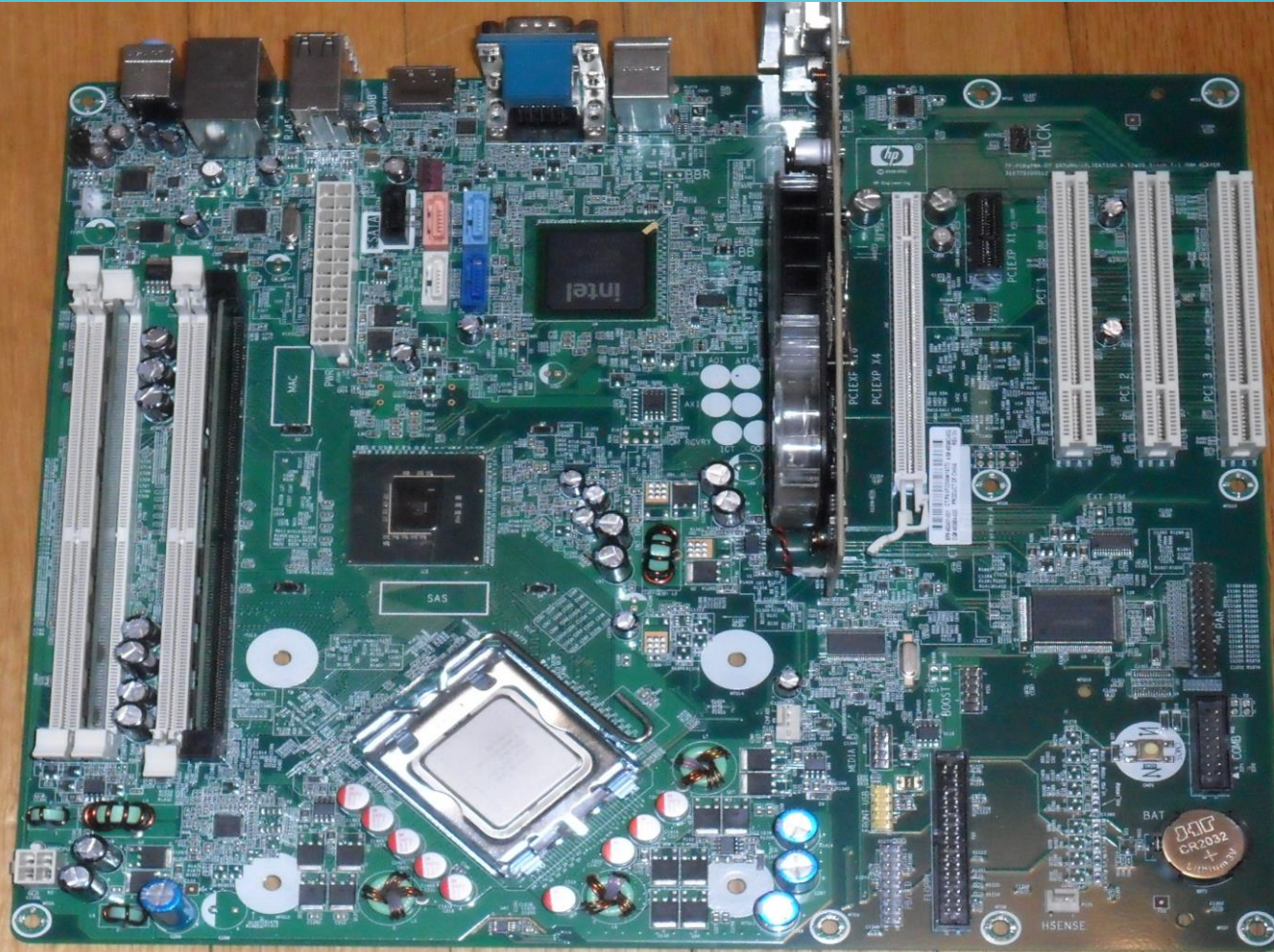
SIDE PANEL OPENED.
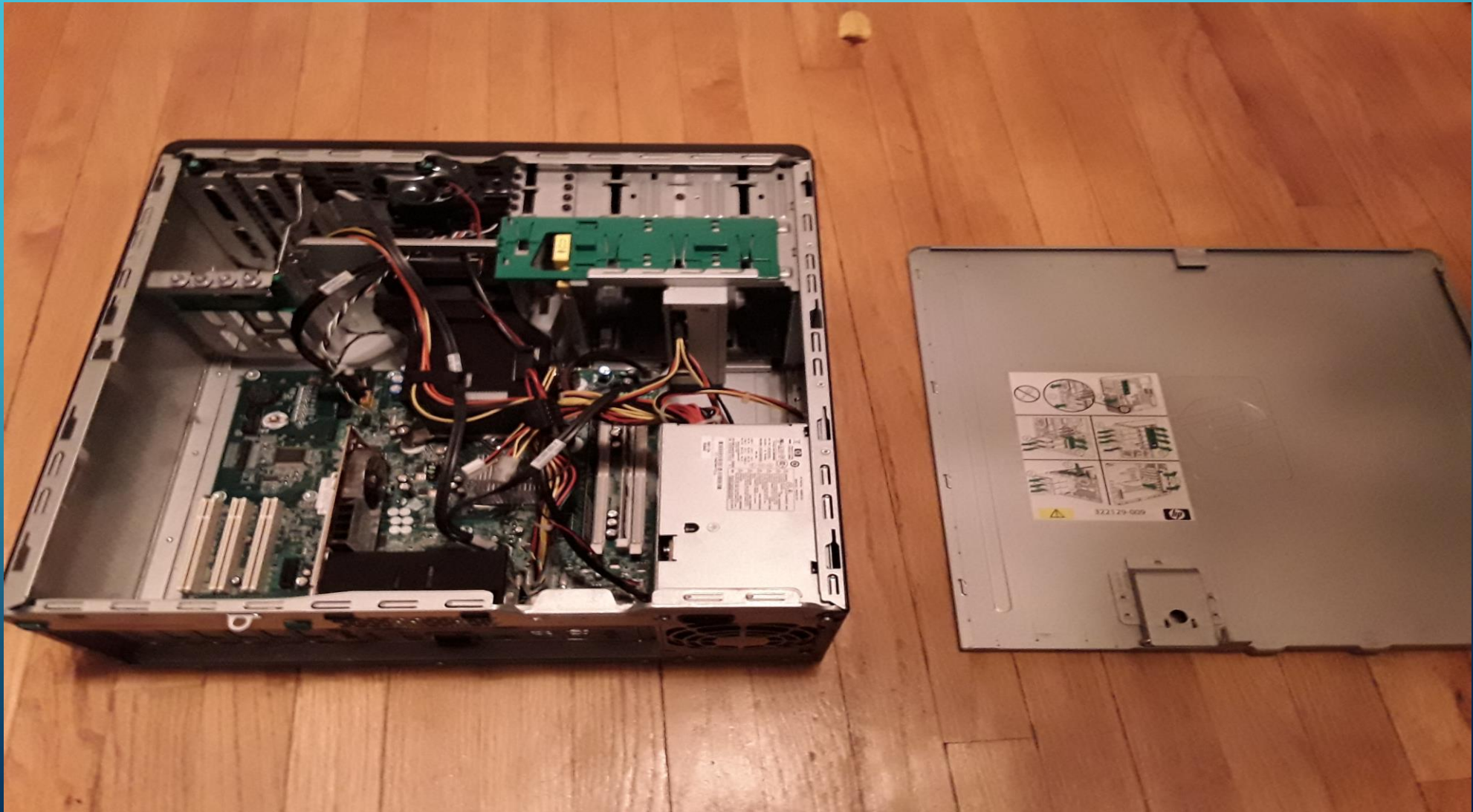
BACK PORTS AND FANS.

