

Why Open Source Software is not only about software

Ivan Zorin

Intro

- Who am I?
- ia @ github

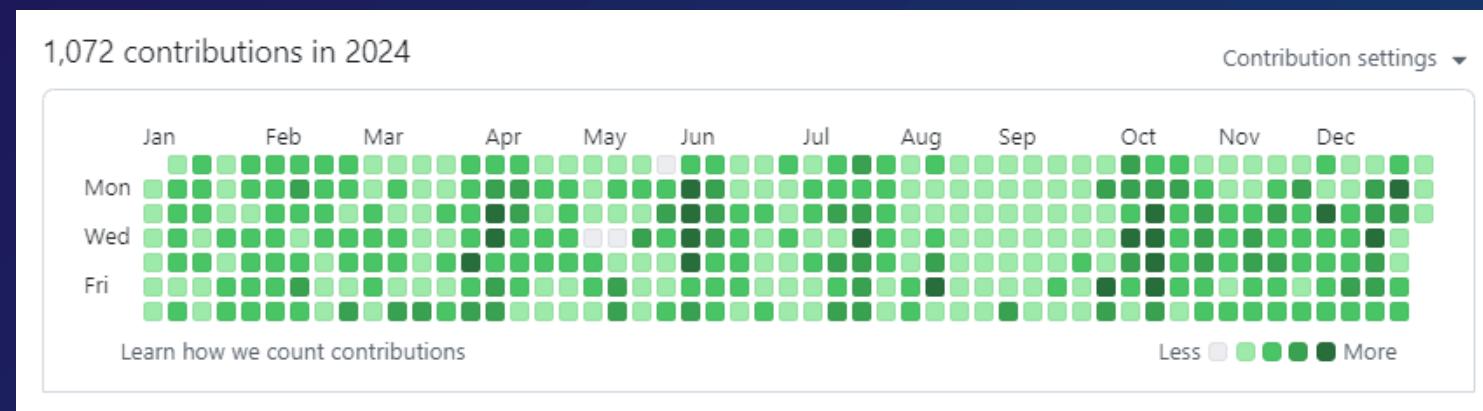
- **System Engineer**
- **Open Source Developer**
- **Conference Speaker**
- **Independent Researcher**
- **Community Enjoyer**
 - Free Software Ideology
 - Right to Repair movement
 - Hackerspace Culture



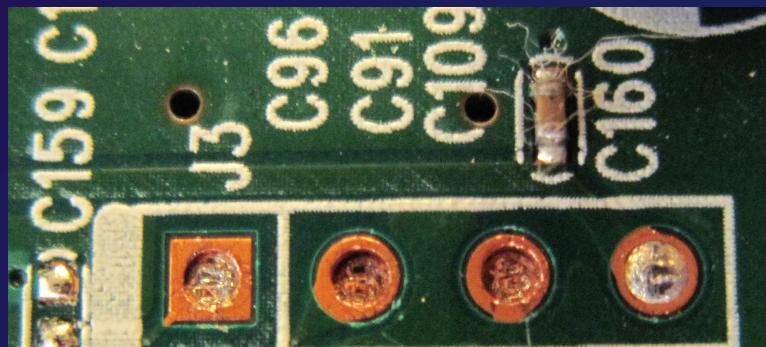
Opensoursini Contributini



- **Moscow Linux Install Fests**
- **Ubuntu Security Notice (USN-663-1)**
- **Unity Desktop Environment**
- **CyanogenMod**
- **HydraFW**
- **IronOS**



- **Open Source firmware for soldering hardware**
- **Soldering irons & mini hotplates**
- **Software: FreeRTOS-based + 3rd party libs**
- **Hardware: STM32 & RISC-V MCUs**
- **Founded, developed & maintained by Ben «Ralim» V. Brown**
- **Patched & supported by the community**



Supported Hardware						
Device	DC	QC	PD	EPR****	BLE	
Mineware MHP30	✗	✗	✓	✗	✗	
Pinecil V1	✓	✓	✓	✗	✗	
Pinecil V2	✓	✓	✓	✓	✓	
Mineware TS101	✓	✗	✓	✓	✗	
Sequare S60	✗	✗	✓	✗	✗	
Sequare S60P	✗	✗	✓	✗	✗	
Sequare T55	✗	✗	✓	✗	✗	
Mineware TS80P	✗	✓	✓	✗	✗	
Mineware TS100	✓	✗	✗	✗	✗	
Mineware TS80	✗	✓	✗	✗	✗	

DISCLAIMERS



- **Free Software vs Open Source terminology**
- **Personal opinion only!**
- **Commercial Free!!!**
- **Slides uploaded already**

[Home](#) / [Philosophy](#) / [Essays & articles](#) / [About free software](#) / [Free software & open source](#) /

Why Open Source Misses the Point of Free Software

by Richard Stallman

The terms “free software” and “open source” stand for almost the same range of programs. However, they say deeply different things about those programs, based on different values. The free software movement campaigns for freedom for the users of computing; it is a movement for freedom and justice. By contrast, the open source idea values mainly practical advantage and does not campaign for principles. This is why we do not agree with open source, and do not use that term.

When we call software “free,” we mean that it respects the users' essential freedoms: the freedom to run it, to study and change it, and to redistribute copies with or without changes. This is a matter of freedom, not price, so think of “free speech,” not “free beer.”

History



Timeline

- **1969 — UNIX as academic & scientific OS**
- **1977 — BSD**
- **1984 — UNIX as commercial product**
- **1983 — GNU project**
- **1985 — Free Software Foundation**
- **1989 — GPL v1 ('91 - v2, '07 - v3)**
- **1991 — Linux kernel**
- **1993 — FreeBSD**
- **1998 — Open Source Initiative**

A modified version of this definition was adopted by the [Open Source Initiative](#) (OSI) as the Open Source Definition.^{[6][7]} The OSI uses the label "open source", rather than "free software", because it felt that the latter term had undesirable ideological and political freight, and it wanted to focus on the pragmatic and business-friendly arguments for [open-source software](#).^[6] It adopted a closed rather than membership-driven organizational model in order to draft the definition and work together with a wider variety of stakeholders than other free or open-source projects.^[6]

