



DATA DOUBLER[®]

for Mac mini (2011-2012)

Installation Guide

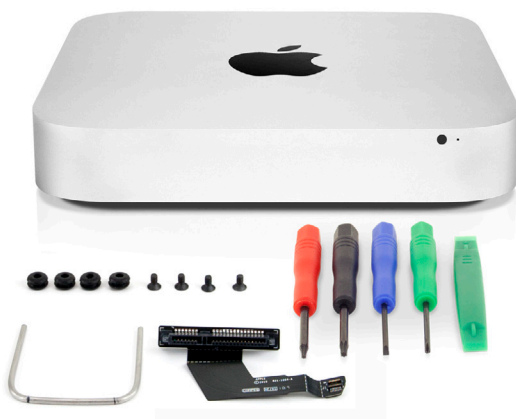


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INTRODUCTION

1.1 MINIMUM SYSTEM REQUIREMENTS

- Mac mini 2011 or Mac mini 2012

1.2 PACKAGE CONTENTS



- 5 Piece Toolkit (4 drivers and one pry tool)*
- Logic board removal tool*
- Four screws and grommets
- SATA cable

* Not all Data Doubler for Mac mini kits come with tools, but the installation steps are the same.

1.3 ABOUT THIS MANUAL

Firmware, images, and descriptions may vary slightly between this manual and the unit shipped. Functions and features may change depending on the firmware version. Please visit the product web page for the most recent product specifications.



Your computer is a static-sensitive device. It is susceptible to invisible damage if not protected during installation. We recommend proper grounding through the use of a grounding strap. Be sure to work in a clean and static-free area, and avoid wearing clothing that retains static charges. For more information, visit: www.owcdigital.com/support/anti-static

DEVICE SETUP

2.1 MAC MINI DISASSEMBLY

1. Begin by placing the Mac mini upside down on a flat surface. Use a towel or mouse pad to protect the top of the Mac mini during the setup process. A 2011 model is used for this manual.



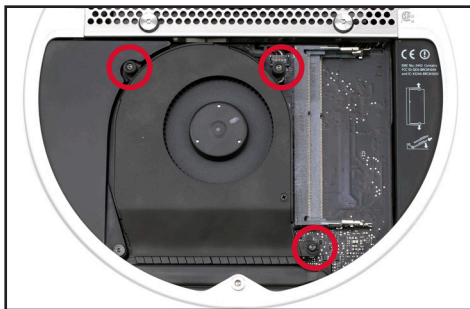
2. Remove the bottom cover of the Mac mini, exposing the access bay and RAM modules.



3. Follow the RAM module removal steps that are silk-screened onto the chassis of the Mac mini (highlighted below in red). **NOTE:** the modules pictured are green; yours may differ in color.



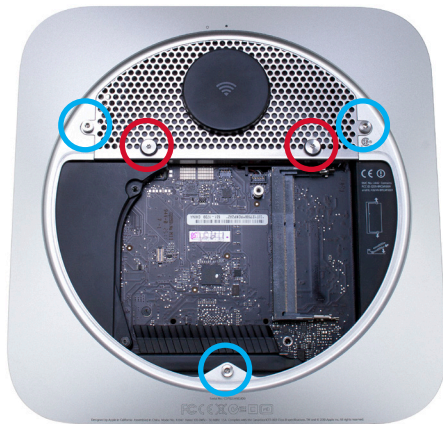
4. Remove the three Torx T-6 screws that secure the exhaust fan to the Mac mini chassis. **NOTE:** The lower-right screw is a longer standoff screw. The other screws are shorter; all three need to be refastened in the same locations later.



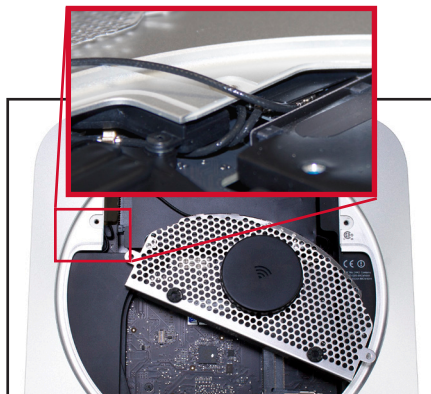
5. Disconnect the fan cable connector from the logic board. It lifts straight up; use the nylon pry tool to assist. **Do not pull on the wires directly;** they are fragile. Lift only the cable connector.



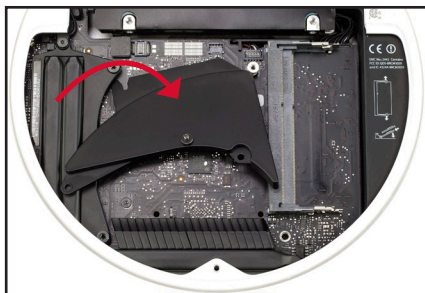
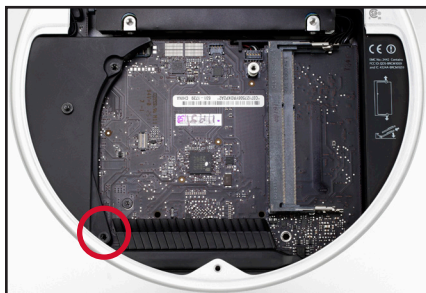
6. Use the Torx T8 driver to remove the three 2mm hex head screws that are used to hold the bottom cover onto the Mac mini (highlighted below in blue). **Caution:** Do not exert heavy force; the screws are easily stripped. Next, remove the two Torx T8 screws highlighted in red, these screws secure the drive in the lower drive bay.



