



# Sony Vaio PCV-RZ14G Teardown

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## INTRODUCTION

Sony Desktop Computer-

The Proprietary Force that is my Pentium 4 PC.

At the time it was released it was a very half decent computer. Sony Deemed this model a Digital Studio because of all its Audio and Video inputs and outputs. It has Video inputs on the front panel and optical audio and DVI Video outs on the rear. There is also a Mpeg Decoder/Encoder board for use with recording television via Cable Connection and an infrared remote to control certain programs with (Giga Pocket). I have Upgraded a few things including adding another Hard Drive and maxxed the Memory to a stunning 1.5gb.

If you use this information to upgrade this PC, take in mind that it may be easier to skip some steps say if your going to install new memory or another hard drive as I've done.

So here it is, The Systematic Disassembly

To Really be Blown Away By the Magic - Watch in Slideshow,

-Link Below-

### TOOLS:

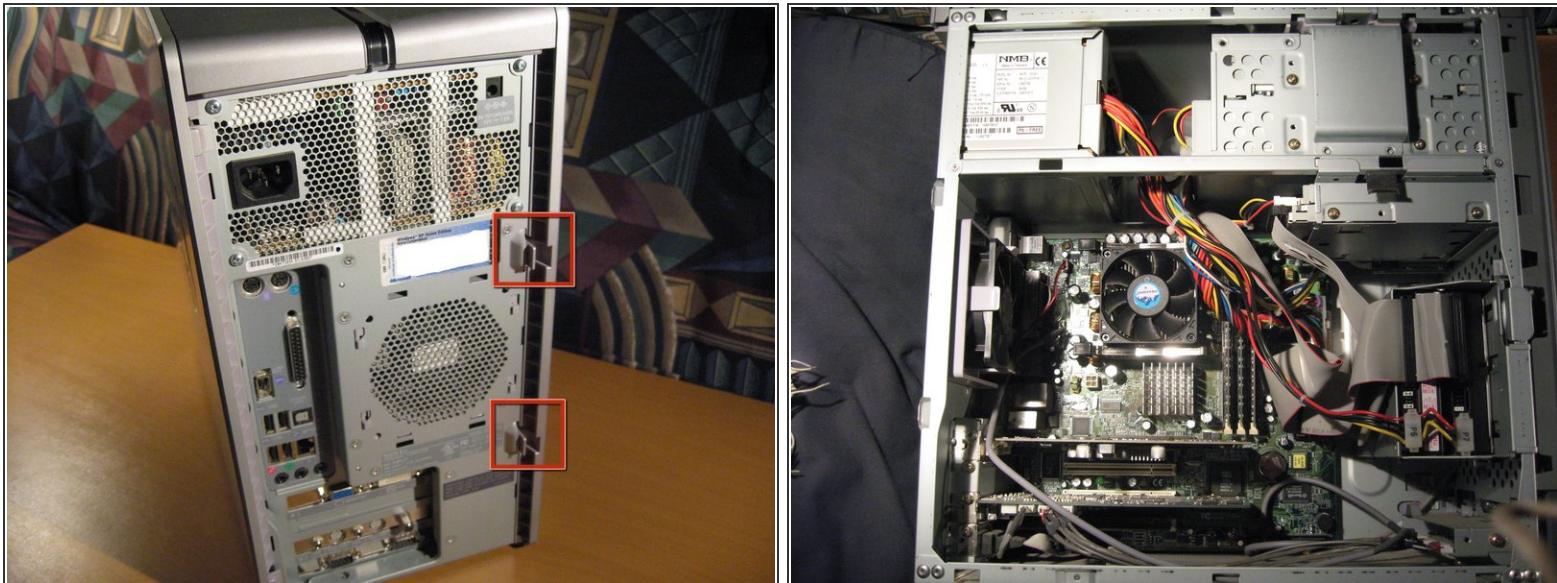
- Large Needle Nose Pliers (1)
- Phillips #1 Screwdriver (1)

