
Subject: Caution: fake V9958s on AliExpress
Posted by [lynchaj](#) on Sat, 06 Apr 2024 13:00:44 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi
Please be careful when ordering V9958 (Yamaha VDP) from AliExpress. There are many vendors selling fakes. I have ordered several and ended up returning them for refunds because I cannot seem to get a legit item.

You can tell if the V9958s are fakes if they have a notch and are date codes 2703 2122 IACC. See this article below for more information:

<https://hackaday.io/project/186450-msx1-homebrew-clone-for-baffa-2-project/log/216999-lots-and-lots-and-lots-of-fake-v9958>

I have asked vendors to send me photos of the actual V9958 and occasionally they do. I have detected fakes this way and canceled orders. However, I can confirm by actual experience these chips are fakes. I have tested on the duodyne Media IO board. It works fine with a real V9958 but does not with a fake V9958.

Good luck!

Subject: Re: Caution: fake V9958s on AliExpress
Posted by [marcopolo](#) on Sat, 06 Apr 2024 20:19:04 GMT
[View Forum Message](#) <> [Reply to Message](#)

This is a recurring problem with all the IC and transistors sold by the Chinese on Ebay, Aliexpress, UTSources ...

Subject: Re: Caution: fake V9958s on AliExpress
Posted by [jordi.solis](#) on Sat, 06 Apr 2024 20:31:48 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi,
Here you have a good source to buy it:
https://buyee.jp/item/yahoo/auction/x1129842354?conversionType=service_page_search
Regards

Subject: Re: Caution: fake V9958s on AliExpress
Posted by [lynchaj](#) on Sat, 06 Apr 2024 23:46:34 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi

I buy a lot of parts from ALiExpress, eBay, Mouser, UTSOURCE, etc. These fake V9938s are the most widespread frauds I've seen to date. The marketplace is absolutely saturated with the fakes and they all seem to look the same.

This has been happening for over a year if you go by the article on hackaday.io. Which I am interpreting is AliExpress is aware of the fakes being sold and is letting it happen regardless. My personal opinion only.

Subject: Re: Caution: fake V9958s on AliExpress
Posted by [marcopolo](#) on Sun, 07 Apr 2024 16:23:33 GMT
[View Forum Message](#) <> [Reply to Message](#)

lynchaj wrote on Sat, 06 April 2024 16:46
These fake V9938s are the most widespread frauds I've seen to date.

In the same way, try buying HD63C09P :lol:

Subject: Re: Caution: fake V9958s on AliExpress
Posted by [lynchaj](#) on Sun, 07 Apr 2024 18:07:29 GMT
[View Forum Message](#) <> [Reply to Message](#)

Argh! I just bought some. You mean those are likely fakes too?

:(

Subject: Re: Caution: fake V9958s on AliExpress
Posted by [marcopolo](#) on Sun, 07 Apr 2024 20:35:21 GMT
[View Forum Message](#) <> [Reply to Message](#)

100% fakes :(

Blacktopped HD63C09EP from UTsource:

File Attachments

- 1) [37_HD63C09_FAKE_UTSOURCE.jpg](#), downloaded 609 times
 - 2) [36_HD63C09_FAKE_UTSOURCE.jpg](#), downloaded 602 times
-

Subject: Re: Caution: fake V9958s on AliExpress
Posted by [lynchaj](#) on Wed, 10 Apr 2024 23:30:05 GMT

[View Forum Message](#) <> [Reply to Message](#)

Hi

I did order a V9938 on AliExpress and got the real thing. I swapped out my real V9958 out of the Media IO board and am using the V9938 instead. Seems to work OK

This weekend I am going to test out my recently purchased HD63C09P CPUs but I think I know how that is going to go...

I can't stand scammers. The fake chip scammers are ruining AliExpress. I have ordered many, many parts there with generally good luck.

Until this last couple of months when the scammers are running wild. Jerks!

