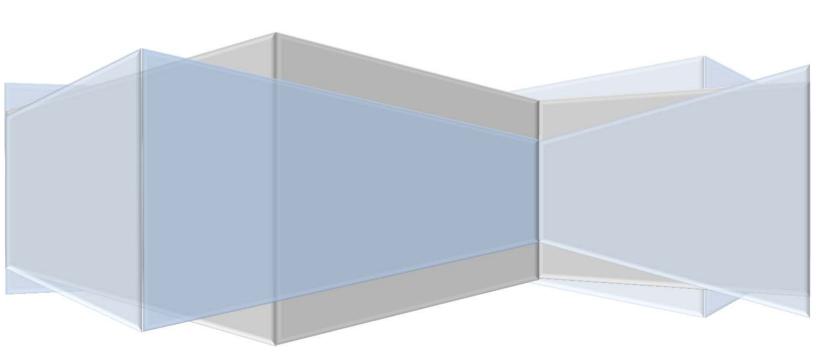


# Geremia "Kamikaze" Winbond Unlock

For Slim Lite-on DG-16D4S with Vendor ID: EF



## Warning!!!

## ka·mi·ka·ze

*noun* / kämi käzē/kamikazes, plural

- 1. (in World War II) A Japanese aircraft loaded with explosives and making a <u>deliberate</u> suicidal crash on an enemy target
- 2. The pilot of such an aircraft

adjective / kämi käzē/

- 1. Of or relating to such an attack or pilot
- 2. Reckless or potentially self-destructive
  - o he made a *kamikaze* run across three lanes of traffic

Read the entire manual before making any attempt at this hack. If you do not feel you can perform any of these tasks, you probably can't and shouldn't!

In unexperienced hands this hack has a HIGH chance of failure. That being said this is a "Do at your own risk" process. Remember you have been warned.

We will take this time to thank Geremia, Carranzaf, and everyone else involved in this discovery. Normally we thank at the end of the manual, but who knows you may be cursing them by then...AGAIN, YOU HAVE BEEN WARNED!

## Winbond Unlock

The following tutorial will take you through the process of removing the write protection from your Lite-on drive. Remember it is important to stay update to date on all Lizard software, especially the Gecko Firmware. With most Gecko releases there is almost always a new Lizard Toolbox as well. Stay up to date on all releases including C4Eva's LiteTouch Firmware by visiting <a href="https://www.360Lizard.com">www.360Lizard.com</a> or joining us in IRC #MaximusLizard on EfNet. The 360Lizard website has a built in IRC client on the Help/Forum tab and in the Chat tab of the Toolbox for convenience.

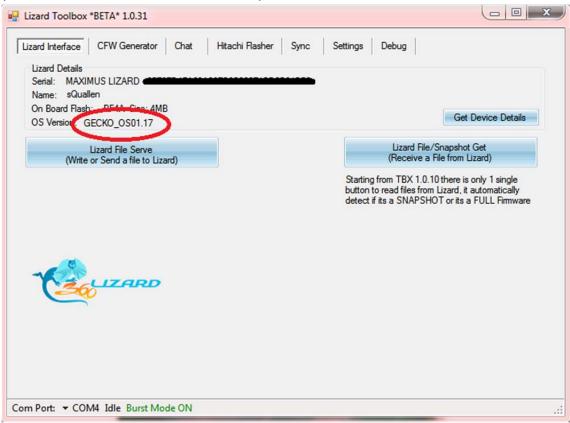
#### Requirements to update your Lizard:

- Maximus Lizard (Gecko 1.17 or Newer)
- Current Lizard Toolbox 1.0.31 (8/3/11)
- DVD Drive Power source (Maximus Dongle, Xtractor, CK3, or homemade device)
- Sata Cable (Supplied with Maximus Lizard )
- USB Cable (Supplied with Maximus Lizard)
- MAXIMUS LIZARD USB Windows Drivers
- Windows XP / Vista / 7 32bit or 64bit
- MAC OSX (Using Parallels, Bootcamp or VMWare)
- Dremel Tool is recommended (drill, engraver, etc. will work)
- Bit #105 for the Dremel
- 100 ohm Resistor
- Soldering Iron and Solder
- Ruler
- Needle(anything to score the marks on the chip)
- Phillips Screwdriver
- Heat Gun/Hair Dryer
- Razor Knife
- Piezo Ignition e.g. Grill Igniter, Cricket Lighter, etc.
- STEADY HAND!!!!