## Step 1 — Sony Vaio PCV-RZ14G Teardown



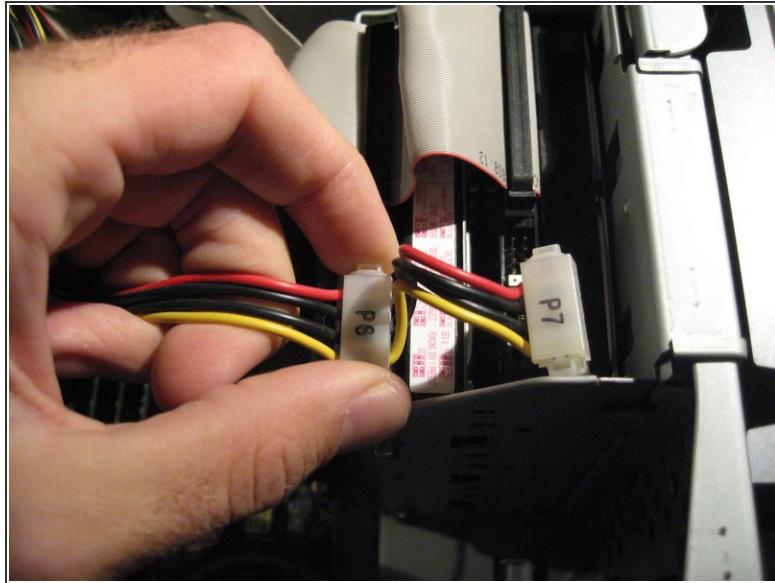
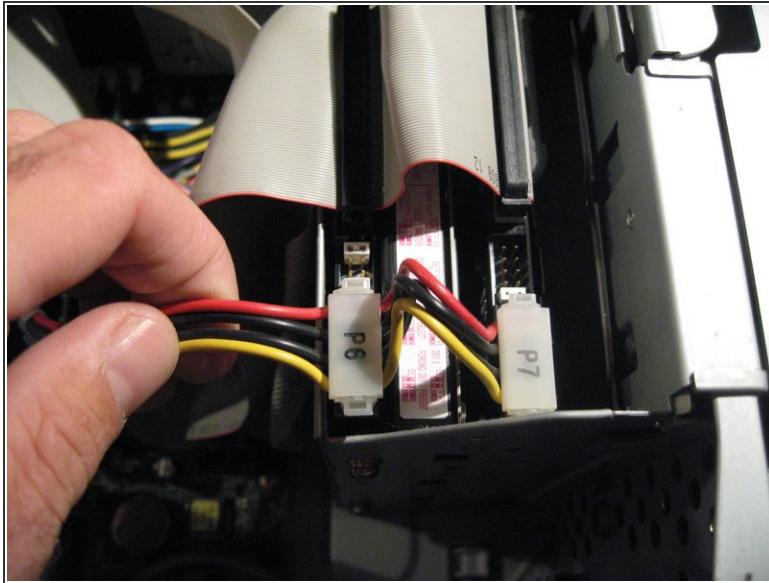
- A few pictures of the front and side panels.

## Step 2



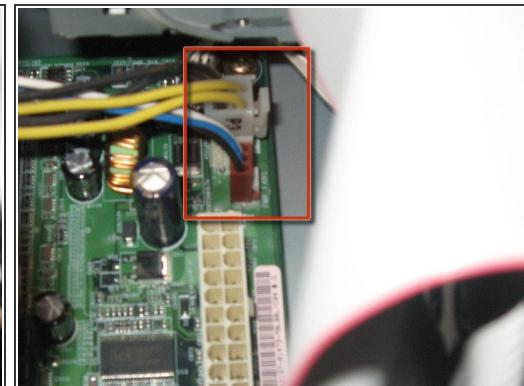
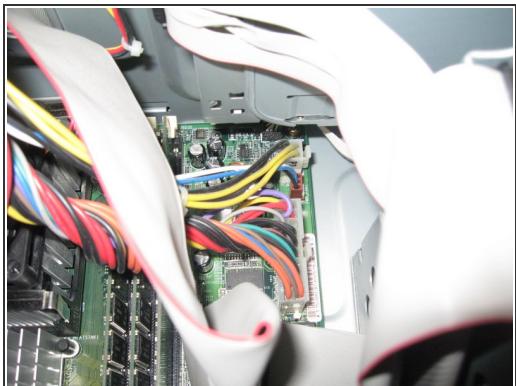
- Remove all Cables and Connections (including power) from the rear of your PC if you haven't already done so.
- Remove the side panel by unlocking the retaining clips on the rear of the PC and sliding the panel off.
- You may want to put the PC on its side at this time.

## Step 3



- Remove the Power Cables from the Hard Drive(s). These are Molex Connectors
- Do this by pulling the clip on either side - May require a little force

## Step 4



- Remove power to the motherboard by finding the 20 pin Connector and disconnecting it.
- Also remove the 4 pin P3 Connector and the brown mini connection next to it.