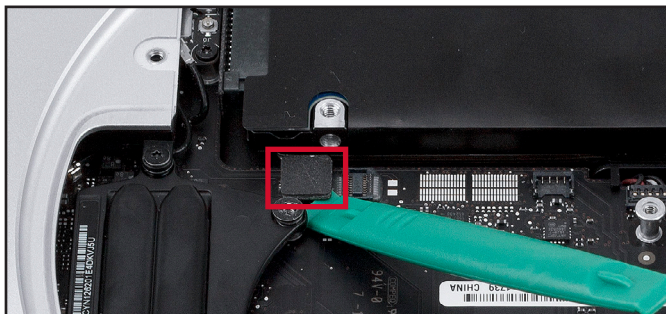
7. Gently lift the Airport antenna cover from the side closest to the logic board, as shown below-left. Next, slide the Airport antenna cover towards you and rotate it about 45 degrees as shown below-right. The antenna connector is under a hinged black plastic cover. Gently lift the cover to expose the connector as shown at top-right, then very carefully lift the connector to remove it from the Mac mini. **CAUTION:** this cable assembly is easily damaged.



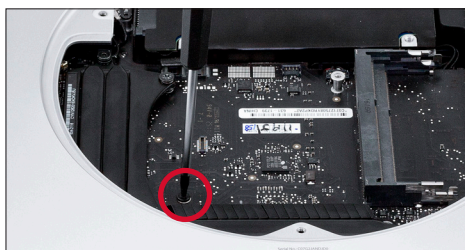
8. Remove the Torx T6 screw from the fan cowling, shown below-left. Then rotate the cowling as shown below-right before you remove it from the case and set it aside.



9. Use the nylon pry tool to carefully lift the hard drive cable connector, disconnecting it from the logic board. **CAUTION:** the cable and connector are easily damaged.



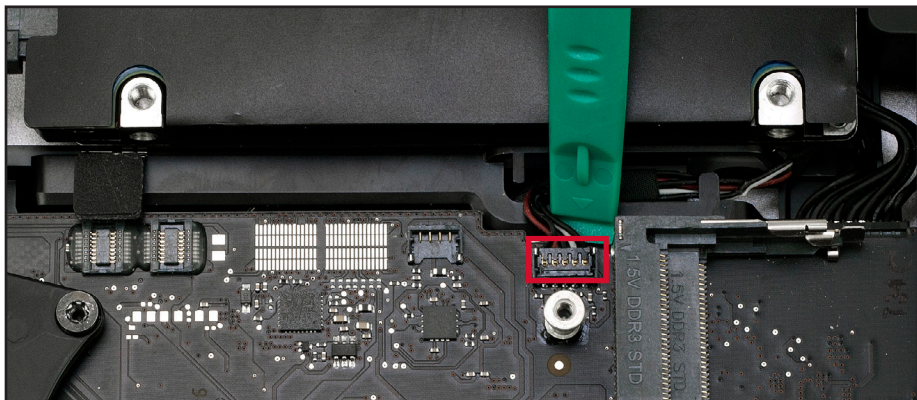
10. Remove the long Torx T6 screw from the chassis. It holds the logic board to the top cover.



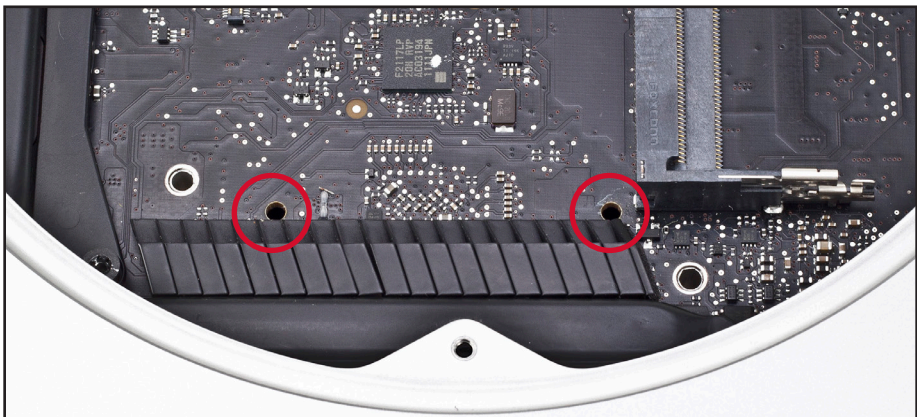
11. Use the nylon pry tool to very gently lift the IR cable connector from behind, as shown below.

CAUTION: this cable and its connector are easily damaged. Also, be careful not to place the pry tool under the connector housing on the logic board. Lift only the connector, not the housing.

