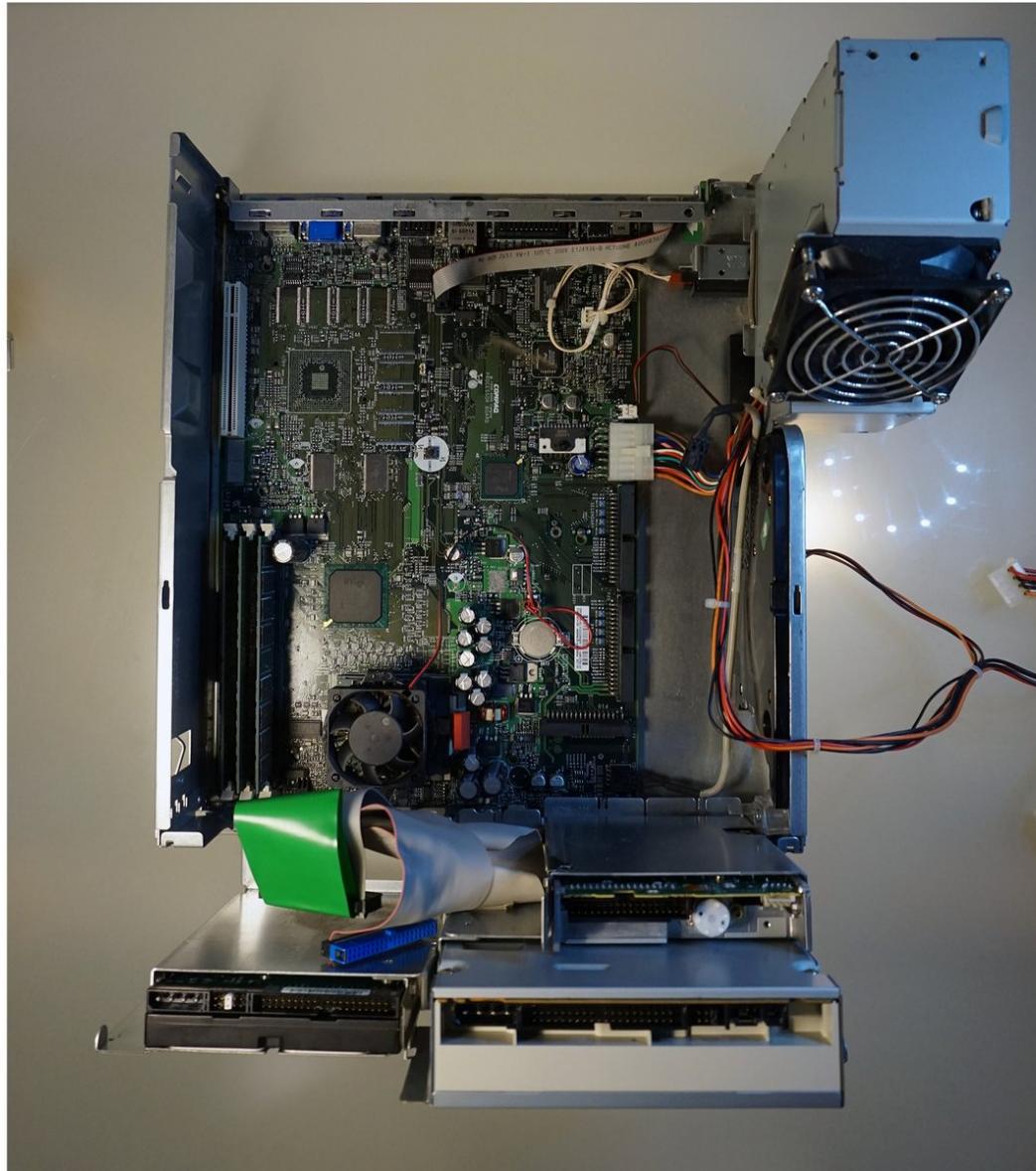




# Compaq Deskpro EN Teardown

Archaeology and curiosity collide in an epic teardown of this 16 year old desktop PC.

Written By: Christian Schaab



## INTRODUCTION

This fine computing device was recently discovered in an undisclosed warehouse where it was being studied by Top... Men.

What could be lurking inside this heavy metal box? A Golden Idol... The Ark of the Covenant... Giant Ants?

These are all possibilities, but there's only one way to find out for sure.