Free Software Definition



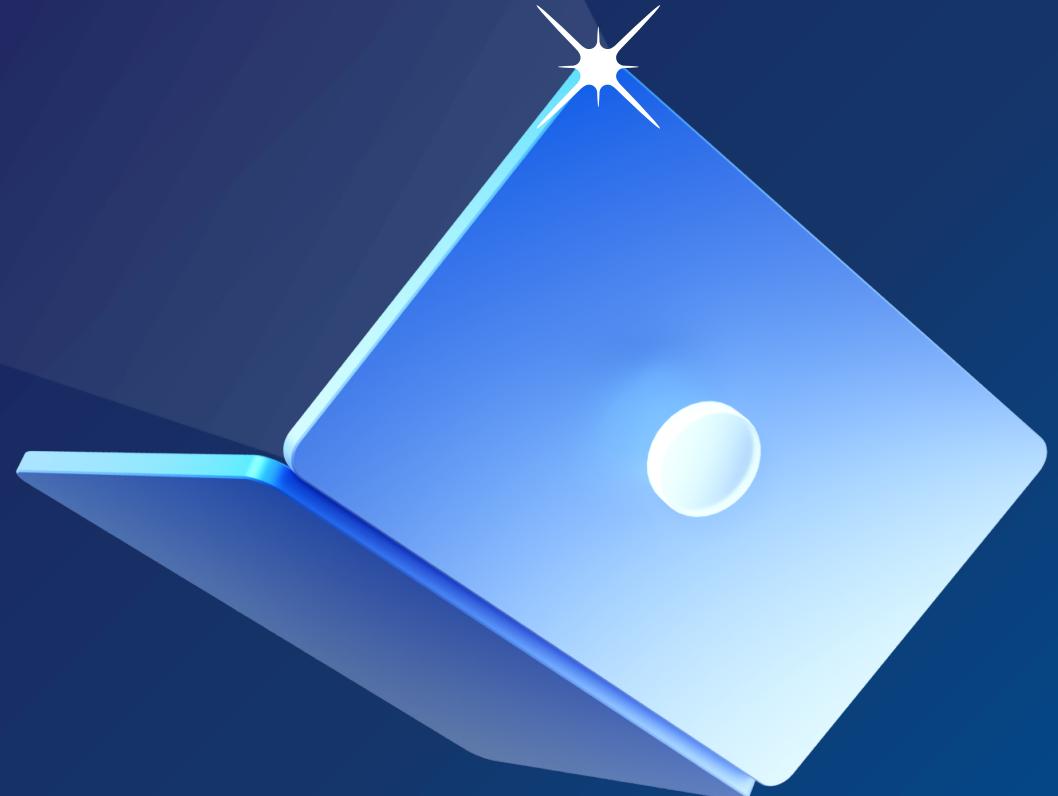
- **Freedom 0 — to run the program as you wish**
- **Freedom 1 — to study & to modify the program**
- **Freedom 2 — to redistribute copies**
- **Freedom 3 — to distribute copies of your modified versions**
 - **Free Software can be commercial**
 - **«Free Software» does not mean «noncommercial»**



Talk

Agenda

- **What can you do for Open Source?**
- **How you should not do it?**
- **And how should you do it?**
- **What will you not get in return?**
- **But what will you get?**
- **So what is going next?**



What can you do for Open Source?

- **Coding**
- **Refactoring**
- **Tooling**
- **Testing**
- **Design**
- **Add-ons**
- **Documentation**
- **Translations**
- **Community**
- **Art**



Coding

- **Enable non-printing characters in your IDE/editor!**
- **Read a contribution guide**
- **Look around source code**
- **Check already accepted patches**
- **Study the limitations**
- **Mind the «maintainability»**
- **Reproduce tooling environment**

```
35
36 // End FreeRTOS
37 // Main sets up the hardware then hands over to the FreeRTOS kernel
38 int main(void) {
39     preRToSInit();
40
41     resetWatchdog();
42     // Testing for which accelerometer is mounted
43     settingsWereReset = loadSettings(); // load the settings from flash
44
45     setTipX10Walls(0), // force tip off
46     /* two leading spaces */
47     ..
48     /* four leading spaces */
49     ....
50     /* eight leading spaces */
51     .....
52     /* leading tab */
53     •
54     resetWatchdog());..
55     /* Create the thread(s) */
56     •
57     /* definition and creation of PIDTask - Heating control*/
58     osThreadStaticDef(PIDTask, startPIDTask, osPriorityRealtime, 0, PIDTask
59     PIDTaskHandle = osThreadCreate(osThread(PIDTask), NULL);
```

Refactoring



- **Provide a good rationale**
- **Show «metrics»**
- **Refactoring, nothing else!**
- **Use logic & common sense
to explain a patch:**
 - why
 - for what

Refactoring: good rationale



source/Core/Src/settingsGUI.cpp

Viewed

613 switch	613 switch
(getSettingValue(SettingsOptions	(getSettingValue(SettingsOptions
::LockingMode)) {	::LockingMode)) {
614 - case 0:	614 + case lockingMode_t::DISABLED:
615 OLED::drawUnavailableIcon();	615 OLED::drawUnavailableIcon();
616 break;	616 break;
617 - case 1:	617 + case lockingMode_t::BOOST:
618	618
OLED::print(translatedString(Tr-	OLED::print(translatedString(Tr-
>SettingLockBoostChar),	>SettingLockBoostChar),
FontStyle::LARGE);	FontStyle::LARGE);
619 break;	619 break;
620 - case 2:	620 + case lockingMode_t::FULL:
621	621
OLED::print(translatedString(Tr-	OLED::print(translatedString(Tr-
>SettingLockFullChar),	>SettingLockFullChar),
FontStyle::LARGE);	FontStyle::LARGE);
622 break;	622 break;

Refactoring: metrics

```
INFO:root:Collapsing charactersSettingStartSleepOffCharMessage
INFO:root:Collapsing charactersSettingLockFullCharMessage
INFO:root:Writing pickled data to Objects/TS80P/Core/Gen/translation.files/EN.pickle
INFO:root:Done
Linking Hexfile/TS80P_EN.elf
In function 'prvCopyDataToQueue',
    inlined from 'xQueueGenericSend.constprop.isra' at ./Middlewares/Third_Party/FreeRTOS/Source/queue.c:1033:38:
./Middlewares/Third_Party/FreeRTOS/Source/queue.c:2420:18: warning: argument 2 null where non-null expected [-Wnonnull]
2420 |         ( void ) memcpy( ( void * ) pxQueue->pcWriteTo, pvItemToQueue, ( size_t ) pxQueue->uxItemSize );
|           ^
/usr/arm-none-eabi/include/string.h: In function 'xQueueGenericSend.constprop.isra':
/usr/arm-none-eabi/include/string.h:31:10: note: in a call to function 'memcpy' declared 'nonnull'
31 | void *    memcpy (void * __restrict, const void * __restrict, size_t);
|           ^
/usr/lib/gcc/arm-none-eabi/13.1.0/../../../../arm-none-eabi/bin/ld: warning: Hexfile/TS80P_EN.elf has a LOAD segment with RWX
permissions
Memory region          Used Size  Region Size %age Used
RAM:                  13416 B   20 KB   65.51%
ROM:                 42268 B   46 KB   89.73%
arm-none-eabi-objcopy Hexfile/TS80P_EN.elf -O ihex Hexfile/TS80P_EN.hex
arm-none-eabi-objcopy Hexfile/TS80P_EN.elf -O binary Hexfile/TS80P_EN.bin
arm-none-eabi-size Hexfile/TS80P_EN.elf
      text     data     bss     dec      hex filename
 41700       564   12864   55128     d758 Hexfile/TS80P_EN.elf
python3 dfuse-pack.py -b 0x08004000@0:Hexfile/TS80P_EN.bin -D 0x1209:0xDB42 Hexfile/TS80P_EN.dfu
make[1]: Leaving directory '/build/ironos/source'
/build/ironos #
```

Tooling



- **CI/CD & build scripts**
- **Dev[Sec]Ops & linters:**
 - autotests
 - C/C++: llvm/clang-{format,tidy,analyzer,sanitizer}
 - Python: black, flake8, ruff
 - Markdown: mdlint
- **Reproducible builds**
- **push.yml & Launchpad packaging**



Tooling: build commands



?

```
$ cd source/  
$ /home/ia/.local/bin/docker-compose -f ./Env.yml run --rm builder  
/build/ironos # make firmware-EN model=TS80P
```

```
# former build.sh  
+ docker-build: $(DOCKER_DEPS)  
100 +     $(DOCKER_CMD) /bin/bash /build/ci/buildAll.sh  
101 +  
102 + # delete container  
103 + docker-clean:  
104 +     -docker rmi ironos-builder:latest  
105 +  
106 + # generate docs in site/ directory (DIR for -d is relative to mkdocs.yml file  
+ location, hence use default name/location site by setting up ../site)  
107 + docs: $(MKDOCS_YML) Documentation/* Documentation/Flashing/*  
+ Documentation/images/*  
108 +     $(MKDOCS) build -f $(MKDOCS_YML) -d ../site  
109 +  
110 + # deploy docs to gh-pages branch of current repo automagically using  
+ ReadTheDocs framework  
111 + docs-deploy: $(MKDOCS_YML) Documentation/* Documentation/Flashing/*  
+ Documentation/images/*  
112 +     $(MKDOCS) gh-deploy -f $(MKDOCS_YML) -d ../site  
113 +  
114 + # pass-through target for Makefile inside source/ dir  
115 + %:  
116 +     make -C source/ $@  
117 +  
118 + # global clean-up target  
119 + clean-full: docker-clean
```

Tooling: C/C++



Clang 21.0.0git documentation
CLANG-FORMAT STYLE OPTIONS
« ClangFormat :: Contents :: Clang Linker Wrapper »

Clang-Format Style Options

Clang-Format Style Options describes configurable formatting style options supported by **LibFormat** and **ClangFormat**.