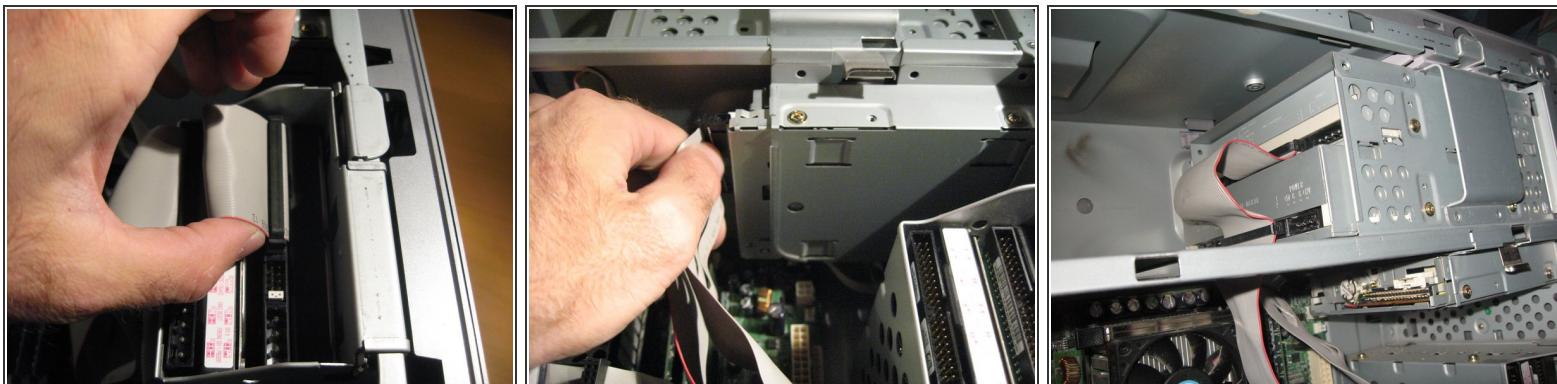
## Step 5



- Now remove power from the two Cd/DVD Drives- these are the same Molex connectors as the Hard Drives.
- Remove Power Cable from the Floppy Drive. - this is known as a mini connector. As shown boxed in Red
- Now That all Power connectors are un-attached, we will remove the power supply.
- Unscrew four screws (labeled in yellow Circles) Then lift power supply out of Case.

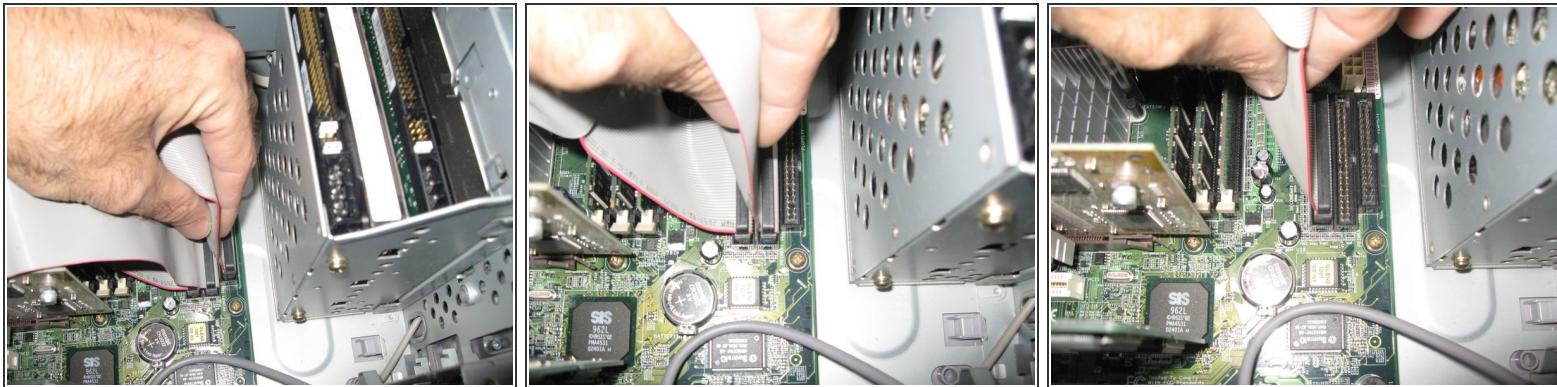
 \*\*- Danger -\*\* Never Attempt to disassemble a PC Power Supply