Subject: Re: Caution: fake V9958s on AliExpress
Posted by [plasmo](#) on Thu, 11 Apr 2024 00:27:20 GMT

[View Forum Message](#) <> [Reply to Message](#)

Practically all Z80 and 6502 on eBay are fakes, i.e., relabeled parts. The question is whether the new label matches the part underneath, or will it still works like the new label indicated. My experiences are 6502 are indeed 6502, but maybe NMOS or CMOS 6502 good up to 4Mhz; it will never be W65C02 which is good to 14Mhz. Z80 is almost always CMOS Z80 good to 20Mhz, in fact, I routinely run fake Z80 to 30Mhz passing zexall instruction tests. YMMV.

Bill

Subject: Re: Caution: fake V9958s on AliExpress
Posted by [lynchaj](#) on Thu, 11 Apr 2024 16:37:50 GMT

[View Forum Message](#) <> [Reply to Message](#)

Hi

One countermeasure against V9958 fakes I've been using recently on AliExpress is to request a photo of the actual device they are going to send. Their response is highly indicative of whether they are peddling fakes or not.

Legit vendors will happily post photos of valid V9958s. Vendors of fakes know that and with either post stock photos of V9958s or refuse to post. Even argue with you about it.

As soon as I order a V9958 on AliExpress, I contact the vendor and post this:

Quote:

Hi, please send me a photo of the actual V9958 part before you ship it. There are many fakes being sold and I would like to see what you are selling before I purchase. It will save you and me both time and money. I have a test board to verify it works.

Do not ship fake V9958 chip. Please send a photo of the actual chip. I can tell if they are fake

immediately. If your chip is fake, please cancel order and do not ship. I have ordered many V9958 chips on AliExpress and returned all the fakes.

You can tell if the V9958s are fakes if they have a notch and are date codes 2703 2122 IACC. See link below for more information

<https://hackaday.io/project/186450-msx1-homebrew-clone-for-baffa-2-project/log/216999-lots-and-lots-and-lots-of-fake-v99-58>

I am not saying this technique is fool proof but the legit vendors post photos and if they have fakes will cancel the order. I don't think they want the negative feedback and would rather not deal with you if they know you're on to their game.

Of course, with a sufficiently scummy scammer, this could be easily duped. However, as soon as I receive the part, I am going to test it and if it is a fake I am going to send it back under "free returns" which costs the vendor time and money plus damages their reputation.

The key seems to be making selling fake V9958s as painful and expensive as possible for the fake vendors. Give them an easy way to escape. Let the marketplace drum them out.

Thanks, Andrew Lynch

Subject: Re: Caution: fake V9958s on AliExpress
Posted by [lynchaj](#) on Thu, 11 Apr 2024 16:43:43 GMT
[View Forum Message](#) <> [Reply to Message](#)

marcopolo wrote on Sun, 07 April 2024 16:35:100% fakes :(

Blacktopped HD63C09EP from UTsource:

Oh that *really* bums me out. I can see AliExpress but UTSource previously had a good reputation. I hope they're not getting sucked into the fake chips trade too.

Subject: Re: Caution: fake V9958s on AliExpress
Posted by [wsm](#) on Thu, 11 Apr 2024 17:17:28 GMT
[View Forum Message](#) <> [Reply to Message](#)

In my opinion, UTSource has already gotten sucked into the various used chip issues and I likely won't be using them again. Specifically:

1) A recent order of mine for 15 Z8S180 chips were all marked SL1960 which is Zilog's designation for early versions of chips with limited capabilities. In emails with UTSource, they

suggested that their supplier may have mislabeled the chips when they remarked them. My testing showed these were NOT SL1960 variants but the more usual later versions and I can no longer believe anything marked on their devices, including speed ratings.

2) Prices on expensive chips like CPLDs have increased dramatically. In less than a year, one of the chips I've used has gone from ~\$6 to ~\$20 and moreover these price increases aren't reflected until AFTER placing an order based on the published prices ... essentially holding the initial funds hostage until the order is either cancelled or the extra funds are submitted. My last order had several of these \$20 devices with failures.

FYI: I recently needed a hard to find part that was recently marked "obsolete" and eventually used ic-components.com. Unfortunately they require RFQ's for prices, have a \$100 minimum and use couriers like FedEx and DHL. My experience was: quick communication, good prices and the parts definitely appeared to be genuine, unused and functional. I'll definitely consider using them again if I have similar requirements.