When using **clang-format** command line utility or `clang::format::reformat(...)` functions from code, one can either use one of the predefined styles (LLVM, Google, Chromium, Mozilla, WebKit, Microsoft) or create a custom style by configuring specific style options.

clang-tidy is a clang-based C++ “linter” tool. Its purpose is to provide an extensible framework for diagnosing and fixing typical programming errors, like style violations, interface misuse, or bugs that can be deduced via static analysis. **clang-tidy** is modular and provides a convenient interface for writing new checks.

1. **scan-build** is an old and simple command line tool that emits static analyzer warnings as HTML files while compiling your project. You can view the analysis results in your web browser.
 - Useful for individual developers who simply want to view static analysis results at their desk, or in a very simple collaborative environment.
 - Works on all major platforms (Windows, Linux, macOS) and is available as a package in many Linux distributions.
 - Does not include support for cross-translation-unit analysis.
2. **CodeChecker** is a driver and web server that runs the static analyzer on your projects on demand and maintains a database of issues.
 - Perfect for managing large amounts of static analyzer warnings in a collaborative environment.
 - Generally much more feature-rich than scan-build.
 - Supports incremental analysis: Results can be stored in a database, subsequent analysis runs can be compared to list the newly added defects.
 - **Cross Translation Unit (CTU) Analysis** is supported fully on Linux via CodeChecker.
 - Can run clang-tidy checkers too.
 - Open source, but out-of-tree, i.e. not part of the LLVM project.

Tooling: python



```
ia@ivzn:/media/ia/DATA/data-devel/ironOS/fork$ black --diff --check Translations  
--- /media/ia/DATA/data-devel/ironOS/fork/Translations/briefflz.py      2025-05-19 12:12:12  
+++ /media/ia/DATA/data-devel/ironOS/fork/Translations/briefflz.py      2025-05-19 14:14:12  
@@ -33,11 +33,11 @@  
     fn = _libbrieflz().blz_max_packed_size  
     fn.argtype = [  
         ctypes.c_size_t,  
     ]  
     fn.restype = ctypes.c_size_t  
-    return fn  
+    return fn  
  
def blz_max_packed_size(src_size: int) -> int:  
    """Get bound on compressed data size."""  
    fn_blz_max_packed_size = _fn_blz_max_packed_size()  
would reformat /media/ia/DATA/data-devel/ironOS/fork/Translations/briefflz.py  
  
Oh no! ☀️💔☀️  
1 file would be reformatted, 7 files would be left unchanged.  
black /media/ia/DATA/data-devel/ironOS/fork/Translations/briefflz.py
```

```
32 fn = _libbrieflz().blz_max_packed_size  
33 fn.argtype = [  
34     ctypes.c_size_t,  
35 ]  
36 fn.restype = ctypes.c_size_t  
37 return fn..  
38  
39  
40  
41 def blz_max_packed_size(src_size: int) -> int:  
42     """Get bound on compressed data size."""  
43     fn_blz_max_packed_size = _fn_blz_max_packed_size()  
44     return int(fn_blz_max_packed_size(src_size))  
l/ironOS/fork/Translations/briefflz.py * dev-tag 16%, 189
```

Tooling [intensifies]



cf method get_host, replace with query #17419
icing wants to merge 2 commits into [curl:master](#) from [icing:cf-get_host-rework](#)

All checks have passed
217 successful checks

	dist / reproducible-releases (pull_request)	Successful in 4m	...
	dist / verify-out-of-tree-autotools-debug (pull_request)	Successful in 2m	...
	dist / verify-out-of-tree-cmake (pull_request)	Successful in 27s	...
	dist / verify-out-of-tree-docs (pull_request)	Successful in 2m	...
	Fuzzer / Fuzzing / BuildFuzzers (pull_request)	Successful in 11m	...
	Fuzzer / Fuzzing / RunFuzzers (curl_fuzzer_bufq) (pull_request)	Successful in
	Fuzzer / Fuzzing / RunFuzzers (curl_fuzzer_dict) (pull_request)	Successful in 2m	...
	Fuzzer / Fuzzing / RunFuzzers (curl_fuzzer_file) (pull_request)	Successful in 3m	...

Reproducible builds



XZ backdoor story – Initial analysis

INCIDENTS

12 APR 2024

1 minute read



News Docs Success stories Tools Who is involved? Talks Events CI tests Contribute

Reproducible builds are a set of software development practices that create an independently-verifiable path from source to binary code. ([Find out more](#))

Why Reproducible Builds Matter

In short: Reproducible Builds provide certainty that software is genuine and has not been tampered with.



Security & Trust

Reproducible Builds let third parties make sure that software hasn't been altered, increasing safety and reliability.



Transparency in Development

Reproducible Builds make sure that developers' code always works the same way, which makes the software more consistent and trustworthy.



Protection of Build Infrastructure

Attacks on build systems and supply chains can affect many users. Reproducible builds detect unauthorized changes to the build process early.

▼ Assets 15

metadata.zip

IMHP50.zip

Pinecil.zip

Pinecilv2.zip

Pinecilv2_multi-lang.zip

Pinecil_multi-lang.zip

S60.zip

S60P.zip

T55.zip

TS100.zip

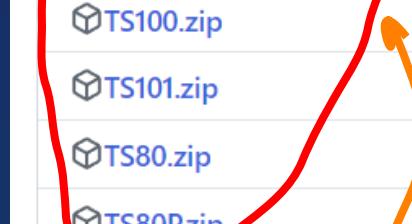
TS101.zip

TS80.zip

TS80P.zip

Source code (zip)

Source code (tar.gz)



Launchpad packaging



- **apt install APPNAME**
- **apt upgrade**

Uploading packages to this PPA

You can upload packages to this PPA using:

```
dput ppa:iaz/battery-status <source.changes> (Read about uploading)
```

Adding this PPA to your system

You can update your system with unsupported packages from this untrusted PPA by adding **ppa:iaz/battery-status** to your system's Software Sources. ([Read about installing](#))

```
sudo add-apt-repository ppa:iaz/battery-status  
sudo apt update
```

▼ Technical details about this PPA

This PPA can be added to your system manually by copying the lines below and adding them to your system's software sources.