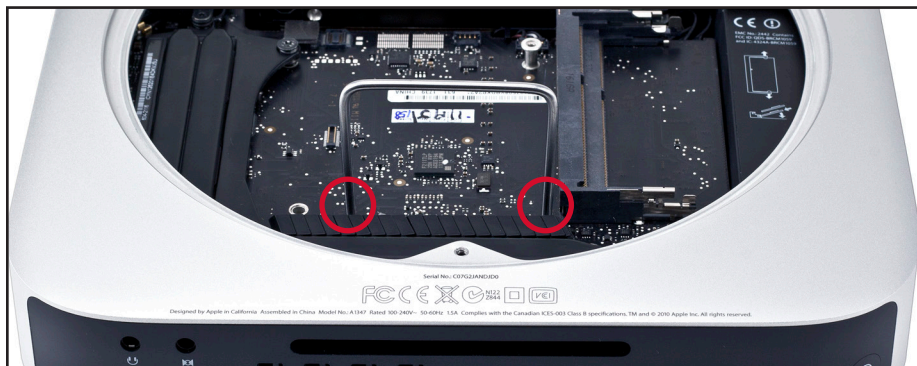
NOTE: The 2012 Mac mini has less clearance between the hard drive and the logic board than the 2011 model. You may need to gently nudge the drive a bit to get under the IR connector.



Before performing the next step, note that on the side of the logic board opposite the connector you dislodged in step 11, there are two holes (highlighted below). These facilitate removal of the logic board using the Logic Board Removal Tool.



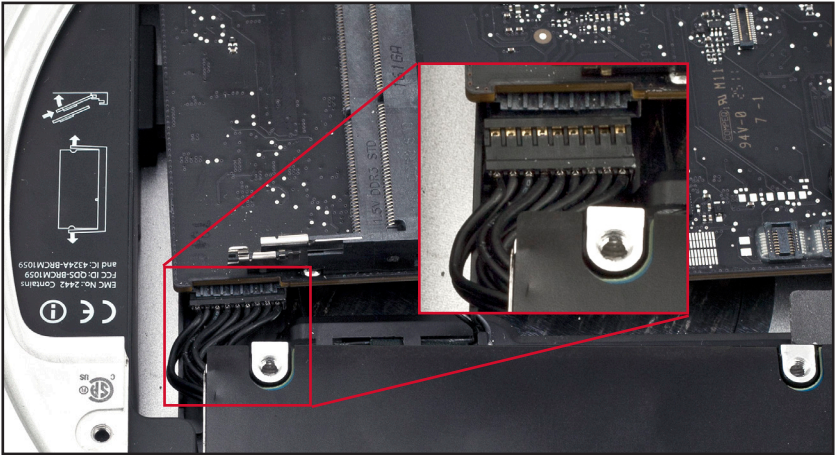
12. Insert the Logic Board Removal Tool into the two holes that were described on the previous page. Confirm that the hard drive cable and the IR cable are not caught on their connectors before proceeding.



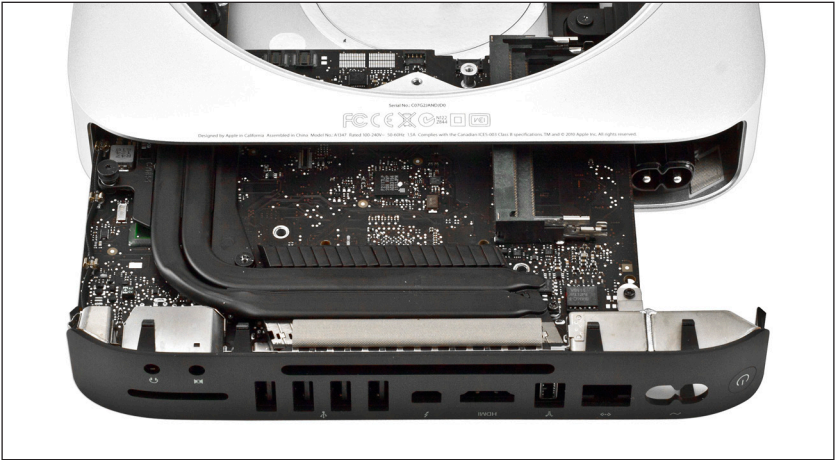
13. Carefully push down on the Logical Board and pull back on the tool until the I/O plate on the back of the Mac mini (that is, the black plate with all the data connectors on it) separates from the housing slightly. You only want to separate the logic board from the chassis a small amount - for this step, do not remove it more than the amount shown below or you could damage it.