## **Setting Up**

Before you connect everything you first need to install the Maximus Lizard Drivers. These are signed and work in Windows XP / Vista / 7 both 32bit and 64bit. The drives should auto install on Windows 7 and Vista.

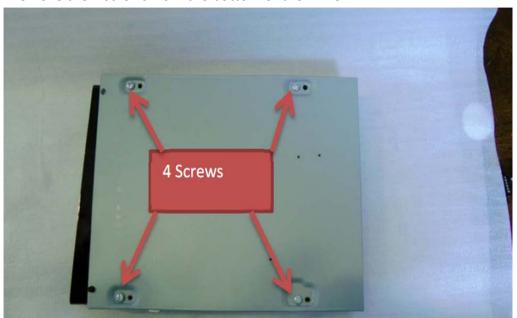
- 1. Plug you Lizard into the PC by the provided USB cable
- 2. Open the Toolbox and click "Get Device Details". Make sure you have Gecko 1.17(Toolbox 1.0.30 and up will inform you when there is an update to your Lizard) if you do not have 1.17 STOP an UPDATE you Lizard!!!



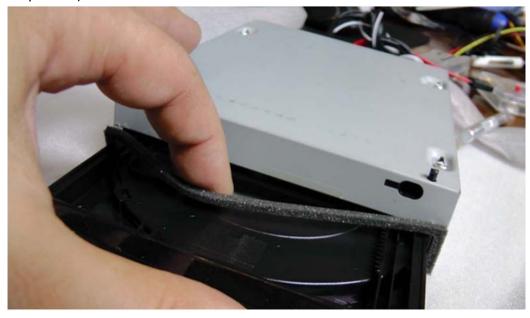
 Go to your Lizard, navigate to the Slim Lite-on tab. MTK the Drive and check the Vendor ID, EF is Winbond and C2 is Macronix. This hack will work with both but there is a much safer and easier unlock for a Macronix, please refer to the Trident Manual <a href="http://www.360lizard.com/website/downloads/Trident\_v10.pdf">http://www.360lizard.com/website/downloads/Trident\_v10.pdf</a> 4. Once you have confirmed your drive is a EF(Winbond) drive go ahead and click "Read Key from Slim Drive". Either to PC or Lizard (refer to Slim manual if you're not familiar with this step)

### **SAVE THE KEY!!!**

- 5. Eject the Tray and go ahead and disconnect the Lizard and your drive power, Lets disassemble the drive. (Leave tray ejected)
  - 1. Remove the 4 screws from the bottom of the Drive



