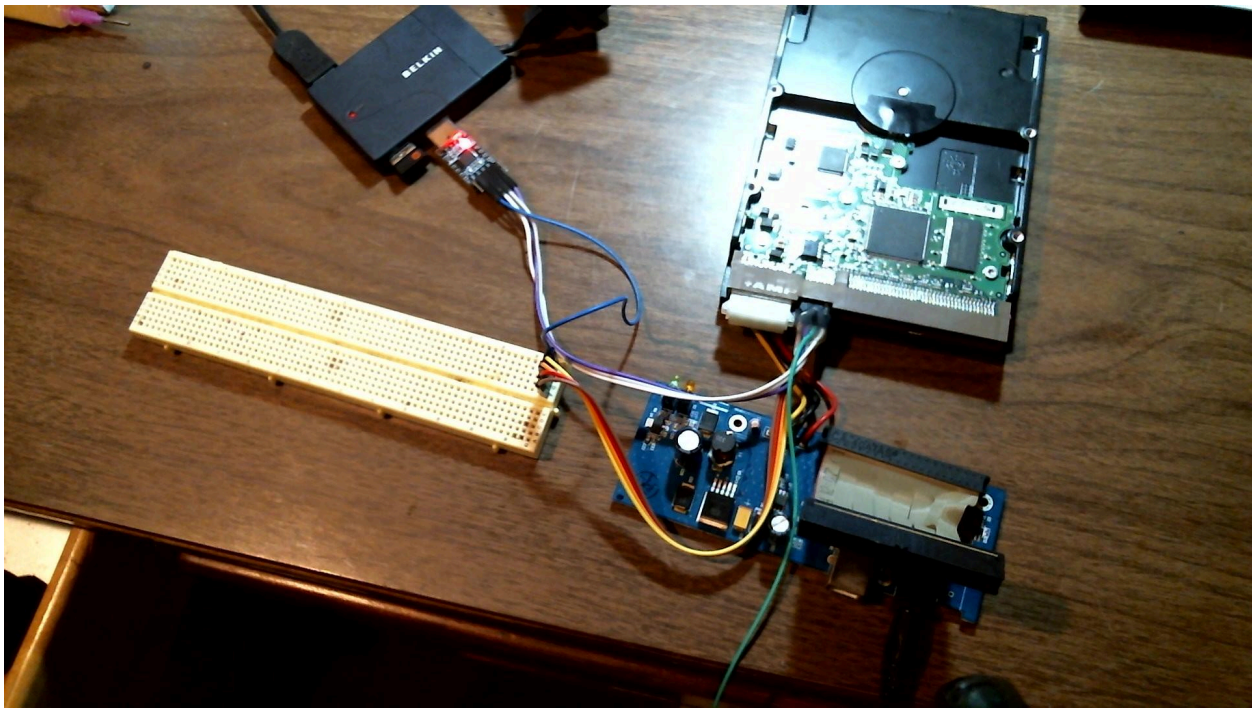


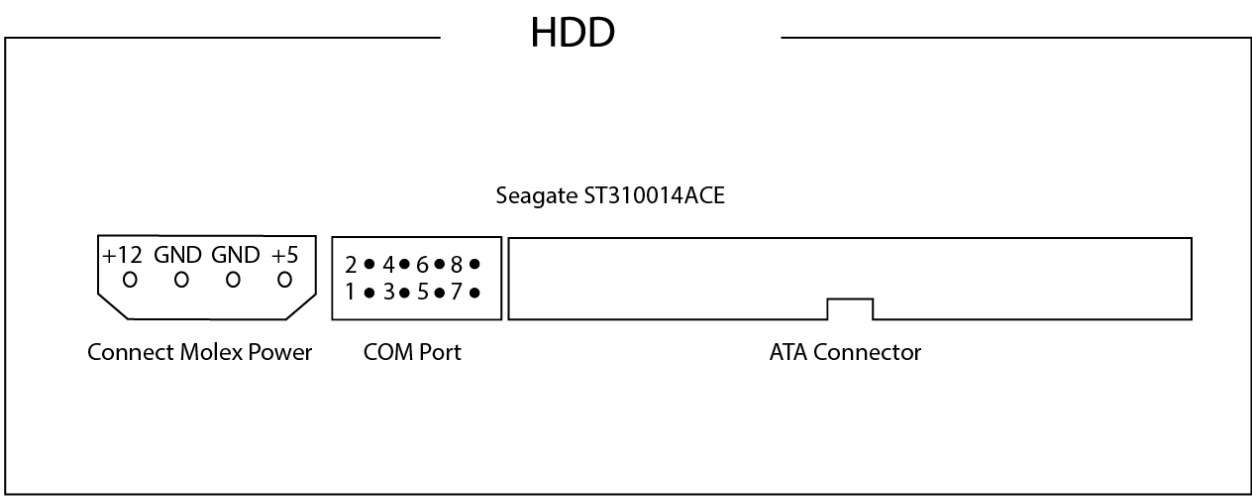
Unlocking HDD Seagate ST310014ACE in 2020

It's possible to unlock the HDD found in many original xbox's with the very common FTDI 232 usb adapter. I'm using the FT232RL variant. This board can be obtained for less than 3 dollars. You may use other FT232 boards, however, your wiring may vary. Also, you will need a way to power the drive, an old power supply works. I'm using an external HDD drive power source.