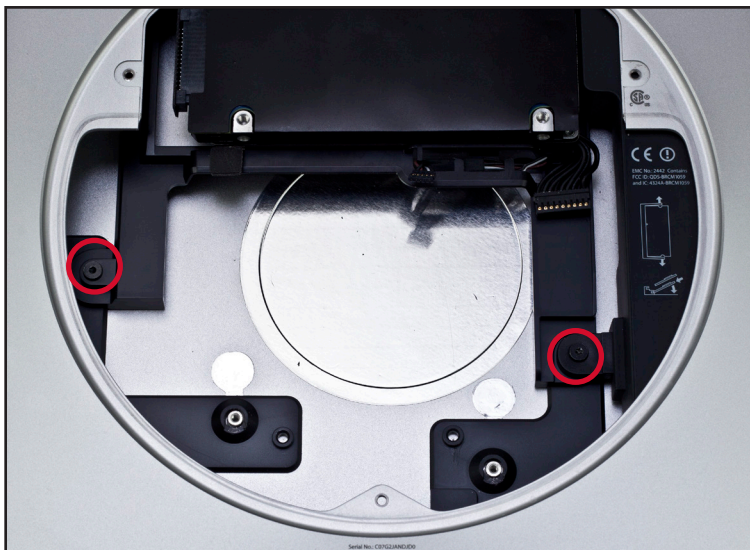
14. Looking from the front of the Mac mini (opposite the side you were looking at in Step 13), locate the power supply plug and disconnect it from the logic board using the nylon pry tool.
CAUTION: to avoid damaging the cable, do not disconnect this cable by pulling on the wires.



15. Slide the logic board out of the chassis by carefully pulling on the I/O plate. Keep it as flat as possible to avoid interference with the memory slots.



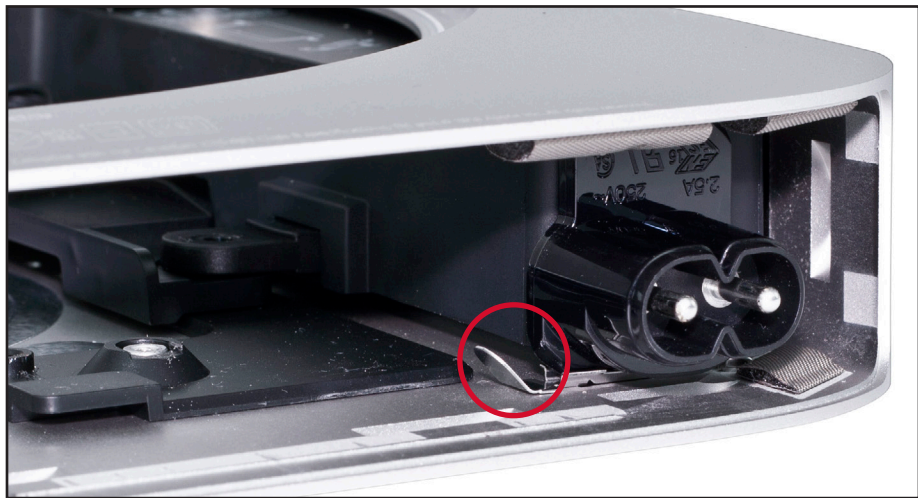
16. Once you have removed the logic board, the chassis will be exposed. Remove the two Torx T6 screws that secure the hard drive carrier and power supply into the chassis.



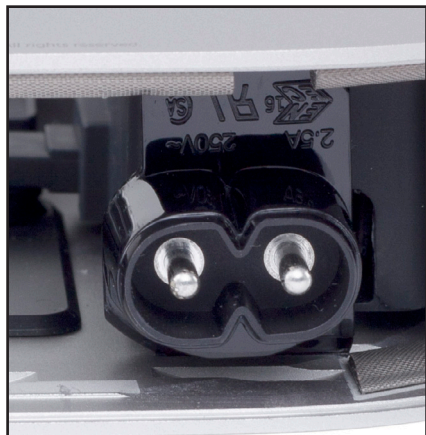
17. Remove the SATA drive from the hard drive carrier; it should lift out easily.



18. Look at the back of the Mac mini and locate the power port. Inside the chassis to the left of the power port is a metal tab that is angled up at a 45° angle. Slide this silver metal tab to the left and remove it from the Mac mini chassis, unlocking the power connector.



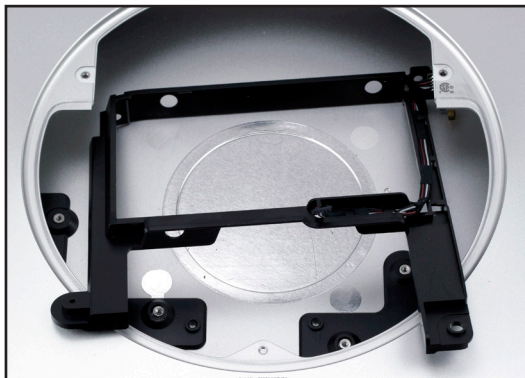
19. Grasp the power plug with your fingers and turn it 90° counterclockwise until it releases from the Mac mini chassis.



20. Slide the power supply out of the Mac mini chassis. You may have to lift the mounting tab (highlighted below in red) before the power supply will slide smoothly.