Display sources.list entries for:

```
deb https://ppa.launchpadcontent.net/iaz/battery-status/ubuntu natty main  
deb-src https://ppa.launchpadcontent.net/iaz/battery-status/ubuntu natty  
main
```

Signing key:

4096R/87058529C9C16F71FB4F32E72AC5A60F6C698996 ([What is this?](#))

Fingerprint:

87058529C9C16F71FB4F32E72AC5A60F6C698996

Testing & Reporting



- **Read already reported & fixed/closed bugs**
- **Study the limitations**
- **Fill a bug report template!**
- **Report as many details as possible (even if you think they're irrelevant)**
 - «How To Ask Questions The Smart Way», by Eric S. Raymond & Rick Moen
- **No vibe coding reporting!!!**



Scroll animation should be removed if both idle and operating detailed screens are used

Create sub-issue



Vibe reporting

CURL AND LIBCURL, SECURITY

THE I IN LLM STANDS FOR INTELLIGENCE

JANUARY 2, 2024 | DANIEL STENBERG | 18 COMMENTS

I have held back on writing anything about AI or how we (not) use AI for development in the curl factory. Now I can't hold back anymore. Let me show you the most significant effect of AI on curl as of today – with examples.

[About](#) • [Blog](#) • [RSS](#) • [Blogroll](#)

New era of slop security reports for open source

Published 2024-12-03 by Seth Larson

★ Reading time: 5 minutes  × 172

I'm on the security report triage team for CPython, pip, urllib3, Requests, and a handful of other open source projects. I'm also in a trusted position such that I get "tagged in" to other open source projects to help others when they need help with security.

Recently I've noticed an uptick in extremely low-quality, spammy, and LLM-hallucinated security reports to open source projects. The issue is in the age of LLMs, these reports appear at first-glance to be potentially legitimate and thus require time to refute. Other projects such as curl [have reported similar findings](#).



Daniel Stenberg  • Following
curl CEO. Code Emitting Organism
2w • Edited • 

That's it. I've had it. I'm putting my foot down on this craziness.

1. Every reporter submitting security reports on **#Hackerone** for **#curl** now needs to answer this question:

"Did you use an AI to find the problem or generate this submission?"
(and if they do select it, they can expect a stream of proof of actual intelligence follow-up questions)
2. We now ban every reporter INSTANTLY who submits reports we deem AI slop. A threshold has been reached.

We are effectively being DDoSed. If we could, we would charge them for this waste of our time.

We still have not seen a single valid security report done with AI help.

6,186 251 comments · 612 reposts

Vibe pull-requesting



My new hobby: watching AI slowly drive Microsoft employees insane (self.ExperiencedDevs)
submitted 18 hours ago * by NegativeWeb1

Jokes aside, GitHub/Microsoft recently announced the public preview for their GitHub Copilot agent.

The agent has recently been deployed to open PRs on the .NET runtime repo and it's...not great. It's not my best trait, but I can't help enjoying some good schadenfreude. Here are some examples:

- <https://github.com/dotnet/runtime/pull/115762>
- <https://github.com/dotnet/runtime/pull/115743>
- <https://github.com/dotnet/runtime/pull/115733>
- <https://github.com/dotnet/runtime/pull/115732>

I actually feel bad for the employees being assigned to review these PRs. But, if this is the future of our field, I think I want off the ride.

EDIT:

This blew up. I've found everyone's replies to be hilarious. I did want to double down on the "feeling bad for the employees" part. There is probably a big mandate from above to use Copilot everywhere and the devs are probably dealing with it the best they can. I don't think they should be harassed over any of this nor should folks be commenting/memeing all over the PRs. And my "schadenfreude" is directed at the Microsoft leaders pushing the AI hype. Please try to remain respectful towards the devs.

706 comments share save hide report

matouskozak commented 2 days ago

@copilot fix the build error on apple platforms

Copilot AI commented 2 days ago • edited

@copilot fix the build error on apple platforms

Fixed the build errors in commit [d424a48](#). There were two syntax

matouskozak commented 2 days ago

@copilot there is still build error on Apple platforms

2025-05-20T14:47:47.6114900Z [17%] Building C object Sys...il
2025-05-20T14:47:47.7119320Z In file included from /Users/...one
2025-05-20T14:47:47.81211180Z /Users/runner/work/1/s/src/native/
PALEXPORT int32_t GlobalizationNat
2025-05-20T14:47:48.0126650Z
2025-05-20T14:47:48.0303400Z
2025-05-20T14:47:48.0844420Z 1 error generated.
2025-05-20T14:47:48.1174680Z make[2]: *** [System.Globalization
2025-05-20T14:47:48.2177580Z [17%] Building C object minipal/C
2025-05-20T14:47:48.2977720Z [17%] Building C object minipal/C
2025-05-20T14:47:48.3356740Z make[1]: *** [System.Globalization
make[1]: *** Waiting for unfinishe

please, fix it.

Vibe pull-requesting (cont.)



A screenshot of a GitHub pull request comments section. The top comment is by user `vietnguyengit`, posted 11 hours ago. The text reads: "The next great move: Make AI a code reviewer. Think about it, Nadella. It's funny being able to witness talented Microsoft devs digging themselves into the hole." This comment has 41 likes. Below it is a reply from user `git-preet`, also posted 11 hours ago. The text reads: "The code was better before @copilot tried to fix it." This reply has 29 likes, 21 thumbs up, and 4 hearts. A red arrow points from the bottom right towards the copilot comment.

vietnguyengit commented 11 hours ago

The next great move: Make AI a code reviewer.
Think about it, Nadella.
It's funny being able to witness talented Microsoft devs digging
themselves into the hole.

git-preet commented 11 hours ago

The code was better before @copilot tried to fix it.

Vibe code reviewing!!!



A screenshot of a GitHub Changelog page. The top navigation bar includes links for GitHub logo, Blog (selected), Changelog (underlined), Docs, Customer stories, a search icon, and buttons for "Use Copilot for free" and "Contact sales". Below the header, a link to "BACK TO CHANGELOG" is visible. The main content area features a green "RELEASE" button, the date "APRIL 4, 2025 • 1 MINUTE READ", and the title "Copilot code review now generally available". A large black rectangular overlay covers the bottom half of the page, containing the text "GENERAL AVAILABILITY" in a white rounded rectangle and "Copilot code review" in large white letters. A red arrow points from the left edge of the slide towards the "Copilot code review now generally available" text.