## TOOLS:

- [T5 Torx Screwdriver](#) (1)
- [8mm socket](#) (1)
- [Anti-Static Wrist Strap](#) (1)

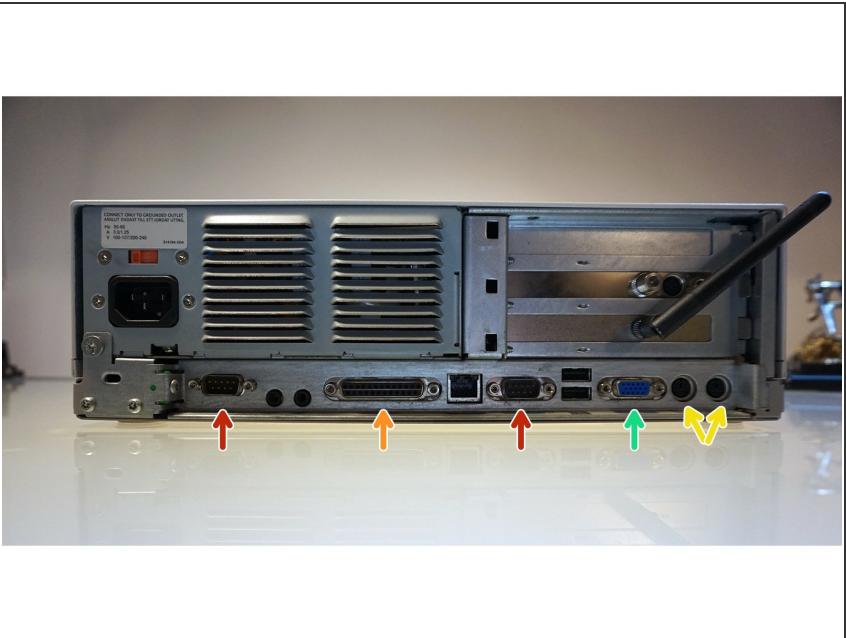
## Step 1 — Compaq Deskpro EN Teardown



- Behold, the power of beige!
- Tech Specs:
  - 933 MHz Pentium III Processor
  - 10 GB PATA Hard Disk
  - 512 MB of PC133 RAM
  - 16x DVD-ROM and 3.5" Floppy Drive
- Life Experience

ⓘ Compaq was bought by Hewlett-Packard in the early 2000s. Let's just say that the transition could have gone smoother.

## Step 2



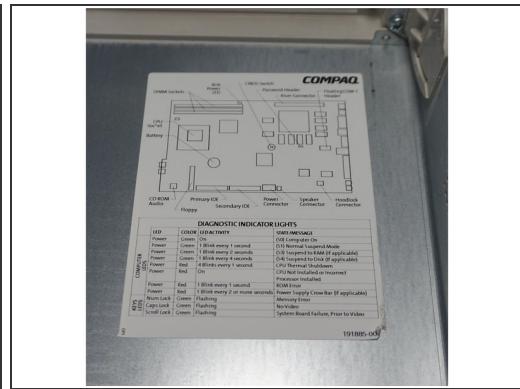
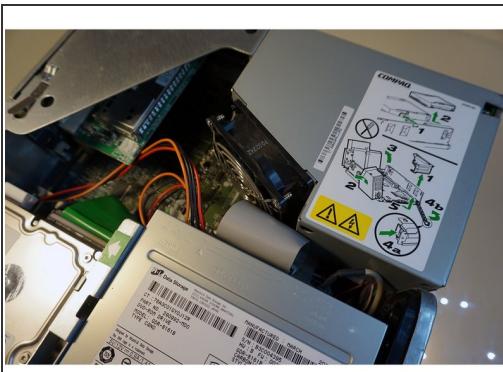
- Some of these ports belong in a museum:
  - RS-232 Serial
  - DB-25 Parallel
  - PS/2
  - DE-15 VGA (*oh, wait...*)
- The antenna is a pretty big clue that this computer has been upgraded at some point.

