



Nifty MiniDrive and TarDisk MiniDrive Teardown

Opening up to see inside of a Nifty MiniDrive and a new TarDisk MiniDrive to see how they are assembled get a good look at the interior adapter chip and overall build.

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INTRODUCTION

I've had 3 Nifty MiniDrive's in all, backed their kickstarter and received updated models. None of them were very reliable, and would not work or work for a brief time and stop and I would lose data or backups. In my search for a similar product I used a drive by TheMiniDrive.com for a while but hated the removal method. Recently I came across a contacted company called TarDisk a new MiniDrive maker and emailed them about these problems I have had with such devices, they sent me two free drives one to use and one to teardown. So here is a side by side teardown of both Nifty MiniDrive and TarDisk (MiniDrive).

TOOLS:

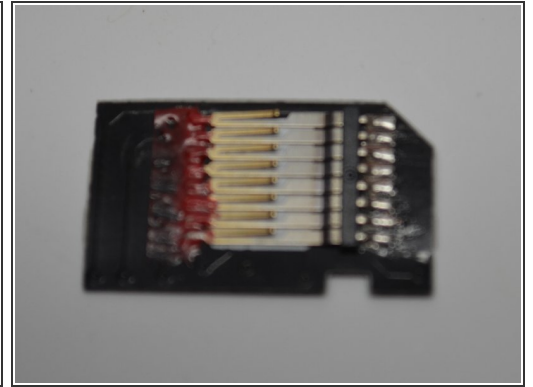
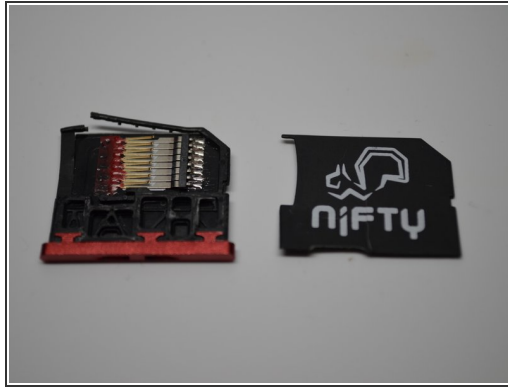
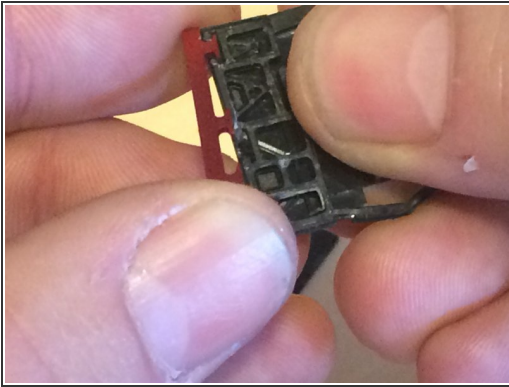
- [Xacto Knife, or Razor Blade](#) (1)

Step 1 — Opening up Nifty MiniDrive



- We are taking apart the new Nifty MiniDrive. First find the sonic weld where the front and back plastic pieces are fused together this is the easiest point to open, you will need a razor blade or an Xacto knife. Start at the MicroSD port cut down the weld to the to metal end cap.
- Then up from the MicroSD port and around the top. Try to say on the sonic weld, run razor all the way around the card.
- Last run blade down between the front and back plastic to break weld at bottom that holds end-cap in place.
- Once you remove the top case you will have to remove the aperture chip, which is very tricky and requires an amount of pulling and, for me, some breaking of the back paneling along the top. The Chip is set into the plastic at the base of the card

Step 2 — Nifty card teardown cont...



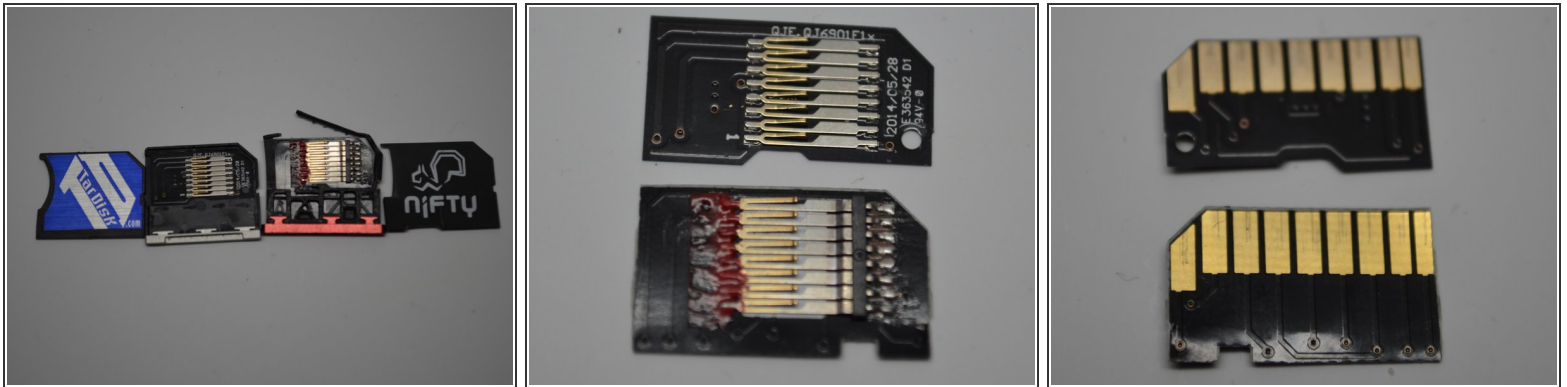
- Removing the end-cap at this point is easy. Nifty's redesigned cap and mold make for easy end-cap removal, after front and rear plastic molds are separated. This requires no force.
- Now the card is completely torn down into 4 parts
 - *Front Plastic Mold, *Rear Plastic Mold, *End-Cap *Adapter Chip