## Step 6



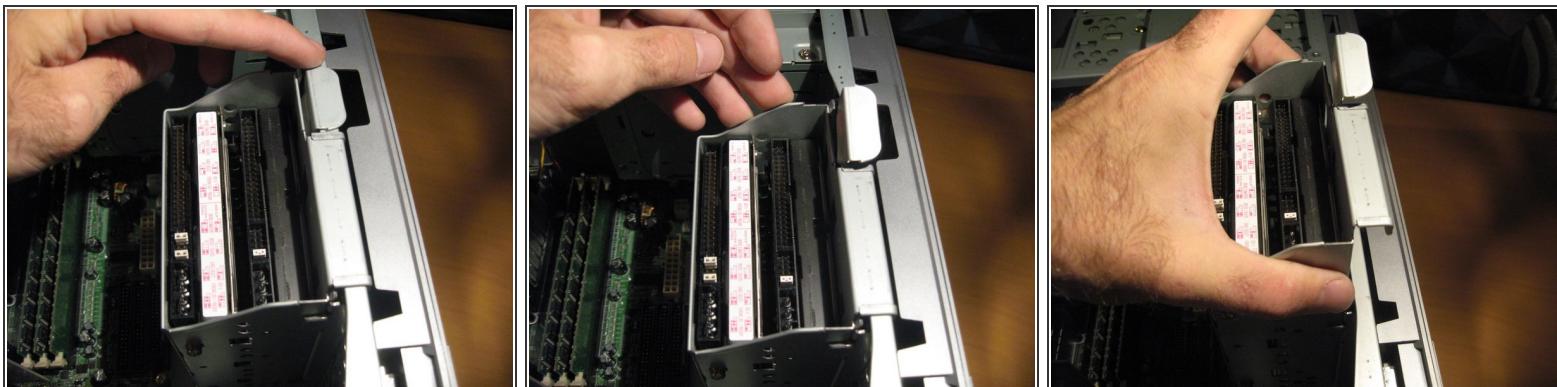
- We can now remove the Data Cables- These are called IDE Cables
- They are removed by simply pulling them out.
- First from the the Hard Drives then from the Floppy and Disk Drives

## Step 7



- Then Remove the other end of the IDE cables from the Motherboard

## Step 8



- The two Hard Drives have their own seperate encasement
- Lift up on the Latch as shown
- Remove the Hard Drive assembly

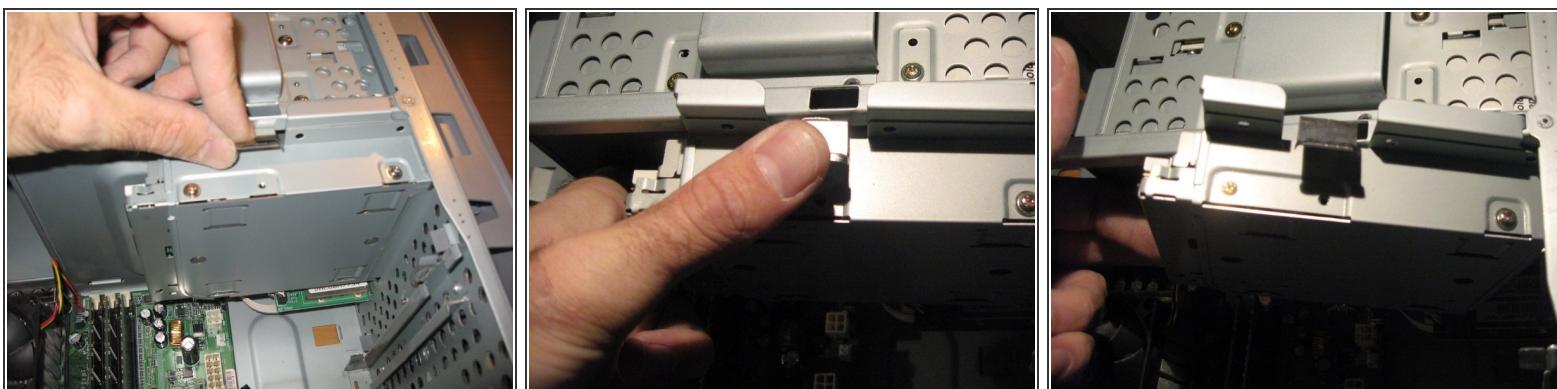
## Step 9



- Remove all Connections from Front Panel assembly as shown in image.
- Unscrew the one screw holding the front panel connectors to the case.
- Pull Front panel connector assembly out of case
- On this Panel is an S-Video in, Red, White and Yellow RCA inputs an Ilink S400 port and 2 USB Ports

*(i)* I Link is Sony's S400 port. Similar to Apple's Firewire. They both fall under the 1394 Standard.

## Step 10



- To remove Floppy drive, Unlatch Retainer and swing Drive outward as shown.