My setup:



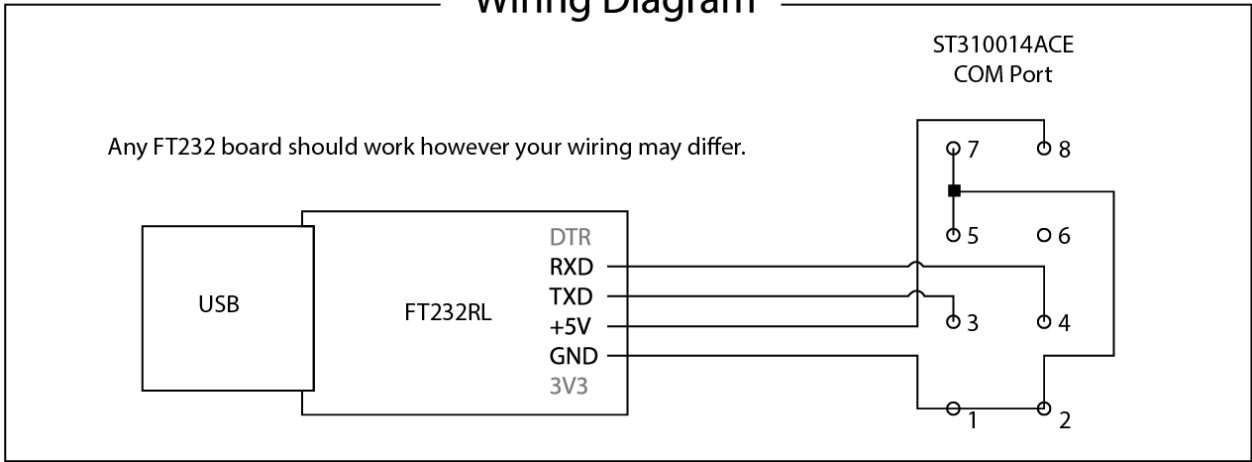
Connect as follows



Connections

FT232RL	COM Port
RXD	4
TXD	3
+5V	8
GND	1, 2, 5, 7

Wiring Diagram



With the HDD wired up you're ready to run my Python script: <https://github.com/hainesdev/Seagate-Diagnostics-Tool>
This script runs all of the necessary commands for you and will save the locking information. With this, you can read the lock sector, wipe it and rewrite it. Effectively you'll be able to unlock and relock the HDD. If you're a hard drive expert you could potentially build off of this script to load files, if you know how to do this contact me! If you find this work helpful email me at: unlocker@dhaines.dev

My script will output all communications as they happen. Notice that the HDD key is shown, this could be used with other software. I've had success with xboxhdm 1.9, the new xboxhdmusb version doesn't seem to support unlocking with a hex key. Likewise, it should also be possible to use this key with hdparm:

```
hdparm --user-master u --security-set-pass hex:31340788EF3FB5D059FB2A11894F1A88EF6C04500000000000000000000000000000 /dev/sdc_YOUR_HDD
```

Addr	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	10	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0AE000	03000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	
0AE020	00000000	31340788	EF3FB5D0	59FB2A11	894F1A88	EF6C0450	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	
0AE040	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	
0AE060	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	
0AE080	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	
0AE0A0	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	
0AE0C0	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	
0AE0E0	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	
0AE100	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	
0AE120	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	
0AE140	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	
0AE160	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	
0AE180	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	
0AE1A0	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	
0AE1C0	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	
0AE1E0	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	
0AE200	FFFFFFFF	FFFFFFFF	FFFFFFFF	FFFFFFFF	FFFFFFFF	FFFFFFFF	FFFFFFFF	FFFFFFFF	FFFFFFFF	FFFFFFFF	FFFFFFFF	FFFFFFFF	FFFFFFFF	FFFFFFFF	FFFFFFFF	FFFFFFFF	FFFFFFFF	FFFFFFFF	FFFFFFFF	FFFFFFFF	FFFFFFFF	FFFFFFFF	FFFFFFFF	FFFFFFFF	FFFFFFFF	FFFFFFFF	FFFFFFFF	FFFFFFFF	FFFFFFFF	FFFFFFFF	FFFFFFFF	

Using the hex key outside of my Seagate Unlock tool isn't necessary, once you have the drive in an unlocked state you're free to load on soft mod files. I recommend xboxhdmusb. Have fun!

XboxhdmUSB:
<https://www.se7ensins.com/forums/threads/using-xboxhdm-updated-2019.1902/>

Rocky5's softmod files to transfer to C and E:
<https://drive.google.com/file/d/19RtaYlj5HE26GE9oMNwlg2dmWNILf4aq/view?usp=sharing>

How to use an old PSU as a bench supply:
<https://www.electronics-tutorials.ws/blog/convert-atx-psu-to-bench-supply.html>

Helpful documents on HDD commands:
https://drive.google.com/file/d/1OCqy8UvTiQtI9_RDYW0sml0lw454n49O/view?usp=sharing
<https://www.hddserialcommander.com/seagate/>

The most in depth documentation on seagate diagnostics commands I could find:
https://drive.google.com/file/d/1a1vl0UJWVliJFj4A9EYwq_nUnb32KCz7/view?usp=sharing

interesting:
<https://serverfault.com/questions/712849/how-to-unlock-a-ssd-disk-with-hdparm>
<https://hackaday.com/2011/04/28/ide-bus-sniffing-and-hard-drive-password-recovery/>