Subject: Re: Caution: fake V9958s on AliExpress
Posted by [lynchaj](#) on Thu, 11 Apr 2024 17:35:42 GMT
[View Forum Message](#) <> [Reply to Message](#)

This looks like it could be a legit V9958. At least it is not an obvious fake.

This is definitely a fake V9958. Note the notch and the date code. Hands down, total fake

File Attachments

- 1) [Maybe real V9958.jpg](#), downloaded 555 times
- 2) [One more fake V9958.jpg](#), downloaded 548 times

Subject: Re: Caution: fake V9958s on AliExpress
Posted by [lynchaj](#) on Thu, 11 Apr 2024 17:54:48 GMT
[View Forum Message](#) <> [Reply to Message](#)

wsm wrote on Thu, 11 April 2024 13:17 In my opinion, UTSource has already gotten sucked into the various used chip issues and I likely won't be using them again. Specifically:

1) A recent order of mine for 15 Z8S180 chips were all marked SL1960 which is Zilog's designation for early versions of chips with limited capabilities. In emails with UTSource, they suggested that their supplier may have mislabeled the chips when they remarked them. My testing showed these were NOT SL1960 variants but the more usual later versions and I can no

longer believe anything marked on their devices, including speed ratings.

2) Prices on expensive chips like CPLDs have increased dramatically. In less than a year, one of the chips I've used has gone from ~\$6 to ~\$20 and moreover these price increases aren't reflected until AFTER placing an order based on the published prices ... essentially holding the initial funds hostage until the order is either cancelled or the extra funds are submitted. My last order had several of these \$20 devices with failures.

FYI: I recently needed a hard to find part that was recently marked "obsolete" and eventually used ic-components.com. Unfortunately they require RFQ's for prices, have a \$100 minimum and use couriers like FedEx and DHL. My experience was: quick communication, good prices and the parts definitely appeared to be genuine, unused and functional. I'll definitely consider using them again if I have similar requirements.

This makes me sad. Fake chip scammers will be the death of the retrobrew computer hobby.

It is difficult enough to get a new design to work right but adding fake parts in the mix makes debugging exceedingly difficult and impractically expensive.

Subject: Re: Caution: fake V9958s on AliExpress
Posted by [lynchaj](#) on Thu, 11 Apr 2024 21:44:11 GMT
[View Forum Message](#) <> [Reply to Message](#)

I am wondering what we can do about fake chip scams. Is it legal to have a registry of confirmed fake chip vendors? Like a blacklist?

I know I could add a few names to the list...

Subject: Re: Caution: fake V9958s on AliExpress
Posted by [wsm](#) on Fri, 12 Apr 2024 01:33:41 GMT
[View Forum Message](#) <> [Reply to Message](#)

One of the things I've noticed recently with eBay chips is a *LOT* of new Chinese sellers with large stores (i.e. 78,000 items) and very low feedback counts (i.e. single digit). Moreover, the pictures and chip descriptions have been duplicated from listings of sellers with much higher feedback counts (i.e. tens of thousands). My hunch is that someone is selling an app to create that kind of duplicated store and they've had lots of takers. I don't look at any ad whose description ends in pound sign, an alphabetic and a numeric (i.e. #W4).

Subject: Re: Caution: fake V9958s on AliExpress
Posted by [lynchaj](#) on Fri, 12 Apr 2024 11:34:49 GMT
[View Forum Message](#) <> [Reply to Message](#)

Yes, it makes me wonder if these small, low count vendors are actually some kind of "cut out" for

the larger vendors who want to peddle fakes but don't want accountability for it.

That implies a larger scam to me. The big vendors set up expendable little vendors to sell as many fakes as possible and take the hits when the negative feedback and returns flood back in.

Meanwhile the bigger vendors move fake chip inventory by supplying the little vendors that otherwise they couldn't sell without damaging their reputation.

But that's just a theory, I don't have any evidence to support it.

Subject: Re: Caution: fake V9958s on AliExpress
Posted by [marcopolo](#) on Fri, 12 Apr 2024 19:32:04 GMT
[View Forum Message](#) <> [Reply to Message](#)

lynchaj wrote on Thu, 11 April 2024 10:35 This looks like it could be a legit V9958. At least it is not an obvious fake.