## Step 3



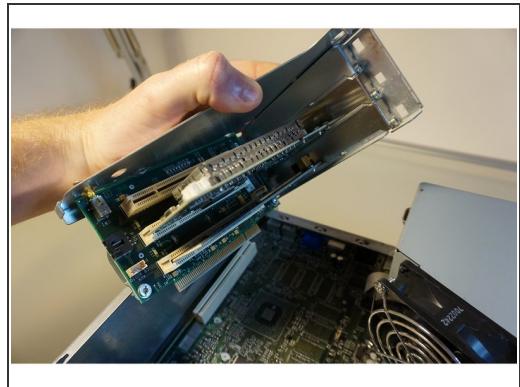
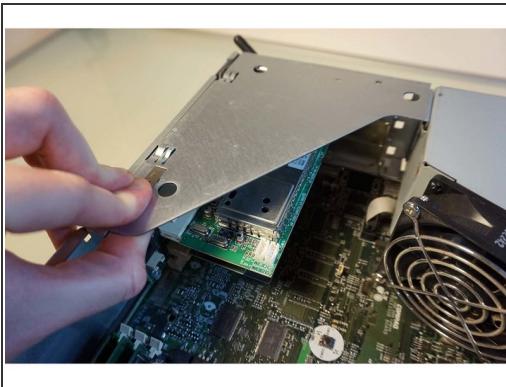
- We're going to remove the heavy steel casing by pressing in on the tabs located on the sides of the cover and then pulling the cover forward.
- There are a few hooks holding the cover in place, so some rocking is necessary to free it.

## Step 4



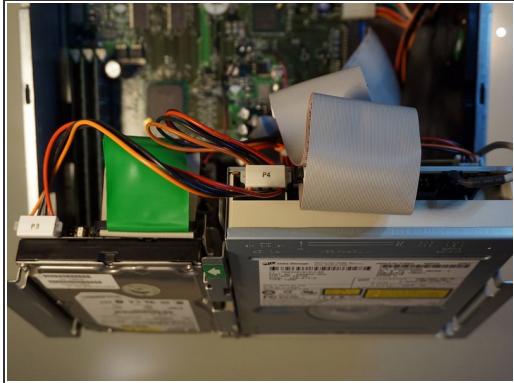
- With the cover removed, we are greeted by some ancient hieroglyphics. Green tabs and arrows identify how the rest of the major components can be removed.
- A diagram of the motherboard and common diagnostic codes can be found on the interior of the chassis cover.

## Step 5



- The various drives are mounted on a single hinge that flips forward. Just pull up and it will click into place.
- The PCI riser is one of the few things missing a green label. The release button is the silver tab towards the front of the computer.  
 The card slot is fragile, so use an even amount of force and pull straight up to remove the riser board.
-  We'll set the riser board aside for now and get back to it at the end of this teardown.
- The power supply swivels up and away from the motherboard.

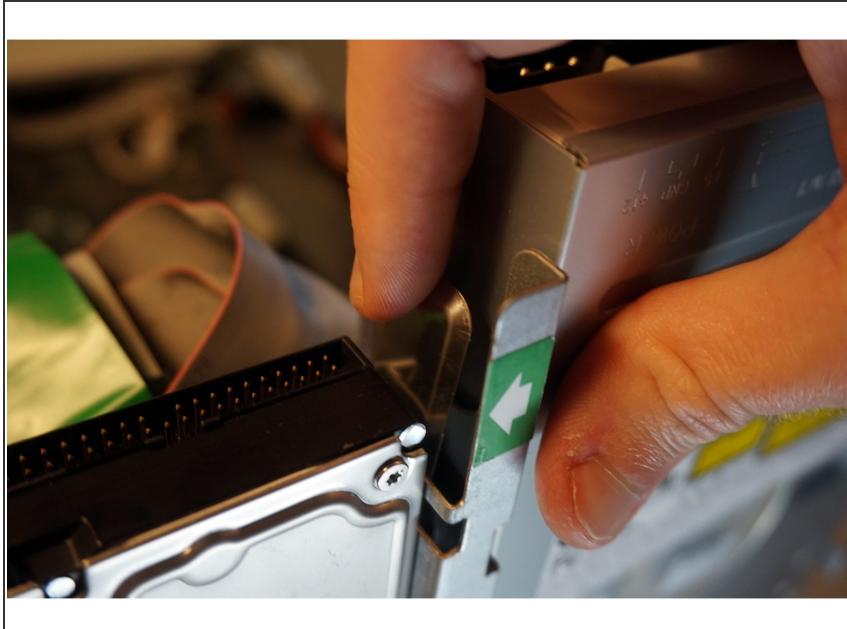
## Step 6



- Time to remove those pesky cables. We'll want to be careful since PATA ribbon cables have many pins that can be bent.
- Tape. Why'd it have to be tape?

*(i)* We'll just leave that one cable taped to the drive hinge where it can't hurt anything.

## Step 7



- Each drive has its own metal tab located in the center of the hinged bracket.
- Removing the various drives is just a matter of pressing the metal tab and sliding the drive out.