## Step 11



- To Remove the top of the case, unclip the retaining clips as marked
- Pull top from case

## Step 12



- Next to remove the Front Panel of the Case.
- There are retaining clips as with the top of the case, Unclip them and remove the Front Panel.

## Step 13



- Remove the Sony Memory card reader by unplugging it from the motherboard and unscrewing the single screw (in red). Then simply slide it out of its little niche
- Our first little piece of proprietary MAGIC. A lot of Sony Devices at the time this was sold and still today have only SONY MEMORY STICK / Magic Gate Readers. I'm not sure if SD cards were really prominent as they are today. Regardless, they wanted it to work primarily with their equipment.
- Next we will remove both of the Optical Disk Drives.
- Pull up on latch, releasing the lock enabling you to pull up on drive box assembly and lift out of case

## Step 14



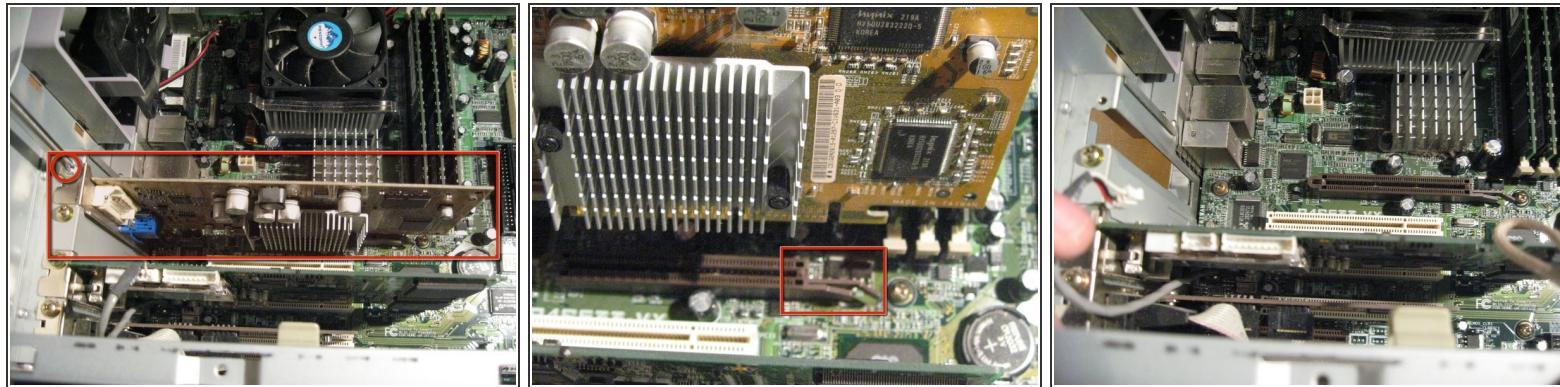
- Removing of the Optical Drive Bay.
- Then a quick look at the interior of the PC So Far
- Now onto the Power button / Light panel in the front of the PC.

## Step 15



- Unscrew single screw at front of PC to remove . Unattach connector on front side and pull cable through hole in Case.
- *i* The other side of the connector is too large to pull through hole.

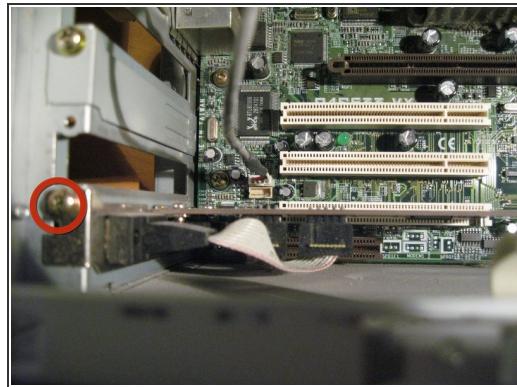
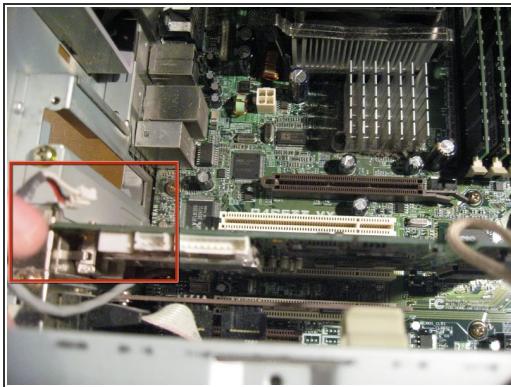
## Step 16



- Now we will remove our AGP Graphics card by first removing the screw from the top left holding it secure to the card slot.(in Red)
- Before pulling the card out of it's placement you must unlatch this little plastic lever to release. (Second image in RED)

