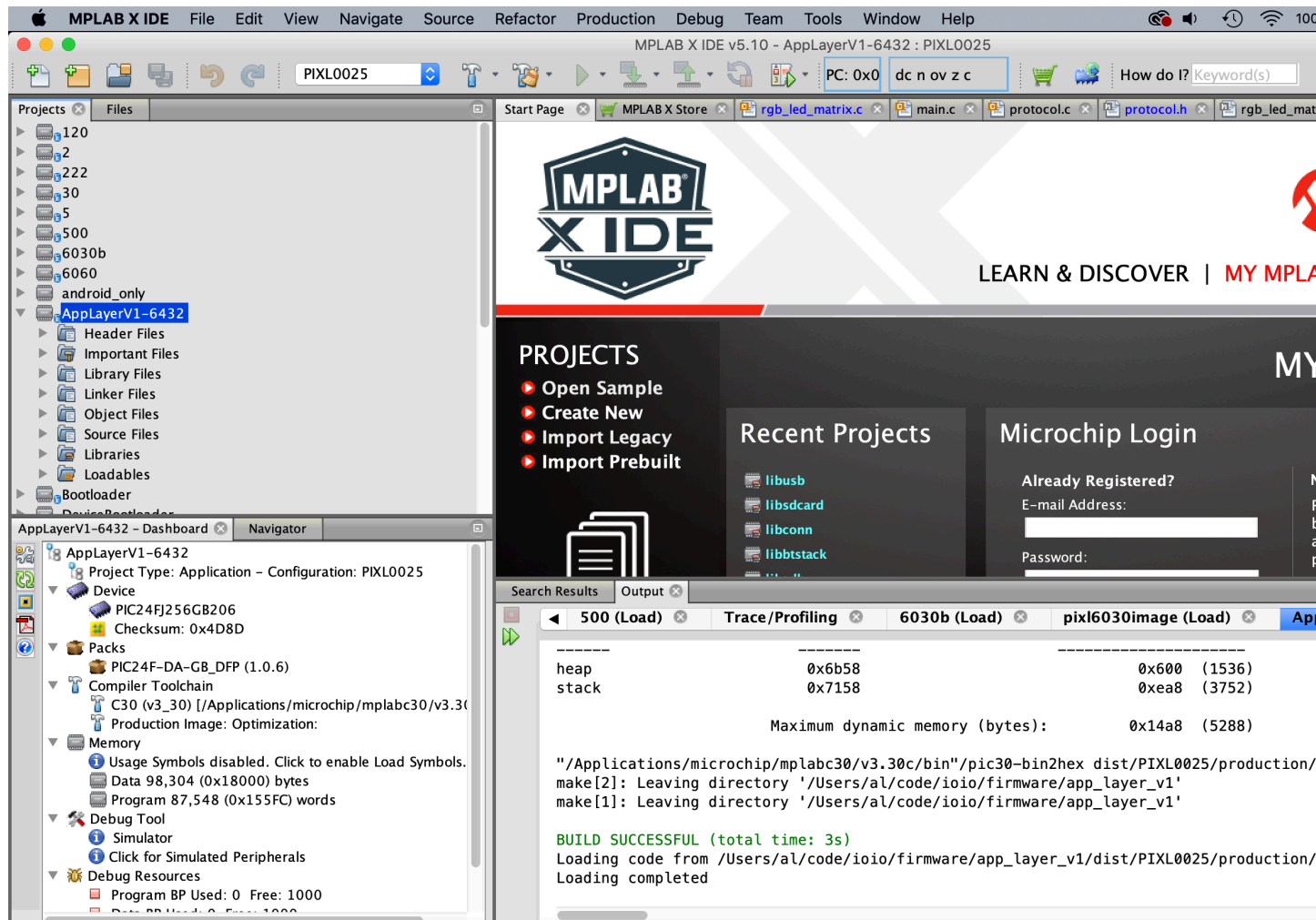
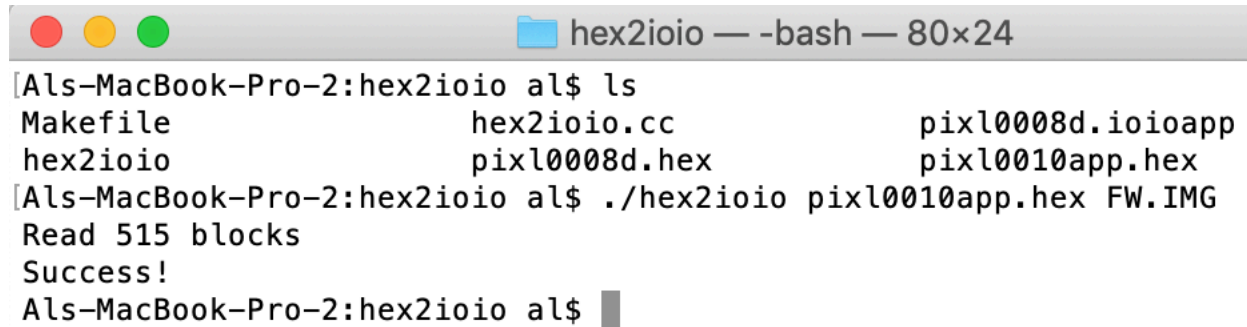