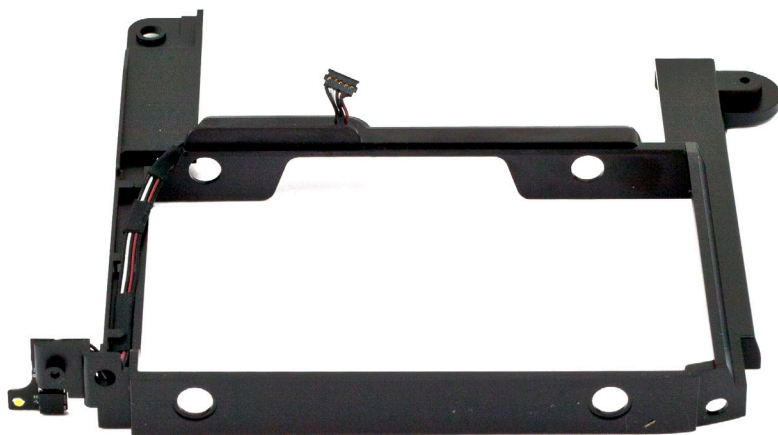
21. Lift up on the hard drive carrier and remove it from the Mac mini chassis.



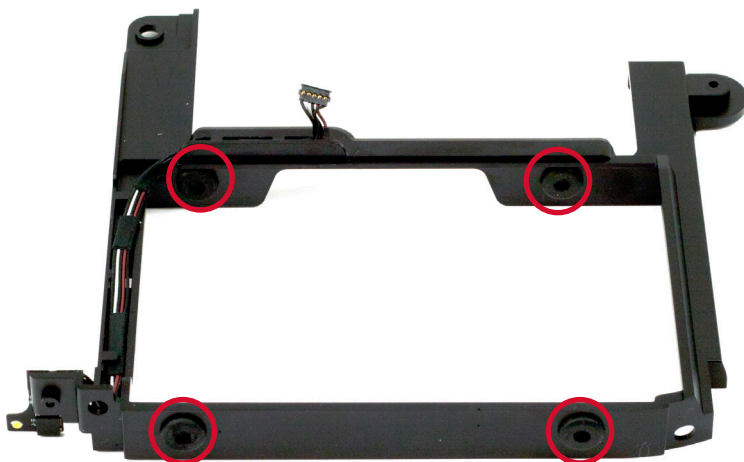
This concludes the disassembly process.

2.2 DRIVE CARRIER ASSEMBLY

22. Set the drive carrier that was removed on the prior page in front of you, with the mounting tabs pointed away from you, as shown below.



23. Insert the four included rubber grommets into the holes highlighted below. Make certain that they are centered on the plastic sides of the drive carrier.



24. Take the 2.5 inch SATA drive you intend to use with the Data Doubler and turn the drive upside-down. Next insert the included cable into the SATA port on the drive, as shown below. Note: the cable will be either black or orange, but the process is the same.



25. Install the drive into the drive carrier then affix it to the carrier. To do this, insert the four included hex head screws through the rubber grommets (two on each side, as highlighted below), then fasten them to the drive using the Torx T8 driver. **CAUTION:** Do not overtighten! **NOTE:** the drive carrier will bulge slightly when everything is inserted. This is normal.



2.3 REASSAMBLY

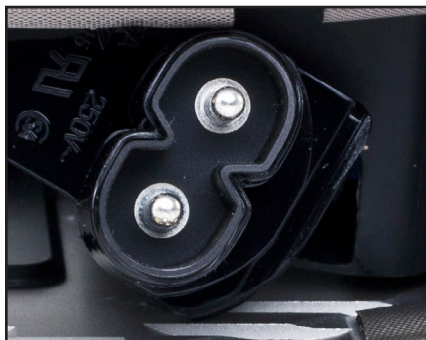
26. Place the drive carrier back into the Mac mini housing and replace the Torx T6 screw from **Step 16 (left side only)**. The mounting tabs for the drive carrier will line back up on the Mac mini housing top shell and lock into place when you have it in the correct position.



27. Slide the power supply back into the Mac mini chassis (shown below-left). Note there is a small metal guide pin on the back of the power supply, shown below-right. This pin fits into a small receiver slot at the front of the Mac mini chassis. Last, insert and refasten the other Torx T6 screw that was removed in Step 16.



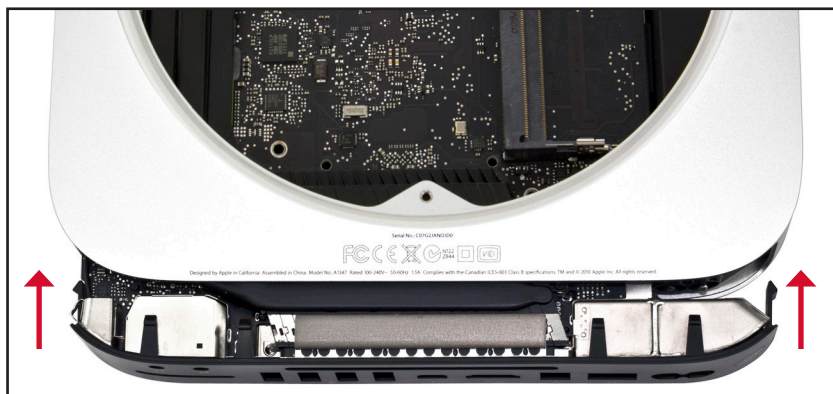
28. Line the power plug up so that the locking tab is in the inside mounting groove in the Mac mini chassis. Twist the power plug 90° clockwise to lock it into the Mac mini chassis. NOTE: If you have trouble re-aligning and fully seating the power plug, you can use the Mac mini's power cord to safely provide additional leverage. Disconnect the cord from power then connect it to the power plug. Use the connected cable to apply additional leverage as you rotate and seat the plug, then disconnect the power cord.