RELEASE

APRIL 4, 2025 • 1 MINUTE READ

Copilot code review now generally available

GENERAL AVAILABILITY

Copilot code review

Design



- Themes
- Color schemes
- Icons
- Wallpapers

Merged

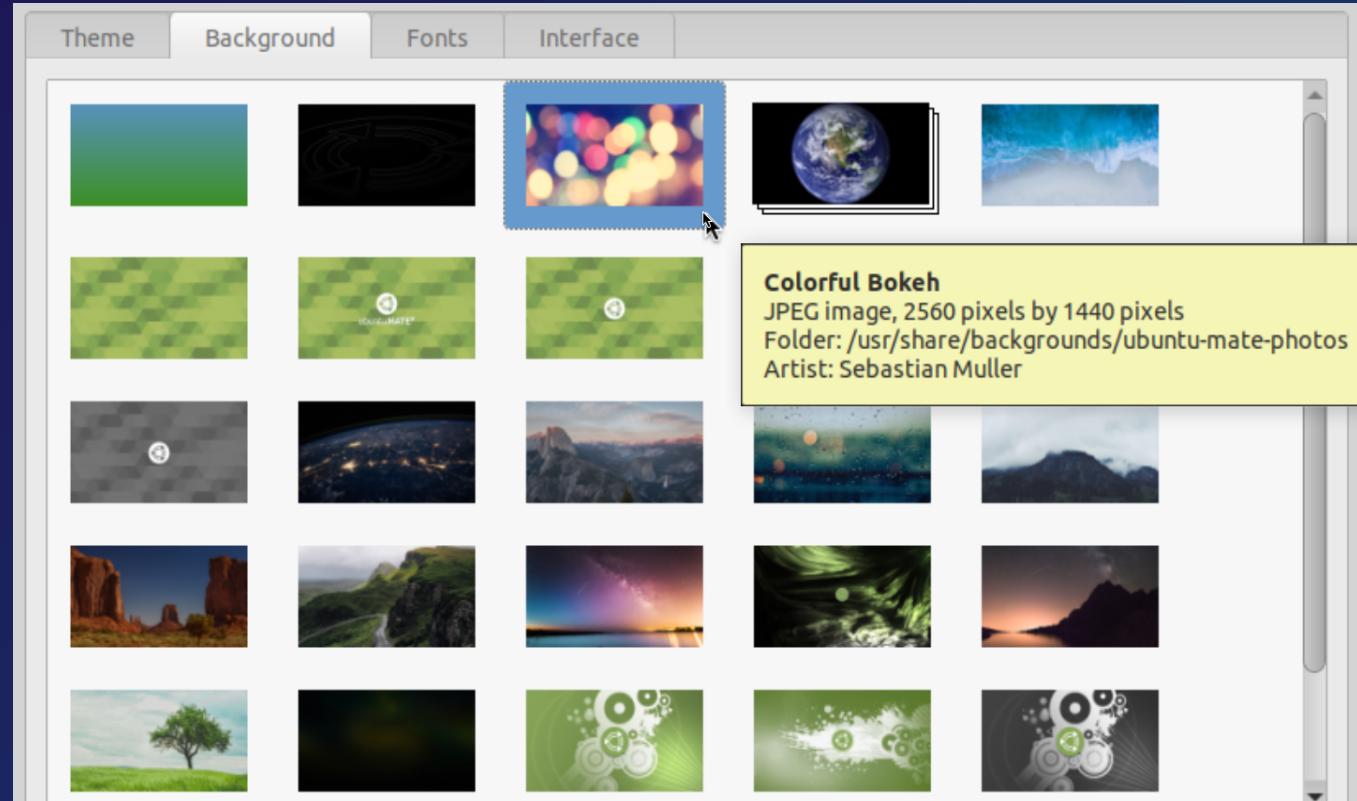
Implement optional looping for animated b
discip merged 17 commits into [Ralim:dev](#) from [ia](#)

 discip commented on Nov 22, 2023

This is the latest icon-set:




Please let me know what you think about it.



Add-ons



- **IDA plugins**
- **Metasploit modules**
- **GDB configs & extention**
- **nmap scripts**
- **Wireshark dissectors**
- ...

Add-ons: GDB config



← Files ⌂ master ▾ Gdbinit / gdbinit ⌂

 **gdbinit** Merge branch 'master' into master 67a5e8c · last year

3829 lines (3549 loc) · 103 KB

Code Blame Raw ⌂ ⌂ ⌂ ⌂ ⌂

```
1 # INSTALL INSTRUCTIONS: save as ~/.gdbinit
2 #
3 # DESCRIPTION: A user-friendly gdb configuration file, for x86/x86_64 and ARM platforms.
4 #
5 # REVISION : 9.01 (31/03/2024)
6 #
7 # CONTRIBUTORS: mammon_, elaine, pusillus, mong, zhang le, l0kit,
8 #                 truthix the cyberpunk, fG!, gln
9 #
10 # LICENSE: No idea about original authors, I guess it's public domain (at least all my char
```

Documentation



- **Main README and the root directory**
- **Simplify, not overcomplicate**
- **Reproducible steps**
- **User Guide & Developer Guide**
- **FAQ**
- **The power of markdown:**
 - ReadTheDocs
 - MkDocs
 - Jekyll
- **nightly.link**



Documentation: FAQ



Builds

github.com/Ralim/IronOS#builds

The links in the table below allow to download available builds directly:

- current *Stable Release* is [v2.22](#) ;
- *Development Build* dynamically provides *the latest successful build* from [dev](#) branch.

Device	Stable Release	Development Build
Pinecil V1	Pinecil.zip	Pinecil.zip
Pinecil V1/multilang	Pinecil_multi-lang.zip	Pinecil_multi-lang.zip
Pinecil V2	PinecilV2.zip	PinecilV2.zip
Pinecil V2/multilang	PinecilV2_multi-lang.zip	PinecilV2_multi-lang.zip
Miniware TS100	TS100.zip	TS100.zip
Miniware TS101	TS101.zip	TS101.zip
Miniware TS80	TS80.zip	TS80.zip
Miniware TS80P	TS80P.zip	TS80P.zip
Miniware MHP30	MHP30.zip	MHP30.zip

Translations



- **Human natural translation by a native speaker**
- **Translate the meaning, not the text**
- **Be aware of domain terminology**



(c) Microsoft & ХимФак МГУ '98

Перевод куска текстовика к хелпу Win95 без основного словаря переводчиком Poliglossum с медицинским, коммерческим и юридическим словарем.

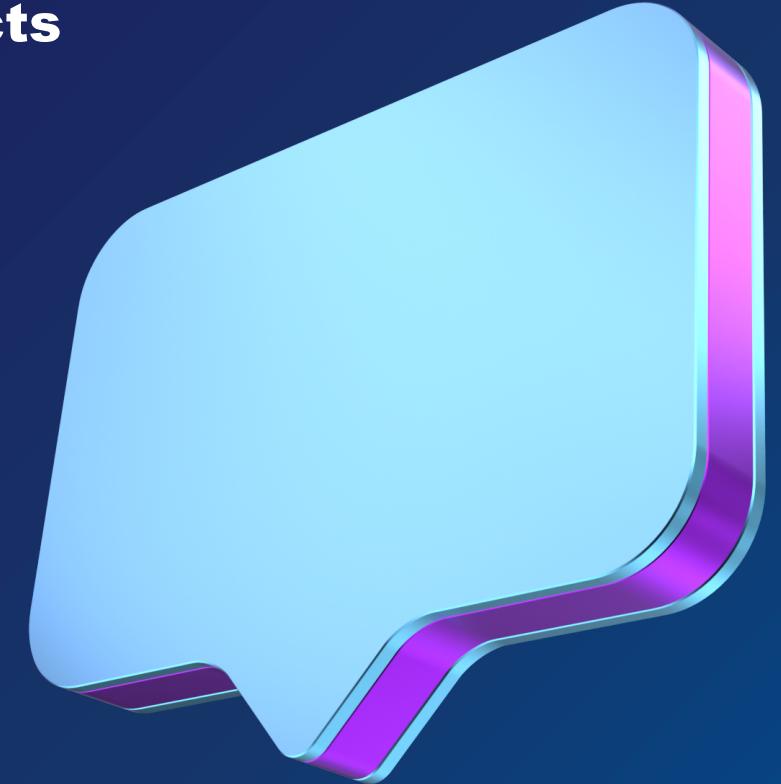
Гуртовщики Мыши

Microsoft компания получает много откликов после появления Окон 95. Мы выявили, что много пользователей встретили проблему мыши. В этом документе Служба Техничного Упора Microsoft компании сводит вместе всю полезную информацию о возможных проблемах с мышами и гуртовщиками мыши и забота-стреляние.

Community



- **Small & medium projects > big & corporate projects**
- **Be a normal, adequate, and reasonable person**
- **Do not read nor check any 3rd party resources**
- **Asynchronous communication**
- **nohello.net & nometa.xyz**
- **0% of emotions, 100% of professionalism**



Community [toxifies]



In-Reply-To: <124c1003-24c3-4f13-99a9-0e02241400c2@mailbox.org>

Ok, lots of Russian trolls out and about.