**i** AGP stands for Accelerated Graphics Port.

## Step 17

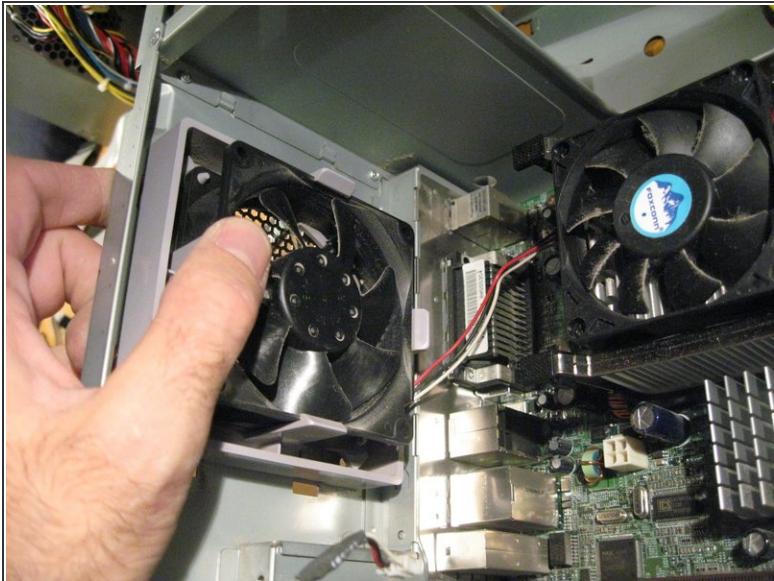
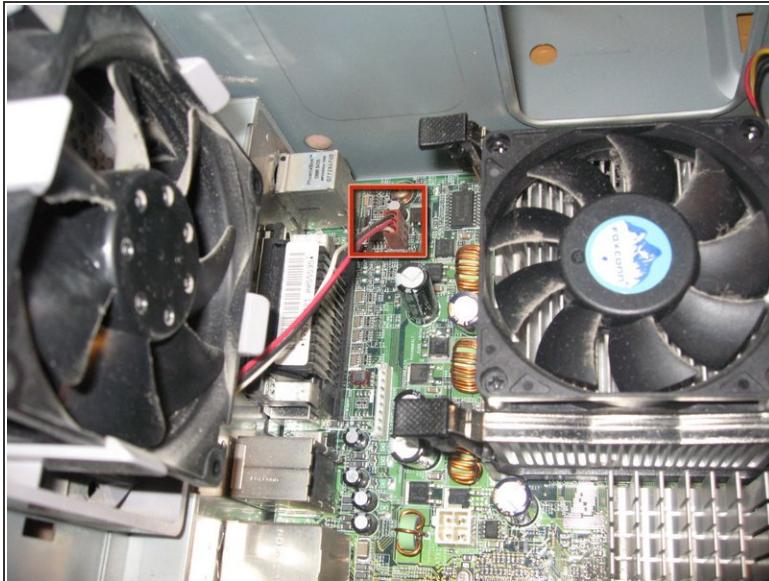


- Next is the PCI Mpeg Decoder Board. Remove the Cable that connects from the motherboard to the card.
- Unscrew and remove the Mpeg/Video In Board.

*(i)* This MPEG ENCODER/DECODER board is another piece of Sony proprietary MAGIC. I say this because the only software that works with this Hardware is made by SONY. GIGA POCKET by the way, at this point in time was a pretty crappy combo.

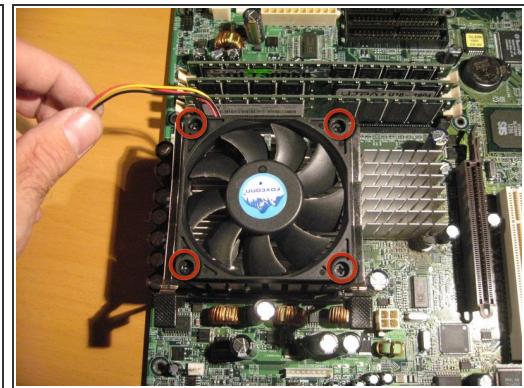
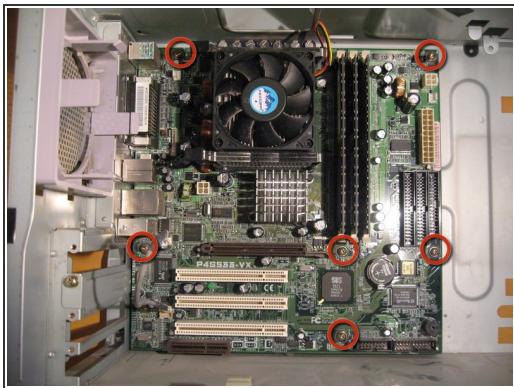
- And remove the Last PCI Card by unscrewing the single Screw. This card is a PCI -Serial Port adapter.