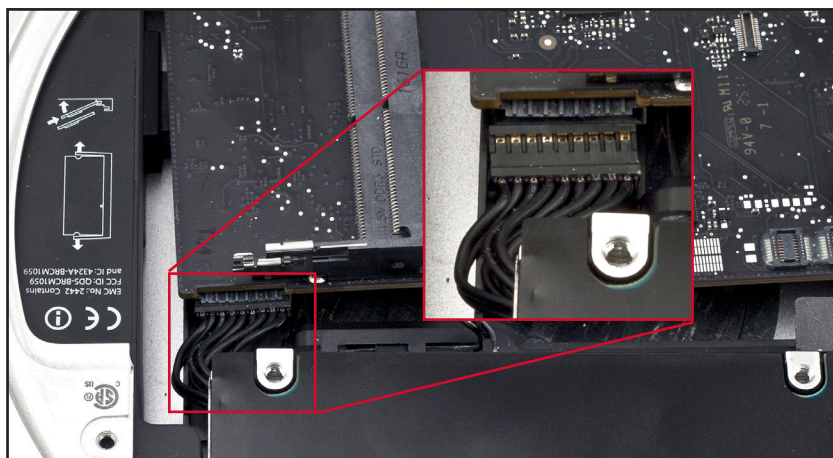
29. Slide the metal locking tab into the locking slot, holding the power plug into the Mac mini chassis as shown in the photograph. Make sure that the metal tabs are on opposite sides of the power plug groove before pushing it in all the way.



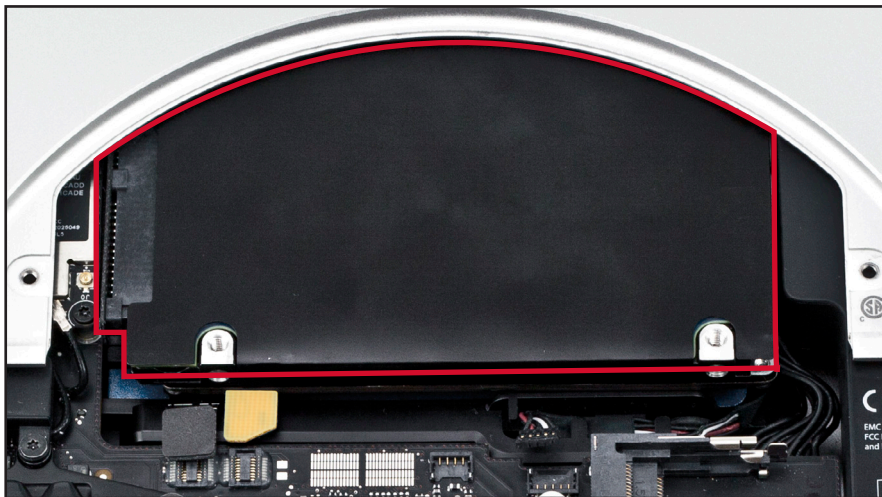
30. Gently slide the logic board assembly back into the Mac mini chassis. Stop when you reach the side locking tabs.



31. Looking from the front of the Mac mini (opposite the side you were looking at in Step 30), locate the power supply plug and carefully reconnect it to the logic board..



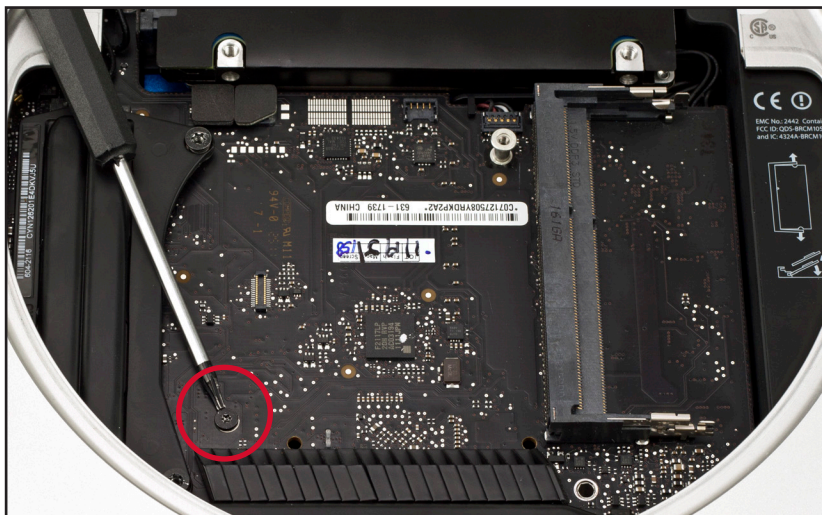
32. Place the SATA drive that you removed in **Step 17** back into the Mac mini chassis. **Note:** The two screw pins on the drive must fit in holes on the internal side wall of the housing. Maneuver the drive until the pins secure to the holes in the housing; using a Torx T8 driver in one of the drive's screw holes may help. The drive should not move from side to side once secure.



