

---

Subject: Recompiling bios for the sbc-188  
Posted by [oldefool](#) on Wed, 15 Jun 2022 18:53:03 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

I am trying to figure out how to compile the bios for my sbc-188 v3 board, the source files contain many .asm files amongst others.

I have made a couple of changes to the config.asm file and so need to re compile all the needed files to one .bin file

I have NASM, but don't know what to do with the MAKEFILE  
Any help would be great.  
Anybody?

Colin

---

---

Subject: Re: Recompiling bios for the sbc-188  
Posted by [microbit](#) on Sat, 18 Jun 2022 00:39:58 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

Hi Colin!

I went through the same exercise yesterday.  
Found the official doc on Open Watcom useless - there's no setup file for starters.

I tried with Dosbox and had problems with the usual 64 bit saga. (Either Dosbox complains about Watcom, or NASM complains about non 16 bit environment).

First, what OS are you on?  
I ended up succeeding, so if you are also on WIN7/10, I'll post the procedure later today.  
I ended up being able to recompile and flash in an updated BIOS.

B rgds  
Kris

---

---

Subject: Re: Recompiling bios for the sbc-188  
Posted by [oldefool](#) on Sun, 19 Jun 2022 16:57:18 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

Hi Kris.

I would appreciate any guidance on this as it's been driving me nuts!  
I tried using Dosbox at college once, but don't have any need for it at home.

The system I use for all my interesting work is a nice old Pentium type thing running Windows XP 32 bit,  
there I have Nasm and Open Watcom.

I also use a laptop running a rather tame Windows 7, again 32 bit.  
And finally there is an ex works pc with Win 10 64 bit.

So, I could try all sorts of combinations and find what works,  
maybe it's the 'Rossetta stone' of Open Watcom that i'm missing

hope you can help!

Regards

Colin

---

Subject: Re: Recompiling bios for the sbc-188  
Posted by [microbit](#) on Mon, 20 Jun 2022 09:48:27 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

Hey Colin,

I'm like you, I prefer working in an IDE.  
However, it would be a big job to port the SBC-188 BIOS into that IDE.  
This is what I did on my WIN10 machine :

Installed Watcom 1.9 using the first step on this URL :

<https://www.thoughtco.com/install-open-watcom-c-candand-comp-iler-958451>

I installed 1.9, the win32 exe file, for specific reasons I forgot.  
When it prompts you for a choice between registry, env variables etc I opted for environment variable setup.  
It should install to C:\Watcom. Best not to modify that because the BIOS build relies on that path.

I installed NASM using this file :

nasm-2.15.05-installer-x64.exe  
(you might need the 32 bit version, this was my URL :  
<https://www.nasm.us/pub/nasm/releasebuilds/2.15.05/win64/> )

After installing both, you should be able to go to the directory where you unzipped source\_3.5  
(from "DOS" command prompt)  
and type "make". It should build the entire thing.

Notes/gotchas :

Don't modify settings from the cfg files, they don't affect the build, they are templates.

Modify in config.asm

Don't try to change the settings 32 etc for BIOS and chip size, the make build automatically generates the 32k, 64k and 128k BIN files.

If you try to modify the whole thing goes apeshit. This isn't documented very obvious. (which is understandable, guess anyone that just freely changes things without knowing what it does, doesn't get the keys :) )

Make sure you add the path to NASM in your WIN path (environment variables. Watcom did it for you, no need there.

That's it, let me know how you went.

73, Kris

PS : here's a log of my build, used "new" here, to be sure.

```
C:\Firmware\SBC-188\source_3.5>new
```

```
C:\Firmware\SBC-188\source_3.5>wmake clean
```

```
Open Watcom Make Version 1.9
```

```
Portions Copyright (c) 1988-2002 Sybase, Inc. All Rights Reserved.
```

```
Source code is available under the Sybase Open Watcom Public License.
```

```
See http://www.openwatcom.org/ for details.
```

```
echo foo >foo.err
```

```
echo foo >foo.lst
```

```
echo foo >fpem/foo.lst
```

```
echo foo >foo.map
```

```
del *.lst
```

```
del *.map
```

```
del *.err
```

```
del fpem\*.lst
```

```
echo foo >foo.bin
```

```
echo foo >foo.obj
```

```
echo foo >fpem/foo.obj
```

```
echo foo >foo.exe
```

```
echo foo >foo.sys
```

```
echo foo >foo.hex
```

```
echo foo >xbios.lib
```

```
del *.bin
```

```
del *.obj
```

```
del fpem\*.obj
```

```
del *.exe
```

```
del *.sys
```

```
del ?bios.lib
```

del \*.hex

C:\Firmware\SBC-188\source\_3.5>wmake all

Open Watcom Make Version 1.9

Portions Copyright (c) 1988-2002 Sybase, Inc. All Rights Reserved.

Source code is available under the Sybase Open Watcom Public License.