It's entirely clear why the change was done, it's not getting reverted, and using multiple random anonymous accounts to try to "grass root" it by Russian troll factories isn't going to change anything.

And FYI for the actual innocent bystanders who aren't troll farm accounts - the "various compliance requirements" are not just a US thing.

If you haven't heard of Russian sanctions yet, you should try to read the news some day. And by "news", I don't mean Russian state-sponsored spam.

As to sending me a revert patch - please use whatever mush you call brains. I'm Finnish. Did you think I'd be *supporting* Russian aggression? Apparently it's not just lack of real news, it's lack of history knowledge too.

Linus

The bottom line is that engineering in the real world is all about tradeoffs, and business realities are part of that tradeoff. I make no apologies for the fact that I prefer to have food with my meals, and that I want to make enough money that I can retire some day. And that in turn means that I need to be comfortable understanding how I am delivering at least 10x my compensation as value to my employer. If I can do that while still doing open source, and helping other companies make money so they are willing to contribute to ext4, well, that's part of the challenge and why I love working with Open Source.



tytso

Junior Member



Join Date: Feb 2009

Posts: 48



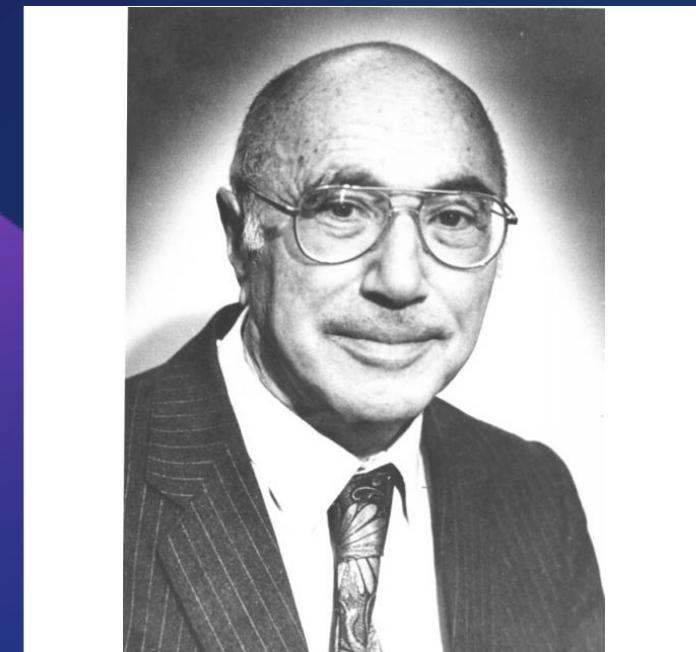
1973

Phd X pt

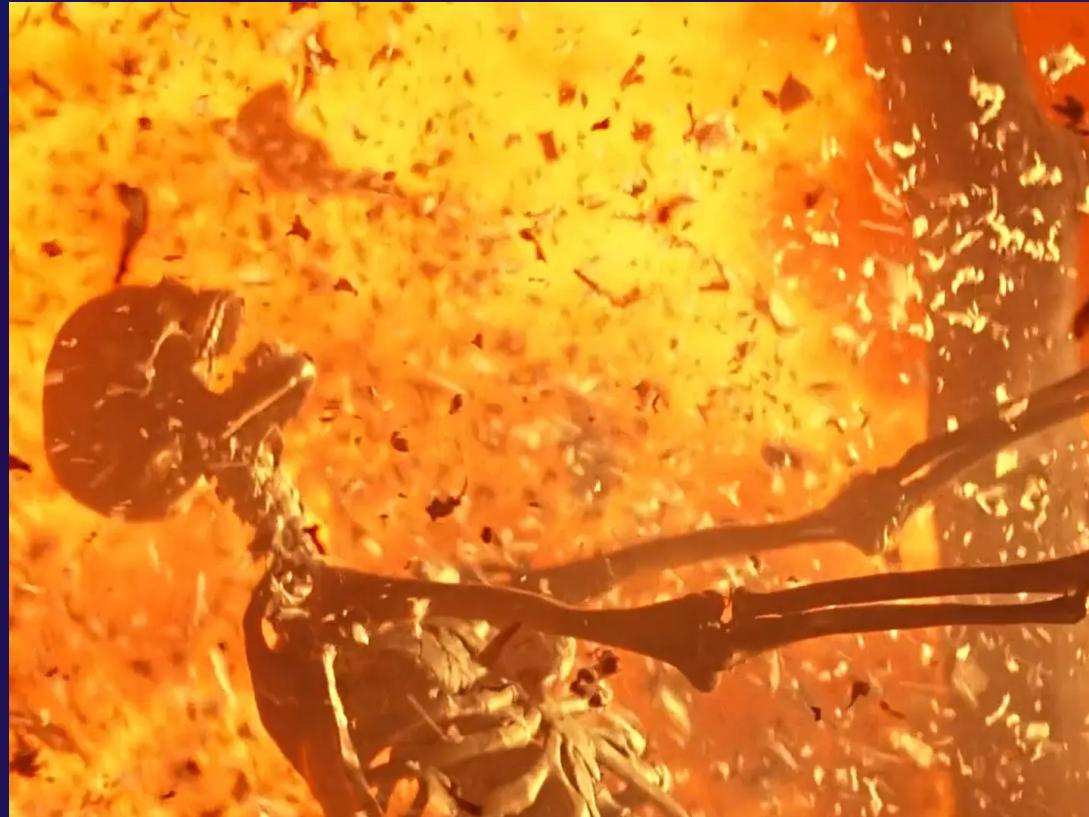


Isaac Halatnikov

Vladimir Braginsky



Yakov Zeldovich



The animation of Flow – Blender Conference 2024

Watch on [YouTube](#)

STUDIO TALK 50 min [Wednesday 23rd Oct 15:00](#)

[Login to Favorite](#)

The animation of Flow

I want to show how we used Blender on the film Flow, through the methods and tools the software can offer us.

How Gints built his scenes and how we handled the art direction, especially the naturalistic style and its long takes.

It's a kind of feedback on our user experience.

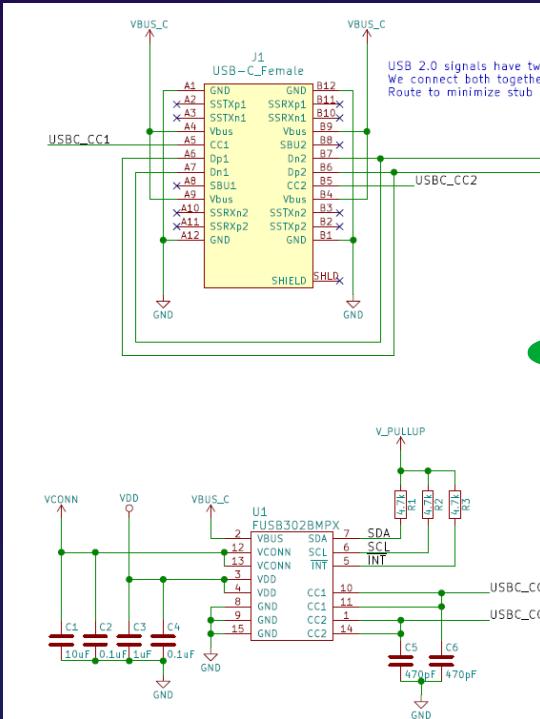


Open Source....

Open Source Hardware!..



- **Schematics**
- **PCB design**
- **STL/3D models for cases/spare parts**



USB-C Power Delivery PHY Breakout Board

★★★★★ (2 Reviews)

A breakout board for the FUSB302, a USB-PD PHY for BMC communication used in USB-C connectors

Designed by Reclaimer Labs in United States of America

Wishlist Tweet Share

tindie.com

\$29.00

Ask a Question

No shipping info available.
Select destination country to see options

Out of Stock

Sign up to get notified when this product is back in stock!