This IC looks blacktopped :(

The indent should not been filled in with the "blacktopping" material.
See the photo of my HD63C09 above.

The reference seems to have been laser engraved, I don't have the impression that this technique was used in 1988, and it's far too clean.
But it could be an original chip. The Chinese often refurbish salvaged chips by blacktopping them so the buyer receives a chip that matches the photo.

Subject: Re: Caution: fake V9958s on AliExpress
Posted by [marcopolo](#) on Fri, 12 Apr 2024 19:35:41 GMT
[View Forum Message](#) <> [Reply to Message](#)

lynchaj wrote on Thu, 11 April 2024 14:44 I am wondering what we can do about fake chip scams. Never buy from Chinese and their local resellers.

Subject: Re: Caution: fake V9958s on AliExpress
Posted by [lynchaj](#) on Sun, 14 Apr 2024 18:06:00 GMT
[View Forum Message](#) <> [Reply to Message](#)

marcopolo wrote on Fri, 12 April 2024 15:32 lynchaj wrote on Thu, 11 April 2024 10:35 This looks like it could be a legit V9958. At least it is not an obvious fake.

This IC looks blacktopped :(

The indent should not been filled in with the "blacktopping" material.
See the photo of my HD63C09 above.

The reference seems to have been laser engraved, I don't have the impression that this technique was used in 1988, and it's far too clean.
But it could be an original chip. The Chinese often refurbish salvaged chips by blacktopping them so the buyer receives a chip that matches the photo.

Well, if it turns out to be fake even after doing due diligence, then I am going to send it back and post negative feedback on the vendor.

Fortunately, I already have a working V9958 and the Media IO board so it is a simple matter of testing the new chip to verify it works.

It clearly is not an obvious fake with the notch and the same date codes as all the other fakes.
Worth taking a chance although I realize this is far from perfect.

If it is not real, I am sending back to AliExpress using their "free returns" policy. I am prepared to buy and return as many V9958s as necessary until I find a source of real ones. It may take several more tries to find them though.

I think this one as a decent chance of being real because others have bought legit V9958s from this particular dealer. Of course, that could be wishful thinking on my part.

Subject: Re: Caution: fake V9958s on AliExpress
Posted by [lynchaj](#) on Sun, 14 Apr 2024 18:10:55 GMT

[View Forum Message](#) <> [Reply to Message](#)

marcopolo wrote on Sun, 07 April 2024 12:23lynchaj wrote on Sat, 06 April 2024 16:46

These fake V9938s are the most widespread frauds I've seen to date.

In the same way, try buying HD63C09P :lol:

Well, I bought 5 HD63C09P chips from AliExpress and I just tested one in the 6809 processor board.

It seems to work just fine at least the same as the MC6809P it replaced. So that's encouraging.

Do you know a simple way to tell the difference between a MC6809P vs. HD63C09P from the debug monitor?

Maybe I lucked out with these HD63C09P processors.

Thanks, Andrew Lynch

Subject: Re: Caution: fake V9958s on AliExpress
Posted by [plasmo](#) on Sun, 14 Apr 2024 18:57:09 GMT
[View Forum Message](#) <> [Reply to Message](#)

"Fake" just means the part has been re-labeled and sometimes the pins have been dipped in solder to make it look new. In my own experience, "fake" parts worked like the real part vast majority of the times, but the new fake labels may not represent the speed grade correctly or the correct variants of the part. The most common mis-representation is marking NMOS part as CMOS part. I think this has to do with eBay's return policy where defective parts will be penalized at seller's expense, so the sellers are motivated to sell at least comparable parts.

It is very important to test your parts as soon as you've received it.
Bill

Subject: Re: Caution: fake V9958s on AliExpress
Posted by [marcopolo](#) on Mon, 15 Apr 2024 11:50:39 GMT
[View Forum Message](#) <> [Reply to Message](#)

I agree with Bill.

Andrew, you probably received a blacktopped HD63C09, it could be a 6809, a 68A09, a 68B09 or a 63B09
Please post a high-res photo.