## Step 18



- In order to remove the case fan, First disconnect its power cable from the Motherboard.
- Then unlatch the Four Retaining clips to release the fan- and Remove.

## Step 19



- Now to remove the Motherboard-Remove Labeled Screws in image
- Be Careful to keep mind of the connection ports on the rear of the Motherboard while removing. So your going to want to lift it out first on the right side then the side with the ports.
- Now lift the Motherboard out of the Case
- Disconnect the PC fan from the motherboard, Unscrew the four screws and remove.

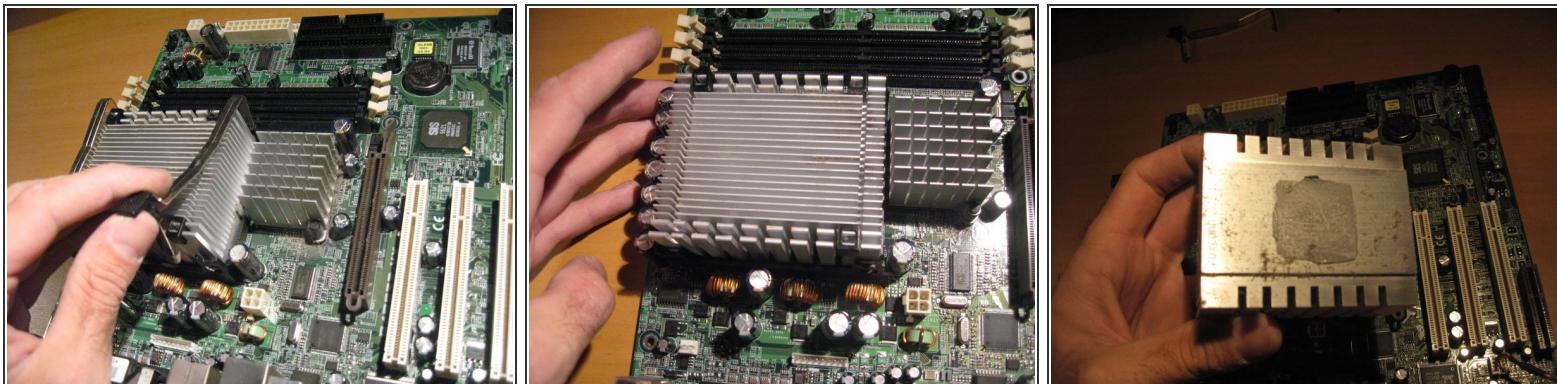
## Step 20



- Unlatch the Memory Slots on either side.
- Remove Memory Dimms by lifting out of slot

*(i)* Keep memory in a safe place because it is prob one of the most volatile components of your PC and is known to get messed up easliy from Static Electricity.

## Step 21



- In order to remove heatsink, apply pressure to the far side and pull out of latch on near side (Use Both hands).
- After Releasing clips lift up and remove heatsink.

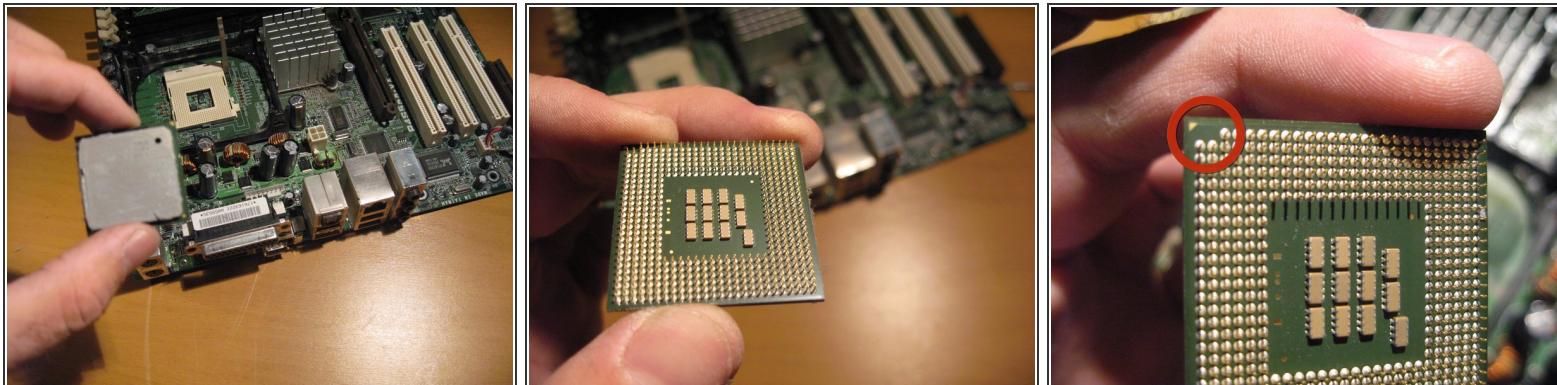
*(i)* The underside of the heatsink will have thermal paste so when removed place on its top in order not to make a mess. And in this case it has a bit of dust accumulated.