PIXEL: How to build a new firmware for micoSD card flashing

1. Build the firmware as normal from MPLABX IDE



2. Use the hex2ioio command line (located in ioio/tools/hex2ioio) to convert the .hex firmware to a ioio firmware image, rename this file to FW.IMG



```
Als-MacBook-Pro-2:hex2ioio al$ ls
Makefile                hex2ioio.cc              pixl0008d.ioioapp
hex2ioio                pixl0008d.hex            pixl0010app.hex
Als-MacBook-Pro-2:hex2ioio al$ ./hex2ioio pixl0010app.hex FW.IMG
Read 515 blocks
Success!
Als-MacBook-Pro-2:hex2ioio al$
```

3. Get the MD5 checksum for FW.IMG from <http://onlinemd5.com/>

What's | Migrate | Instagram | Glowfor | Glowfor | Setting | HOME | Welcom

← → ↻ **Not Secure** | onlinemd5.com

Apps ★ Bookmarks Google QR Code Generat... AT&T Natural Voic... https://connect.xfi...

Delivered for Free

48% off
Samsung
T580NZKI
~~\$329.99~~ \$

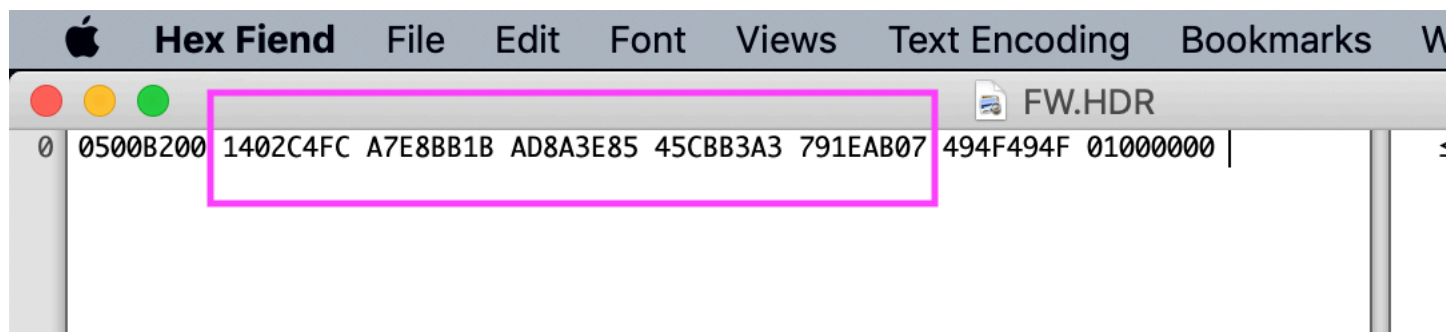
MD5 & SHA1 Hash Generator For File

Generate and verify the MD5/SHA1 checksum of a file without uploading it.