The first test is to scrape the top of the circuit to see if any paint is peeling off (=blacktopped)

I'm not an HITACHI specialist, but you should be able to test this to see if you have a 63B09 or 63C09.

The MOTOROLA 6809 doesn't support additions between registers.

```
CC0102      LDD #$0102
103089      ADDR A,B
```

You should find \$0003 in register B

Don't forget that for serious tests like speed, you need to switch the CPU from emulation mode (6809) to native mode (6309).

Subject: Re: Caution: fake V9958s on AliExpress
Posted by [lynchaj](#) on Wed, 24 Apr 2024 11:19:38 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi
I did finally get a legitimate V9958 from AliExpress. It's \$40 and clearly a used pull but at least it is not an obvious fake. I tested it in my Media IO board and it works fine. The pins are straightened and soldered, well at least most of them. Kind of rough condition overall.

<https://www.aliexpress.us/item/2255800262220704.html>

Subject: Re: Caution: fake V9958s on AliExpress
Posted by [marcopolo](#) on Thu, 25 Apr 2024 13:37:22 GMT
[View Forum Message](#) <> [Reply to Message](#)

And your HD63C09P from AliExpress, 68 or 63?

Subject: Re: Caution: fake V9958s on AliExpress
Posted by [lynchaj](#) on Thu, 25 Apr 2024 14:17:13 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi
I haven't gotten that far yet. Hope to do the test this weekend. There is a lot of set up and tear down involved to use 6809 processor and there are multiple boards in work at any given time like Media IO and Voice IO. The actual test probably won't take but a few minutes but setting up the system takes time. I did verify the V9958 is genuine though.

Thanks, Andrew Lynch

Subject: Re: Caution: fake V9958s on AliExpress
Posted by [lynchaj](#) on Sat, 27 Apr 2024 19:07:38 GMT
[View Forum Message](#) <> [Reply to Message](#)

marcopolo wrote on Mon, 15 April 2024 07:50I agree with Bill.

Andrew, you probably received a blacktopped HD63C09, it could be a 6809, a 68A09, a 68B09 or a 63B09
Please post a high-res photo.

The first test is to scrape the top of the circuit to see if any paint is peeling off (=blacktopped)

I'm not an HITACHI specialist, but you should be able to test this to see if you have a 63B09 or 63C09.

The MOTOROLA 6809 doesn't support additions between registers.

CC0102 LDD #0102
103089 ADDR A,B

You should find \$0003 in register B

Don't forget that for serious tests like speed, you need to switch the CPU from emulation mode (6809) to native mode (6309).

Hi, OK cleared my bench sufficiently to get the 6809 processor running and tested. I ran the small test program and it came back with \$0003 in B register so I am fairly sure it is a real HD63C09 processor. It doesn't look used or blacktopped. It looks new with none of the suspicious signs of remarking. I am not an expert though.

Possibly it is a remarked HD63C09 but if it is, they did a really good job. I don't see why they would though since the HD63C09s are cheap enough that it would hardly be worth the effort. I got like 5 for \$10 or something like that. They seem to be OK.

I can certainly see why they are remarking/faking V9958s though. At \$40 a pop, that gets to be real money quickly.

Thanks for the help! Much appreciated, Andrew Lynch

Subject: Re: Caution: fake V9958s on AliExpress
Posted by [marcopolo](#) on Sat, 27 Apr 2024 19:39:26 GMT
[View Forum Message](#) <> [Reply to Message](#)

That's good news :)
So it's an HD63B09 or an HD63C09

Subject: Re: Caution: fake V9958s on AliExpress
Posted by [marcopolo](#) on Wed, 01 May 2024 07:38:41 GMT
[View Forum Message](#) <> [Reply to Message](#)

A guy on a French forum has just received 8255 from China.
Take a good look at the 8255 in the middle :lol:

Subject: Re: Caution: fake V9958s on AliExpress
Posted by [lynchaj](#) on Wed, 01 May 2024 11:05:16 GMT
[View Forum Message](#) <> [Reply to Message](#)

Ah yes, of course, the rarely seen 42 pin version of the 8255 ;-)

It's totally legit!