Step 3 — Opening TarDisk MiniDrive



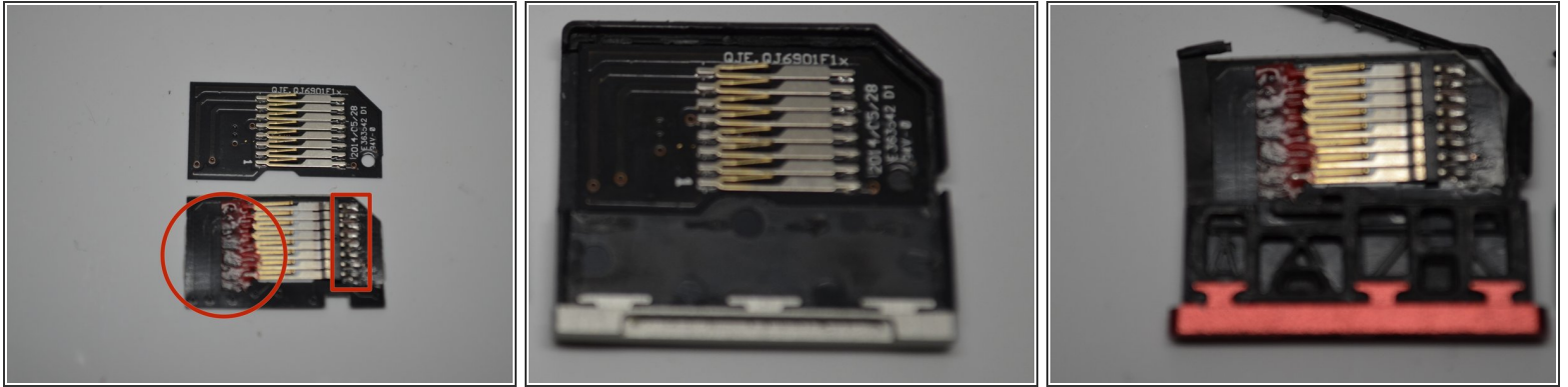
- TarDisk Teardown is similar to Nifty TearDown. The sonic weld is on the front edges of the card. Work a razor blade or Xacto knife along the weld from cap to MicroSD port opening.
- Next Run blade along top weld and right side. Last run blade down between the front and back plastic to break weld at bottom that holds end-cap in place.
- End-cap pops out of mold same as Nifty. Adapter Chip should lift easily out of its mold with little resistance.
- Now the card is completely torn down into 4 parts
 - *Front Plastic Mold, *Rear Plastic Mold, *End-Cap *Adapter Chip

Step 4 — Side By Side look at both Products



- Both are MicroSD adapters for MacBook Laptops that allow you to add more onboard storage. Both have solid aluminum endcaps to match your macbook and add a seamless, safe, onboard storage boost. Both sit flush.
- Top MicroSD to SD Adapter Chip = TarDisk. Bottom MicroSD to SD Adapter Chip = Nifty.
- The Nifty MiniDrive chip has a red glue substance. And a square shape cut up into bottom, this seats the chip in place in the plastic mold
- TarDisk Chip on top in both images has a circular hole cut into the bottom right end the card sits in a shaped plastic bottom mold and is additionally secured in place by this hole and a small plastic peg in the mold.
- Chips back side (verso) Top Chip TarDisk, bottom chip Nifty, both use gold for a faster connection. Read&Write speeds are about the same using the same chip and computer. TarDisk is slightly more responsive but is also newer. The Nifty Card for this test was also purchased new but was not built as recently.

Step 5 — Side Buy Side Look



- I am surprised at how much neater and cleaner the TarDisk's AdapterChip is.
- The red substance used on Nifty's circuit board (red circle) is an epoxy used instead of a clean solder. The connection points (in the red rectangle) look poorly soldered and dismal looking compared to the TarDisk's and appears unstable against the TarDisk's cleaner chip construction.
- This red Epoxy can only add to the reported unreliability and instability of the Nifty MiniDrive.
- TarDisk claims a superior build that is better than other MiniDrives, Boasting ease of removal (no tools needed) a more reliable MicroSD to SD adapter chip. At nearly half Nifty's price.

Step 6 — Wrap Up & Other Info



- Both Drives sit flush and have solid aluminum end-caps match the MacBook's aluminum finish
- Nifty is easily removed with a tool the company provides as seen in image. If you loose the tool you can get a new one from Nifty for about 10\$
- TarDisk is easily removable with a short thumb or finger nail if you don't have nails a credit card or other wallet card can be used.
- Both are available online at [Nifty](#) and at [TarDisk](#)

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