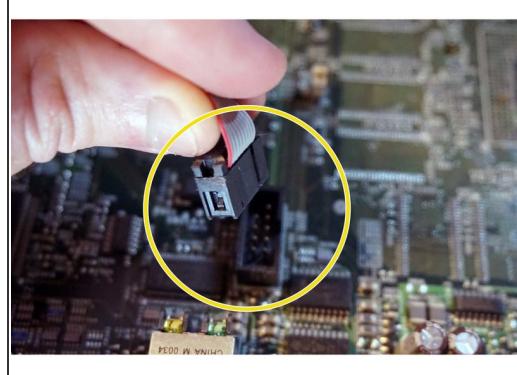
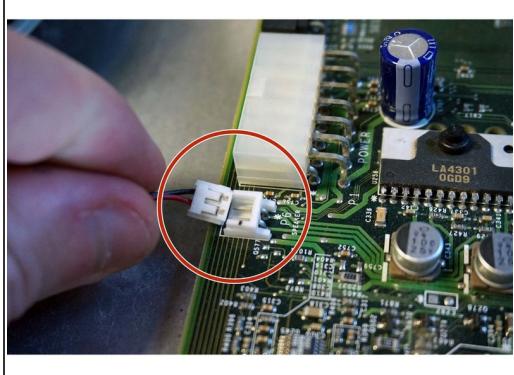
 Keep a good grip on the hard drive as you press the release tab. Even a slight bump could destroy an older mechanical drive like the one shown.

## Step 8



- The next step is to remove the power supply.
- Disconnect the 14 pin ATX connector from the motherboard. (Look for the festively colored cable.)
- A single T5 Torx screw holds the power supply to the chassis.
- *(i)* A standard flathead screwdriver can also be used to remove this screw.

## Step 9



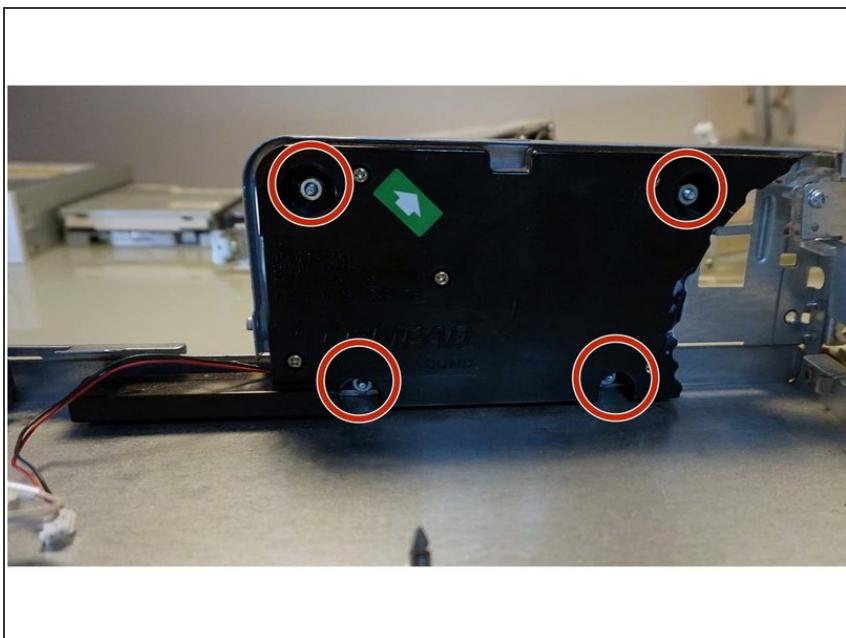
- A few more cables need to be disconnected before the motherboard can be removed.
- The speaker cable has a red and black wire.
- The solenoid cable has three white wires.
- *(i)* The solenoid is used to physically lock the chassis cover. It can be disabled in the BIOS settings.
- The serial cable is a small gray ribbon. The connector is marked as "Flying Serial" on the motherboard.

## Step 10



- It's finally time to remove the motherboard!
- We'll start by releasing the I/O port bracket on the back of the computer.
  - ⚠ This bracket is under pressure and will fly across the room if it isn't held down. (That may be why it's called a "*Flying Serial*".)
- Six support pegs are now the only thing holding the motherboard in place.
- Slide the board towards the back of the computer and lift up once the pegs are free.

## Step 11



- Four 8 mm hex nuts are the only thing keeping this beast of a sound system attached to the chassis.