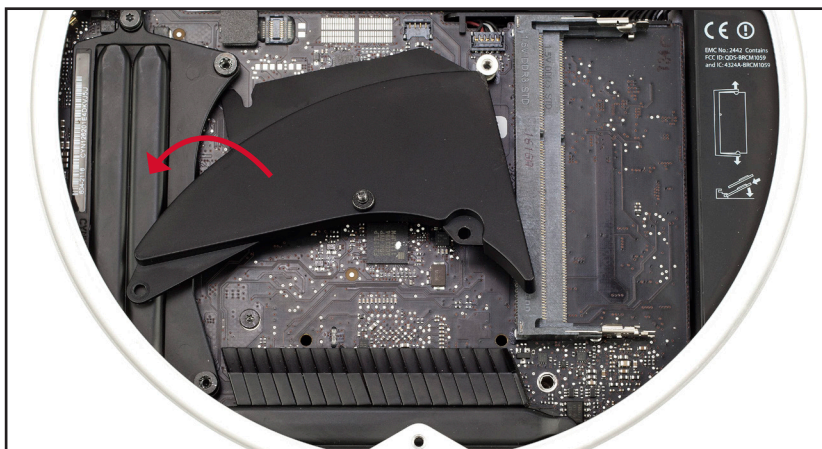
33. Line up the SATA connectors so that they don't interfere with the logic board, then gently slide the logic board back into the Mac mini chassis. When you hit the plastic retainer clips on the port fence, make sure you are applying even pressure to both sides, as one side may pop into position before the other. Reconnect the IR cable and both SATA connectors — all three are highlighted below.



34. Refasten the long Torx T6 screw that you removed in **Step 10** into the logic board.



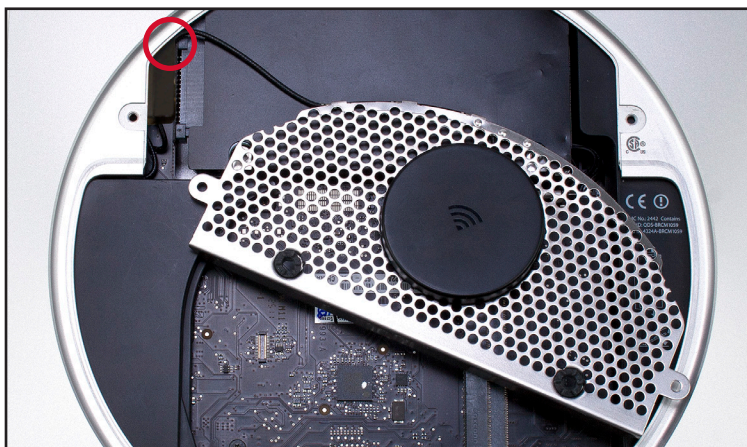
35. Reseat the fan cowling that you removed in Step 9, as shown below.



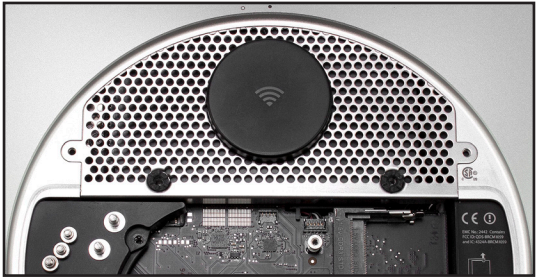
36. Insert and refasten the short T6 screw that you removed in **Step 8**.



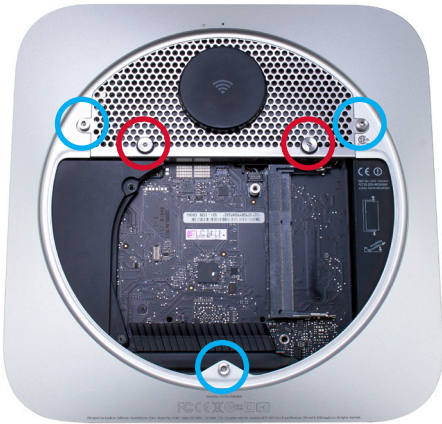
37. Pivot the Airport antenna cover gently into the Mac mini as shown below. Turn the black Airport cable so that the silver connector loops around from the inside-top and attach the connector onto the Airport card. The connector snaps straight down onto the card. **CAUTION:** the antenna and cable are easily damaged.