2. Gently peel back the Foam behind Disc Tray (or slice the foam where drive separates)

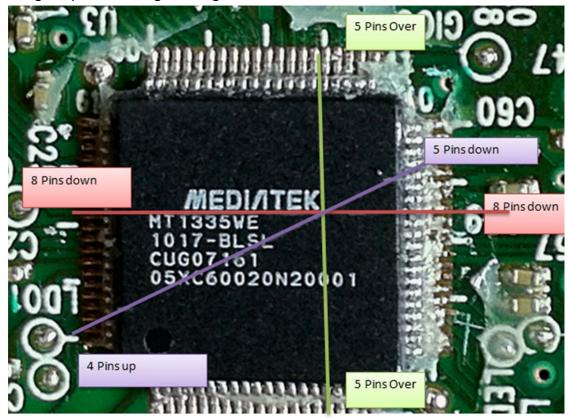


3. Lift the bottom cover off.

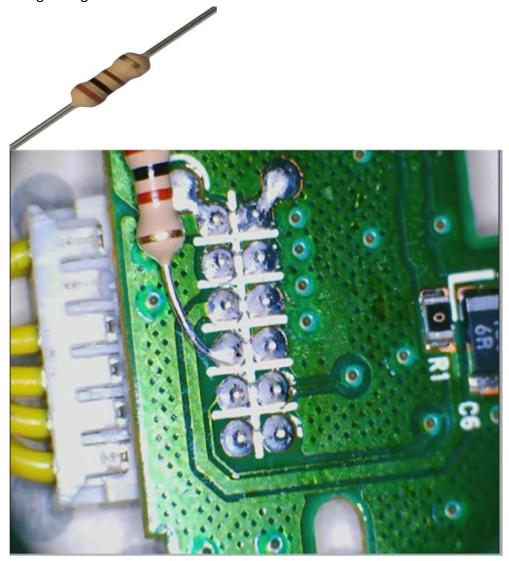


4. We need to remove the epoxy from the chip to see the pins, this step is highly recommended to get an accurate coordinates on where to drill, but it's your choice. Apply heat to the epoxy with a heat gun or hair dryer on a low setting(it's just epoxy not solder). While heating use your razor knife to cut away at the epoxy until all is removed. It doesn't have to be perfectly clean just clear enough to get a good view of the pins. Be careful not to damage the chip or board in this process.

5. Get out the ruler and scoring device(safety pin) and make the coordinates by using the pins following this diagram. **DO NOT RELY ON THE LABEL!!!** 



6. Next we need to solder our 100 ohm resistor to the 3.3v line on the board at the power harness. You also need to solder a thin piece of wire to the resistor long enough to reach the bit.

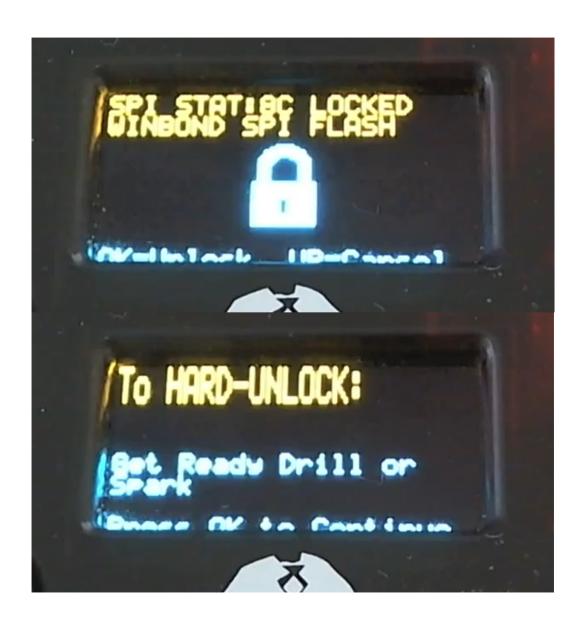


7. At this point we are ready to hook the Lizard and power back up to the drive.

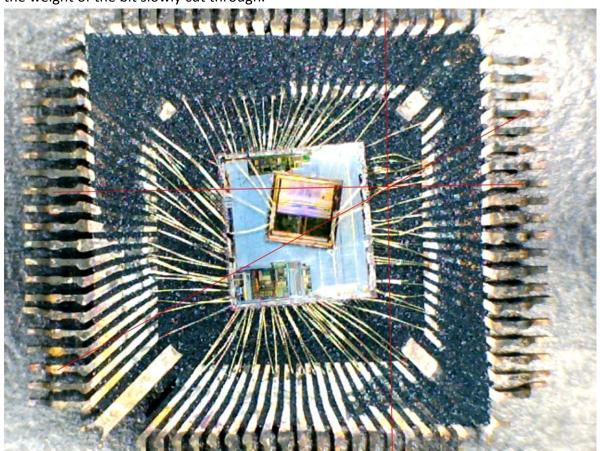
8. Back in the Slim menu navigate to "Lock/Unlock Write on Slim Lite-on", you will be prompted to MTK the drive, power cycle and click OK.