## Step 12



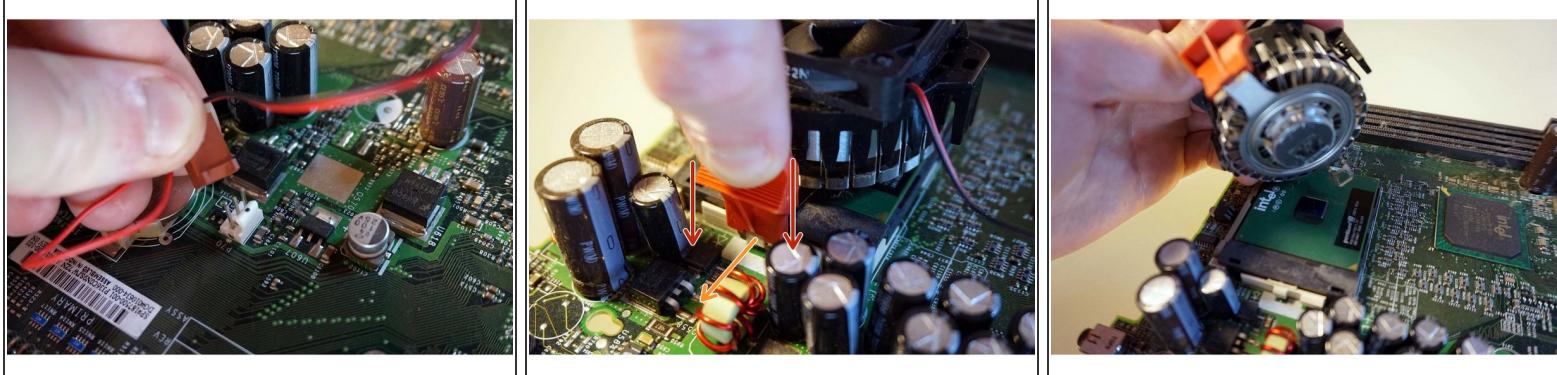
- Take a moment to admire the motherboard in all its glory!
- In lieu of a dedicated video card, the Intel 815 chipset utilizes an integrated graphics solution. Needless to say, gaming on this machine would be painful at best.
- *(i)* The bicycle is a complete mystery. Some people have suggested that a tiny mouse would pedal it to drive the cooling fan. Others have said that it was placed there by Freemasons to locate buried treasure.

## Step 13



- The RAM can be removed by unlocking the white tabs on each end of the modules and pulling up.
- *(i)* Here we find yet another sign of past upgrades. This Infineon 256 MB PC133 module does not match the other two sticks which are 128 MB modules manufactured by Micron.

## Step 14

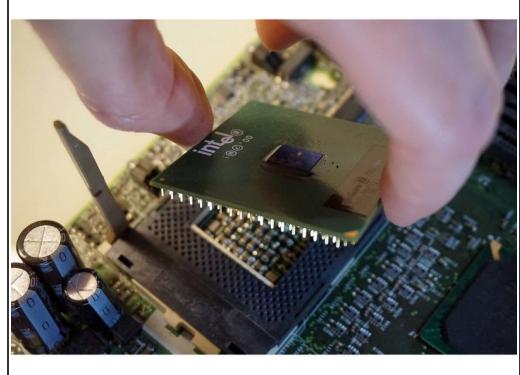
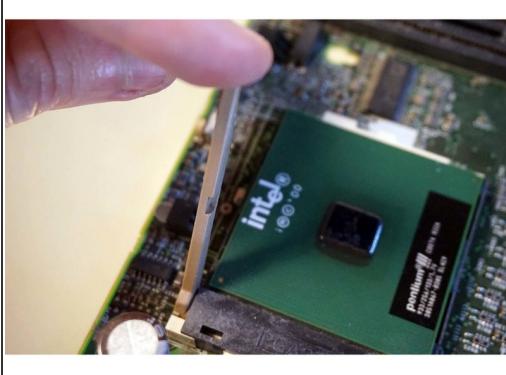


- The first step in removing the CPU cooler is to unplug the small three pin power cable.
- The CPU cooler is attached to the socket with metal hooks. Removing it without damaging the CPU requires two distinct motions:
  - Gently push down on the red tab.
  - Squeeze the red tab towards the fan and then lift the cooler.

**⚠** Using too much pressure can crack the processor and ruin your day.

**i** We can now see the CPU die since this version of the Pentium III does not have an integrated heat spreader. This design is called a flip-chip pin grid array (FC-PGA).