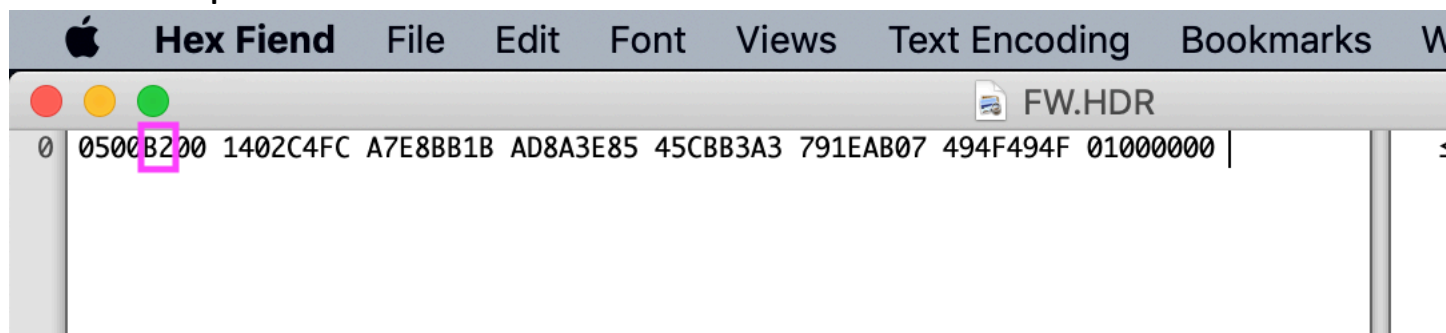
Click to select a file, or drag and drop it here

Filename:	FW.IMG
File size:	100,948 Bytes
Checksum type:	<input checked="" type="radio"/> MD5 <input type="radio"/> SHA1 <input type="radio"/> SHA-256
File checksum:	A7E8BB1BAD8A3E8545CBB3A3791EAB07
Compare with:	
Process:	100.00%

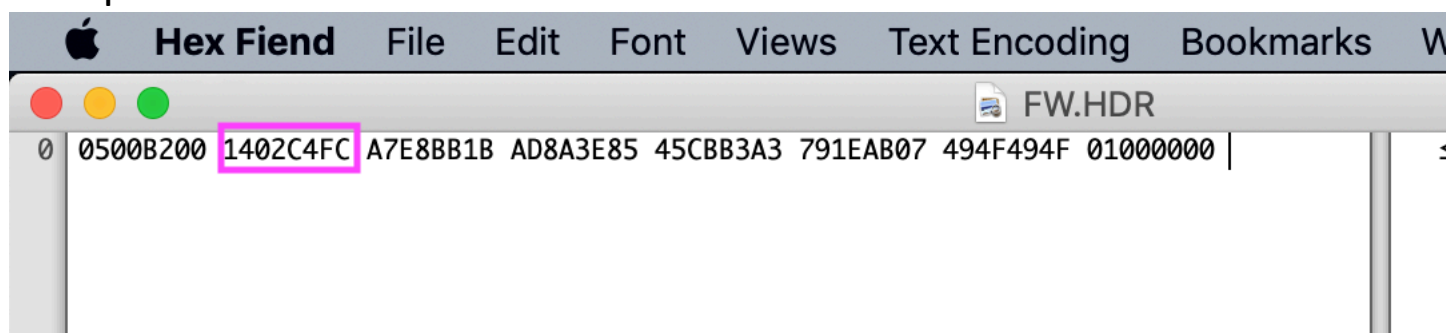
4. Edit FW.HDR with a hex editor like Hex Fiend and replace these numbers with the MD5 checksum



5. Rev these two numbers for a new release. In this example, B2 in hex = 178 in decimal. So use B3 for a new release for example.



6. This is the number of blocks but not sure how / what to put here?



7. That's it, now just copy FW.IMG and FW.HDR to the microSD card image.