9. Time to "Hard Unlock" Get the Dremel/Drill ready!



10. Before you drill understand what you are attempting to cut. These are microscopic wires in a very small chip be EXTREMELY careful! The 2 wires crossing each other in photo is what we are after, DO NOT go too deep, DO NOT make a huge whole. The idea is to slowly sand away until you have cut them. So, don't rush! It's not a piece of wood there is no need to press hard, let the weight of the bit slowly cut through.

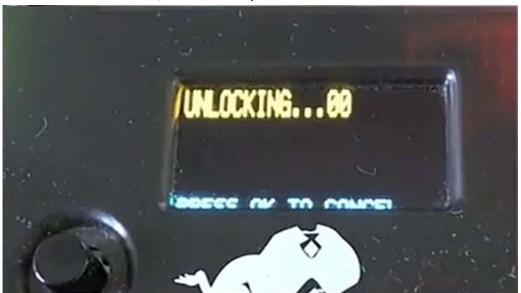


11. Press OK to Hard Unlock. Take the wire connected to the resistor and touch it to the drill bit as you drill, it is very important that it is in contact with the bit the entire time.



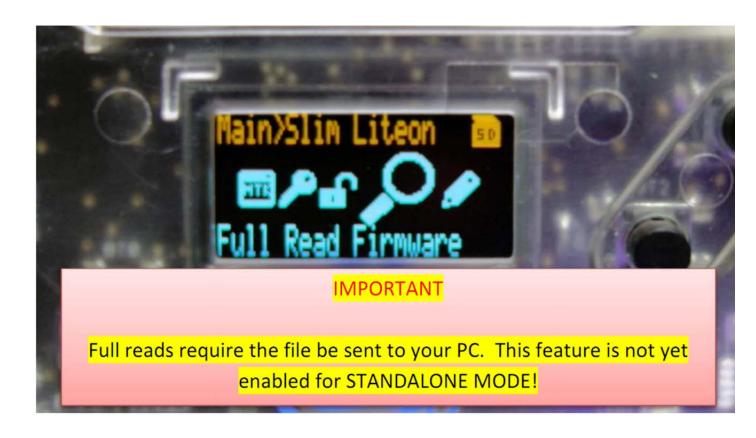
Again, don't use a lot of pressure, the weight of the drill should be enough. Take your time!

The Lizard is sending commands during this process it will notify you as soon as the wires have been cut, as soon as it you see this screen **STOP DRILLING!!!** 





- 12. Success! Your drive has WP(Write Protection) has been removed ©
- 13. From here we suggest (But you don't need to do this) Perform a full read of the firmware (100% Full Dump). Go to the "Full Read Firmware" Icon.



14. Go ahead the press the OK button and the process will begin. Follow the on screen instructions.



15. Start "Fileget on PC" will appear. Go to the Toolbox and click the "Fileget/Snapshot Get" button and the Lizard will dump the drive 100%. A full dump is important, it helps avoid the "Open Tray" error plaguing the Slims with CFW.



- 16. With a full dump saved we can go ahead and our drive. Simply go the "Write FW to the DVD Drive" and follow the Lizard prompts,
- 17. After writing the firmware we can RE-LOCK the drive. This is optional but recommended as to be "Live" safe.
- 18. Go to "Lock/Unlock Write on Slim Lite-on" and press OK.



19. Press OK to perform lock.



20. Specify the type of lock you want. A soft lock can be unlocked again with just the Lizard. A hard lock will require the piezo igniter. A hard lock is recommended to be "Live" safe.



21. SPI Lock Success!



22. Re-assemble your drive and have fun.

# Unlocking with the Igniter for updates

- 1. Navigate to "Lock/Unlock Write on Slim Lite-on", you will be prompted to MTK the drive, power cycle and click OK.
- 2. MTK the drive and prepare for Hard Unlock
- 3. Hold the igniter just above the chip as to be careful not to shock the board itself.



4. As the Lizard sends the commands click the igniter. The goal is to give the wires a small charge. Once you see this screen you stop triggering the igniter.



## 5. SPI Unlocked...again ☺



- 6. Write the firmware
- 7. Re-lock with a hard lock when finished



Again...Thanks to Geremia, Carranzaf, Ed at VGC Repairs, and the rest of the Maximus Team.

sQuallen