## Step 15

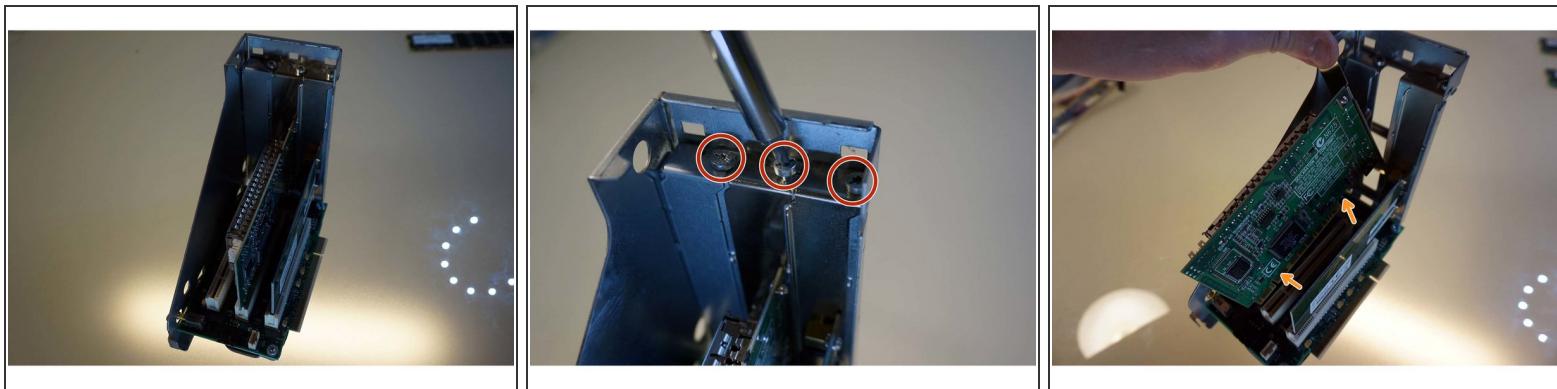


- Removing the CPU requires a steady hand and can be slightly intimidating.
- A beige lever keeps the CPU locked in place. Pull it away from the processor and then up. The processor will move towards the group of capacitors when it is unlocked.

**⚠** Now would be a good time to ground yourself if you haven't been wearing your nifty [anti-static wrist strap](#).

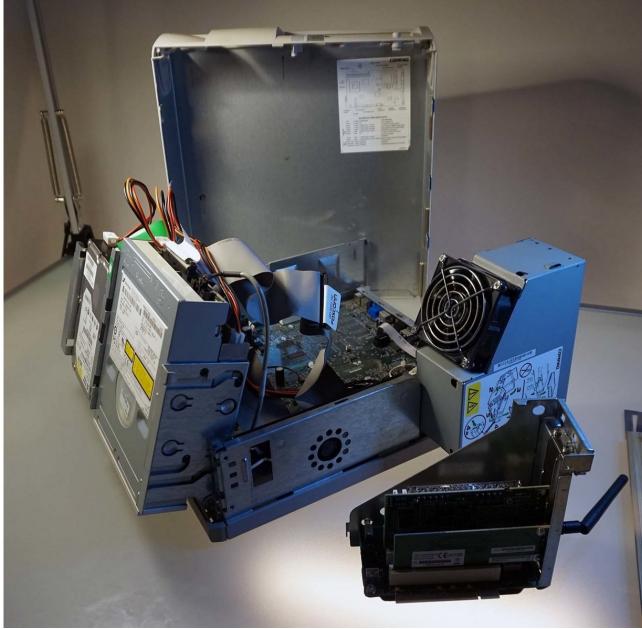
- The processor can be removed from the socket by gripping the edges and pulling straight up.
- ⚠** DO NOT force or twist the processor from the socket. Consider using a [spudger](#) to lift the edges if you can't get a good grip.
- i** This is a socket 370 Pentium III "Coppermine" processor clocked at 933 MHz. The other markings indicate 256 KB of L2 cache and a bus speed of 133 MHz.

## Step 16



- It's time to return to the PCI riser now that we've run out of things to take apart on the motherboard.
- The riser has space for three additional PCI cards that are each secured with a single T5 Torx screw.
- A quick pull is all that is needed to remove each card.

## Step 17



- That's it. Now we just need to reassemble it before someone realizes it's not in the warehouse.
- Completely Unofficial Compaq Deskpro EN Repairability Score: **10 out of 10** (10 is easiest to repair)
  - It practically tells you how to disassemble it.
  - Most common repairs can be done with one tool.
  - Faces remain unmelted after removing the cover. (*Always a good thing.*)
  - Finding replacement parts may require entering a Temple of Doom/RadioShack.