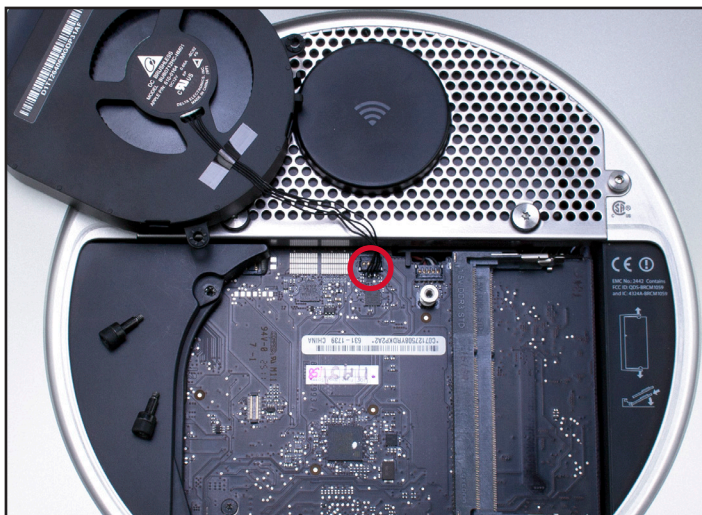
38. Carefully align the Airport antenna cover and slide it back into place as shown below. The edge of the cover will slip into a channel cut out for it in the chassis. Make sure it is straight and seated level before continuing. **NOTE:** if you are unable to get the antenna cover to sit flush, you will have work backwards and attempt to reseat the drive that you installed in Step 32, then work back to this step to reseat the antenna cover.



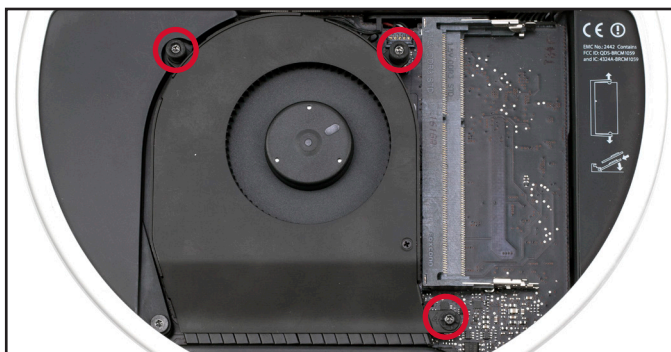
39. Using the Torx T8 driver, insert the five screws that you removed in **Step 6**. Make sure the hex head screws (highlighted in blue) and Torx screws (highlighted in red) are placed back in their original locations. Use a Torx T8 driver to secure all five screws. **CAUTION:** do not over-tighten the screws; they are easily stripped.



40. Carefully align and reconnect the fan cable connector to the logic board as shown below. Gently push the connector straight down once aligned; it should snap into place. **CAUTION:** this cable is easily damaged.



41. Insert and then refasten the three Torx T-6 screws that were removed in Step 4; these secure the exhaust fan to the chassis. **NOTE:** The lower-right screw is a longer standoff screw. The other screws are shorter; the longer screw needs to be refastened in its original location.



42. Carefully re-insert and snap each of the RAM modules back into place, starting with the lower RAM slot. When each module is fully in place the two side clips should snap into the semi-circular cut-outs on the sides of the modules.



43. Replace the bottom cover of the Mac mini by carefully aligning it and using your hands to twist and secure it onto the chassis.



This completes the installation process.

3.1 ONLINE RESOURCES

VIDEOS

To view a detailed video of this installation process, please visit the URL below, choose your Mac mini from the list, then select the “Data Doubler” option.

www.owcdigital.com/installvideos

FORMATTING

For tips on formatting your newly installed drive, please visit:

www.owcdigital.com/format

FREQUENTLY ASKED QUESTIONS

To see our list of commonly asked questions about this and other topics, please visit:

www.owcdigital.com/support/faq

DATA MIGRATION

For a step-by-step walk-through of our recommended approach to transferring data from an existing drive to a new drive, please visit: www.owcdigital.com/support/data-transfer

TROUBLESHOOTING

If you are having trouble getting your drive installed properly or working after installation, please see **Section 3.2** for Technical Support options.

3.2 CONTACTING TECHNICAL SUPPORT

HOURS OF OPERATION

8AM - 8PM (CT) Monday - Friday

9AM - 4PM (CT) Saturday



(866) 692-7100 (North America)

+1 (815) 338-4751 (International)



Live chat is available during normal business hours at:

www.owcdigital.com/support



Email support is available at:

www.owcdigital.com/support

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Changes:

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FCC Statement:

Warning! Modifications not authorized by the manufacturer may void the user's authority to operate this device.

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference with radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference with radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.

Health And Safety Precautions:

- Use proper anti-static precautions while performing the installation of this product.
- Read this user guide carefully and follow the correct procedures when setting up the device.
- Do not attempt to disassemble or modify the device. To avoid any risk of electrical shock, fire, short-circuiting or dangerous emissions, never insert any metallic object into the device. If it appears to be malfunctioning, contact technical support.
- Never expose your device to rain, or use it near water or in damp or wet conditions. Never place objects containing liquids on the drive, as they may spill into its openings. Doing so increases the risk of electrical shock, short-circuiting, fire or personal injury.

General Use Precautions:

- To avoid damage, do not expose the device to temperatures outside the range of 5° C to 40° C (41° F to 104° F).
- Protect your device from excessive exposure to dust during use or storage. Dust can build up inside the device, increasing the risk of damage or malfunction.
- For up-to-date product and warranty information, please visit the product web page.

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