## Step 22



- This particular Setup is called a Pin Grid Array (PGA)
- In order to remove the Processor, lift the light brown latch out and up (as shown)
- Careful, the top of the processor also has thermal paste on it.

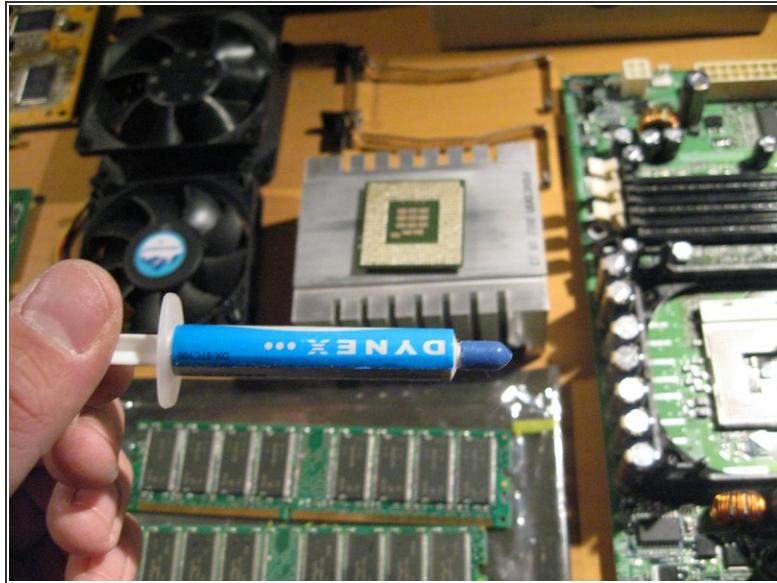
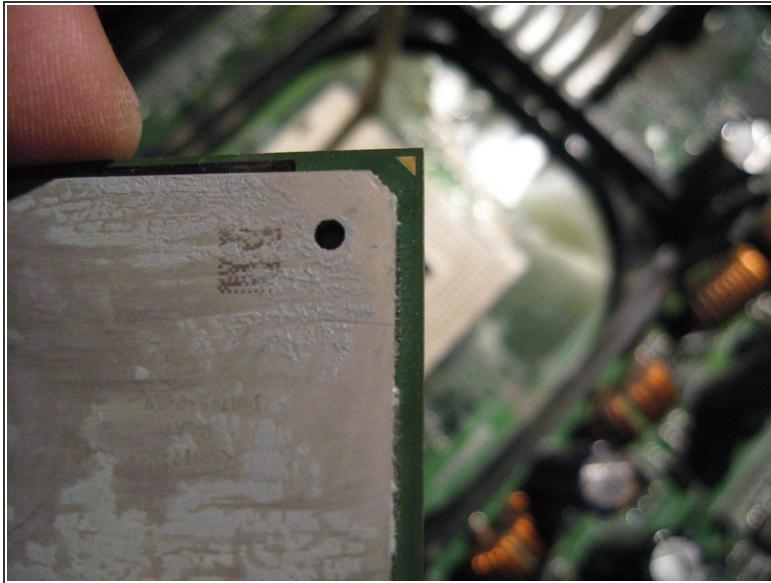
## Step 23



- A look at the Processor topside and underside.
- This Particualr Intel Chip is a 2.53GHZ Pentium 4

*(i)* Take note of the one corner that has a few pins missing and a guide arrow. This processor chip will fit into the PGA one way and this serves as a guide.

## Step 24



*(i)* Note , another guide arrow on the topside of the chip.

- I am going to clean the thermal paste off of the Processor and the heatsink and add a new application. This is not particularly needed but in this case i felt i would.

## Step 25



- The Whole Enchilada!

To reassemble your device, follow these instructions in reverse order.