Desired Quantity*

1

Please message the seller directly if your desired quantity is very large.

Email*

Join Waitlist

Sold out since Apr 21, 2021



A breakout board for the FUSB302, a USB-PD PHY for BMC communication used in USB-C connectors

Description

Shipping

More

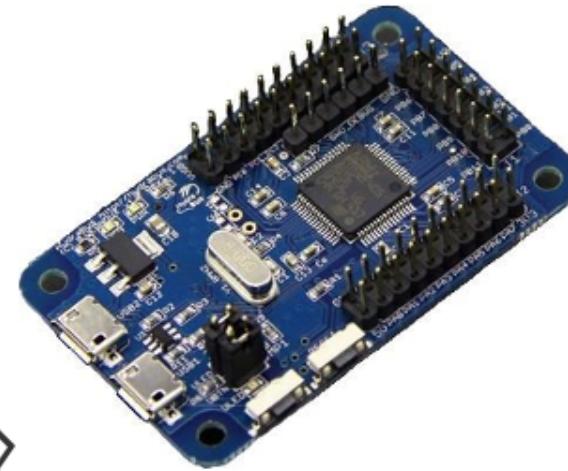
2 Reviews

... aka OSHW

phd X pt



tigard



hydrabus



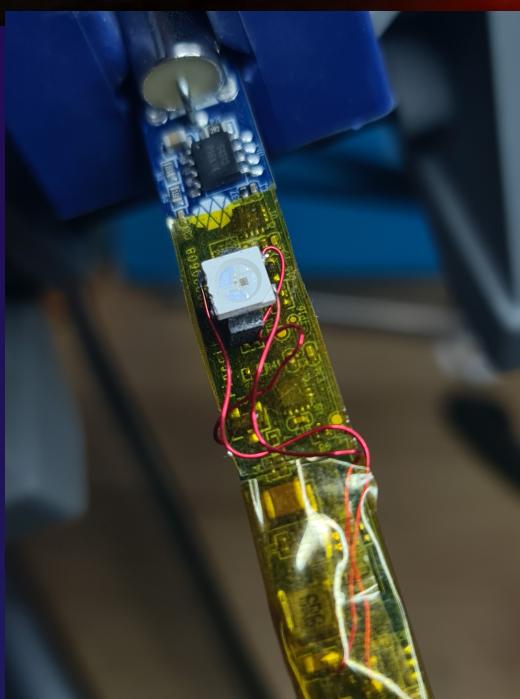
open source
hardware



usbarmory



Pinecil v2 LED mod



TP11 and TP12 aren't usable as they're on the other side of a DNP

Commissioning of reserved resistor R42 r43 R44 R45, simulating usb-pd

TP13
TP14

GPIO_27_CC1 R45 4.7kR0402 1%
GPIO_26_CC2 R44 4.7kR0402 1%

UFP Rd DNP

TP11 TP12

TYPEC_CC1
TYPEC_CC2

R42 R43
5.1k 5.1k
R0402 R0402

DNP %DNP 1%
UFP Rd

C3 220pF
C0402
COG 50V

C2 220pF
C0402
COG 50V

GPIO_14_CC1
GPIO_12_CC2

R39
1K
R0402

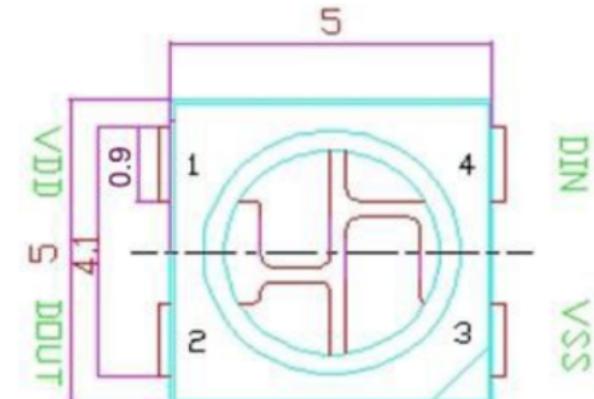
TP9 is usable though is under the screen, it is on the other side of the R42 DNP from TP11.
I ended up going with TP9 after TP10 broke off during my hooking up an oscilloscope to it. Turns out the build system has changed significantly and passing build flags wasn't working like before so I was probing a pinecil which wasn't trying to light an LED - D'oh. Got there eventually. TP10 shall forever be missed. My old iron is not cut out for fine work.

 **Closed** WS2812B RGB mod for Pinecil V2 #1739

Electrical setup:

- WS2812B requires Vdd between 3.5 and 5.3V and Vih (high level of input signal) must be at least 0.7Vdd
 - GPIO levels are 3.3V
 - The 5V rail is actually max 4.6V

So we can directly power the WS2812B on the 5V rail and command it with the GPIO without need for a level shifter, or for a Zener diode to clamp Vdd.



- Vss(3) is connected to GND, e.g. on the U10 pad mentioned and illustrated [here](#)
 - Vdd(1) is connected to the "5V" rail, e.g. on the capacitor mentioned and illustrated [here](#)
 - Din(4) is connected to TP10

Connections are made with 0.1-mm enameled wire and isolated with UV glue to avoid any shortcut (my WS2812B is not attached and could move around).

Problems



- **Fame**
- **Money**
- **Social security**
- **Job opportunities**



The World's Email Encryption Software Relies on One Guy, Who is Going Broke

Werner Koch's code powers the email encryption programs around the world. If only somebody would pay him for the work.

by Julia Angwin Feb. 5, 2015, 11:24 a.m. EST



 FFmpeg @FFmpeg · Apr 2, 2024 ...

The xz fiasco has shown how a dependence on unpaid volunteers can cause major problems. Trillion dollar corporations expect free and urgent support from volunteers.

@Microsoft @MicrosoftTeams posted on a bug tracker full of volunteers that their issue is "high priority"

y: [Caption] FFmpeg fails to decode closed-caption to srt/webvtt → [Intel Caption] Microsoft RTMP Ingest - FF decode closed-caption to srt/webvtt

high priority ticket and the FFmpeg version is currently used in a highly visible product in Microsoft experience issues with Caption during Teams Live Event. Please help,

192 3.1K 14K 1.5M

 FFmpeg @FFmpeg Follow ...

After politely requesting a support contract from Microsoft for long term maintenance, they offered a one-time payment of a few thousand dollars instead.

This is unacceptable.

We didn't make it up, this is what @microsoft @microsoftteams actually did:
trac.ffmpeg.org/ticket/10341#c...