CLOSE UP OF BACK PORTS.

FRONT PORTS AND DISC READER.
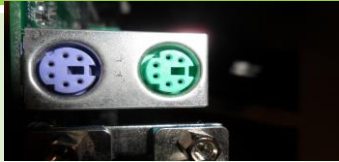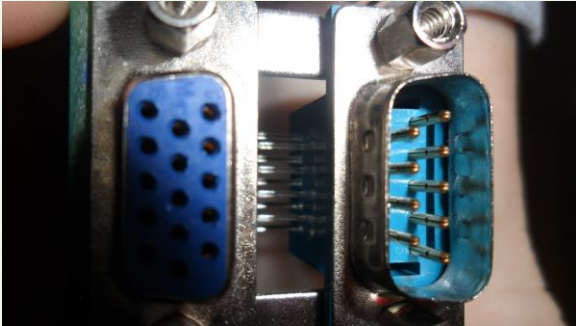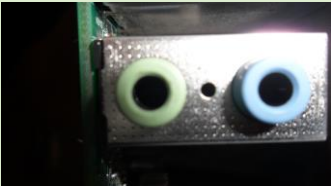
THE MOTHERBOARD REMOVED FROM THE FRAME.

Name	Purpose	Manufacturer	Photo
Northbridge	A northbridge or host bridge is one of the two chips in the core logic chipset architecture on a PC motherboard, the other being the southbridge. Unlike the southbridge, northbridge is connected directly to the CPU via the frontside bus (FSB) and thus responsible for tasks that require the highest performance. The northbridge is usually paired with a southbridge, also known as I/O controller hub.	Intel	
Southbridge	The southbridge typically implements the slower capabilities of the motherboard in a northbridge/southbridge chipset computer architecture.	Intel	
CPU	All major calculations and comparisons are made inside the **CPU** and the **CPU** is also responsible for activating and controlling the operations of other units of a computer.	Intel	
IC INTERFACE	Unknown	Winbond	
CMOS	Unknown	Unknown	

Name	Purpose	Manufacturer	Photo
Memory	These slots hold memory cards.	Unknown	
ESATA, SATA1, SATA2, SATA0, SATA3	Unknown	Unknown	
PCI Express X16 slot	Is a high-speed serial computer expansion bus standard, designed to replace the older PCI, PCI-X, and AGP bus standards.	Unknown	
PCI Express X4 slot	Is a high-speed serial computer expansion bus standard, designed to replace the older PCI, PCI-X, and AGP bus standards.	Unknown	
PCI Express X1 slot	Is a high-speed serial computer expansion bus standard, designed to replace the older PCI, PCI-X, and AGP bus standards.	Unknown	
PCI slots	The Peripheral Component Interconnect **slots**, commonly known as the **PCI slots**, refers to a computer bus. The computer bus is used by the computer to connect to peripheral add-on devices, such as a **pci** video card, network cards, sound cards, tv tuners, firewire cards, graphics cards and many other types of	Unknown	

Name	Purpose	Manufacturer	Photo
Mouse/Keyboard Connecter.	Connects the mouse and keyboard to the computer.	Unknown	
Serial/VGA Ports	A Video Graphics Array (VGA) connector is a three-row 15-pin DE-15 connector. A serial port is a serial communication interface through which information transfers in or out one bit at a time.	Unknown	
Audio-in/Audio-out	The imputes for audio devices.	Unknown	
USBS	USB, short for Universal Serial Bus, is an industry standard that defines cables, connectors and communications protocols for connection, communication, and power supply between computers and devices.	Unknown	
LAN connector/USBS	**LAN connectors** serve the same general purpose: transferring data between the individual computer and the network to which it is connected.	Unknown	