6:09 PM · Apr 2, 2024 · 404.1K Views

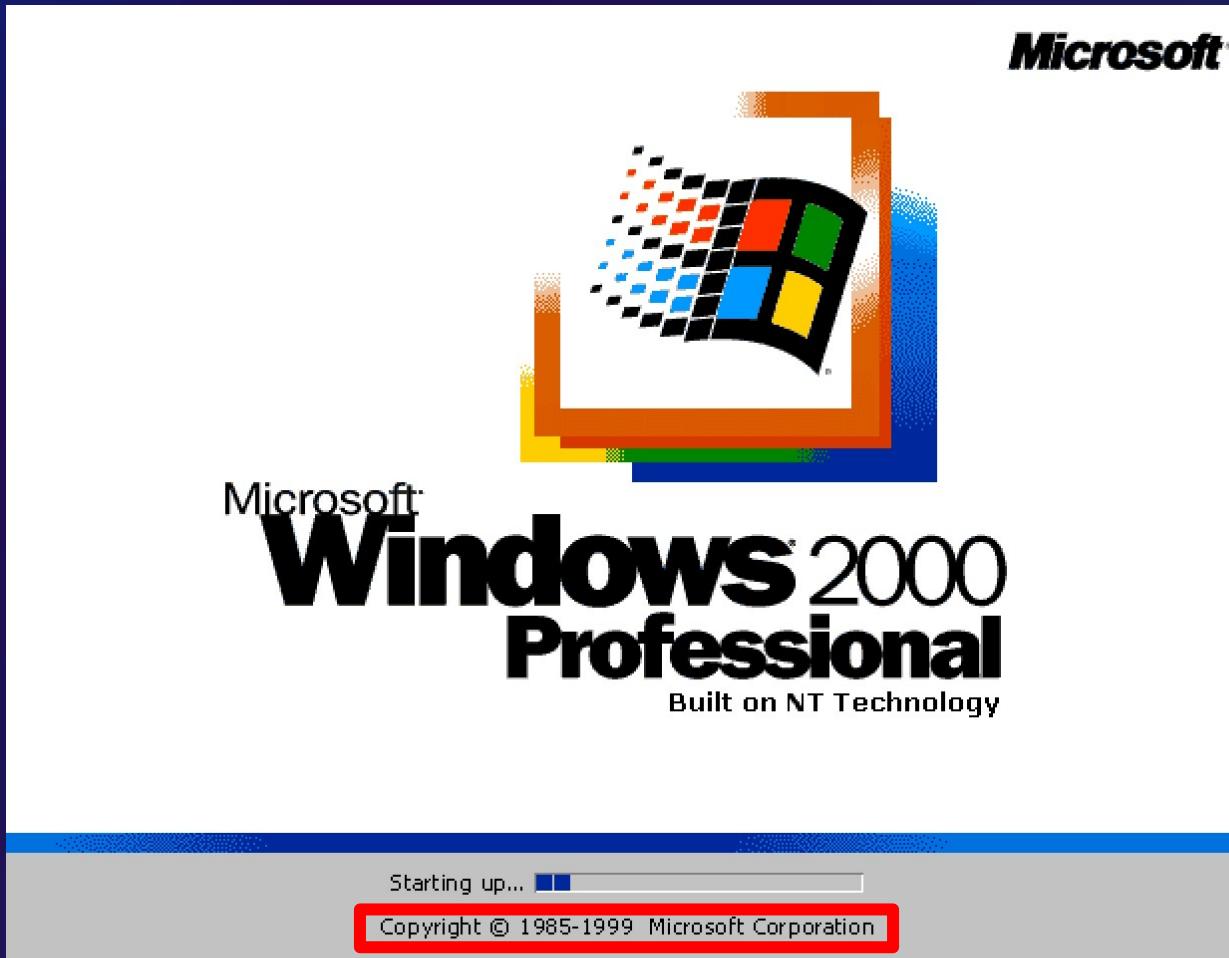
Motivation?!



- **Legacy & credibility**
- **A lot of soft skills**
- **Hard skills, knowledge & experience**
- **Transparency, not NDA**
- **Fun!**



Motivation: transparency



Motivation: skills



Closed Add TS101 support #1420

whitequark on Jun 3, 2023

A brave type-C USB cable has been chosen to voluntarily give its life in the service of the Greater Good. Please take a moment of silence to honor its brave sacrifice, which will forever live in our hearts. ☺☺☺

I can confirm that the programming fixture that was speculated above works.

This function confirms the pinout:

```
void boot_soft_i2c_start()
{
    boot_gpio_reset(gpio: GPIOB, mask: 1)
    boot_gpio_set(gpio: GPIOB, mask: 2)
    boot_gpio_set(gpio: GPIOB, mask: 1)
    boot_gpio_reset(gpio: GPIOB, mask: 2)
    return boot_gpio_reset(gpio: GPIOB, mask: 1) __tailcall
```

As far as I can tell the interrupt lines of the accelerometer are not connected to the MCU and it has to be polled, yes, using software I2C.

VioletEternity on Jun 3, 2023

Addendum: Tip temperature sensing circuit overview

The tip temperature sensing circuit is based on the [RS8551](#) operational amplifier and is located in this area of the PCBA:

The OUT pin of RS8551 is connected to PA3 through an 1 kOhm resistor. PA1 is

Motivation: fun!



Fix: Potential Vulnerability in Cloned Function #2087



tabudz commented on Feb 26 • edited by ia

Contributor

...

- Please check if the PR fulfills these requirements

- The changes have been tested locally
- There are no breaking changes

- What kind of change does this PR introduce?

This PR fixes a security vulnerability in uECC_sign_with_k() that was cloned from micro-ecc but did not receive the security patch. The original issue was reported and fixed under [kmackay/micro-ecc@ 1b5f5ce](#).

This PR applies the same patch to eliminate the vulnerability.

References

<https://nvd.nist.gov/vuln/detail/CVE-2020-27209>
[kmackay/micro-ecc@ 1b5f5ce](#)

whitequark commented on Mar 2

Why does my soldering iron have security vulnerabilities. Where did the industrial civilization go so wrong?

GitHub...



- **User base & projects' base**
 - **Features**

Ready 4 Estimate: 44 ...
This is ready to be picked up

Draft
BUG: boost mode in BOOST locking mode
HIGH 16

Draft
REFACTOR: getters/setters for ctx constant values in locking mode routines
MEDIUM 16

Draft
DOCS: S60(P) flashing:
<https://github.com/Ralim/IronOS/discussions/1985>
NORMAL 8

Progress 2 Estimate: 10 ...
This is actively being worked on

IronOS #2100
AnimationSlide: add a new setting to control slide-scroll animation
HIGH 8

Draft
Daily Status Update
NORMAL 2

IronOS #2075
Debug Menu: add time of compilation to timestamp build
LOW 4

Project	Issues	Description
openwrt/openwrt	2,191	[BPF] Handle traps with kfunc call __bpf_trap
neovim/neovim	2,058	chipsec/chipsec #2489 Mob/dev2/varstore unit tests
openssl/openssl	1,843	
curl/curl	1,698	
micropython/micropython	1,348	llvm/llvm-project #141135 [TSan][Test] Disable signal_recursive.cpp test on Darwin
vim/vim	1,263	chipsec/chipsec #2490 Sanitize test coverage percentage variable
openwrt/packages	1,227	llvm/llvm-project #140158 [HIPSTDPAR] Add handling for math builtins
Homebrew/brew	1,061	
PCSX2/pcsx2	786	llvm/llvm-project #140969 [TableGen] Add missing \$ before the dag operator name
NationalSecurityAgency/ghidra	754	llvm/llvm-project #140777 [lldb-dap] Test gardening, enabling tests and improving doc comments.
tianocore/edk2	691	
fwupd/fwupd	683	llvm/llvm-project #141145 [asan][test] Fix flake in asan_Isan_deadlock test
wezterm/wezterm	605	
topjohnwu/Magisk	465	chipsec/chipsec #2502 Split mmcfg into separate hal
Mbed-TLS/mbedtls	457	
openwrt/luci	452	tock/tock #4446 stm32f4xx: fix EXTI pending register mask
gnuradio/gnuradio	326	llvm/llvm-project #141157 Revert "[StaticDataLayout][PGO] Implement reader and writer change for

... or not GitHub?



Summary



- **Open Source is not about software, firmware or hardware**
- **Open Source is about sane people & mentally healthy communities**
- **Open Source is about as much contributing as downloading**

Thanks!