See <http://www.openwatcom.org/> for details.

```
nasm -DHAS_FASTCALL=1 -O9 -DSBC188=3 -f bin -l emm4mem.lst -o emm4mem.sys
emm4mem.asm
nasm -DHAS_FASTCALL=1 -O9 -DSBC188=3 -DROM=32 -DCHIP=64 -f obj -o
copyright.obj -l copyright.lst copyright.asm
nasm -DHAS_FASTCALL=1 -O9 -DSBC188=3 -DROM=32 -DCHIP=64 -f obj -o rbios.obj
-l rbios.lst rbios.asm
nasm -DHAS_FASTCALL=1 -O9 -DSBC188=3 -DROM=32 -DCHIP=64 -f obj -o floppy.obj
-l floppy.lst floppy.asm
nasm -DHAS_FASTCALL=1 -O9 -DSBC188=3 -DROM=32 -DCHIP=64 -f obj -o
int10ser.obj -l int10ser.lst int10ser.asm
nasm -DHAS_FASTCALL=1 -O9 -DSBC188=3 -DROM=32 -DCHIP=64 -f obj -o
int16ser.obj -l int16ser.lst int16ser.asm
nasm -DHAS_FASTCALL=1 -O9 -DSBC188=3 -DROM=32 -DCHIP=64 -f obj -o
misc15.obj -l misc15.lst misc15.asm
nasm -DHAS_FASTCALL=1 -O9 -DSBC188=3 -DROM=32 -DCHIP=64 -f obj -o ide.obj -l
ide.lst ide.asm
nasm -DHAS_FASTCALL=1 -O9 -DSBC188=3 -DROM=32 -DCHIP=64 -f obj -o mfpic.obj
-l mfpic.lst mfpic.asm
nasm -DHAS_FASTCALL=1 -O9 -DSBC188=3 -DROM=32 -DCHIP=64 -f obj -o timers.obj
-l timers.lst timers.asm
nasm -DHAS_FASTCALL=1 -O9 -DSBC188=3 -DROM=32 -DCHIP=64 -f obj -o
intrtrace.obj -l intrtrace.lst intrtrace.asm
nasm -DHAS_FASTCALL=1 -O9 -DSBC188=3 -DROM=32 -DCHIP=64 -f obj -o tests.obj
-l tests.lst tests.asm
nasm -DHAS_FASTCALL=1 -O9 -DSBC188=3 -DROM=32 -DCHIP=64 -f obj -o font.obj -l
font.lst font.asm
nasm -DHAS_FASTCALL=1 -O9 -DSBC188=3 -DROM=32 -DCHIP=64 -f obj -o ppide.obj
-l ppide.lst ppide.asm
nasm -DHAS_FASTCALL=1 -O9 -DSBC188=3 -DROM=32 -DCHIP=64 -f obj -o dide.obj -l
dide.lst dide.asm
nasm -DHAS_FASTCALL=1 -O9 -DSBC188=3 -DROM=32 -DCHIP=64 -f obj -o diskio.obj
-l diskio.lst diskio.asm
nasm -DHAS_FASTCALL=1 -O9 -DSBC188=3 -DROM=32 -DCHIP=64 -f obj -o
sdc card.obj -l sdc card.lst sdc card.asm
nasm -DHAS_FASTCALL=1 -O9 -DSBC188=3 -DROM=32 -DCHIP=64 -f obj -o ide8.obj -l
ide8.lst ide8.asm
nasm -DHAS_FASTCALL=1 -O9 -DSBC188=3 -DROM=32 -DCHIP=64 -f obj -o idelib.obj
-l idelib.lst idelib.asm
nasm -DHAS_FASTCALL=1 -O9 -DSBC188=3 -DROM=32 -DCHIP=64 -f obj -o
int14ser.obj -l int14ser.lst int14ser.asm
nasm -DHAS_FASTCALL=1 -O9 -DSBC188=3 -DROM=32 -DCHIP=64 -f obj -o
```

```

int17par.obj -I int17par.lst int17par.asm
    nasm -DHAS_FASTCALL=1 -O9 -DSBC188=3 -DROM=32 -DCHIP=64 -f obj -o
redbug.obj -I redbug.lst redbug.asm
    cd fpem
    wmake em187.obj
Open Watcom Make Version 1.9
Portions Copyright (c) 1988-2002 Sybase, Inc. All Rights Reserved.
Source code is available under the Sybase Open Watcom Public License.
See http://www.openwatcom.org/ for details.
    nasm -s -DLONG -f obj -O6+ -I em187.lst -o em187.obj em187.asm
em187.asm: info: assembly required 1+3+2 passes

    cd ..
    wlib -q -n abios.lib +floppy.obj +int10ser.obj +int14ser.obj +int16ser.obj +int17par.obj
+misc15.obj +ide.obj +mfpic.obj
    wlib -q abios.lib +timers.obj +intrtrace.obj +tests.obj +font.obj +ppide.obj +dide.obj
+sdcard.obj
    wlib -q abios.lib +ide8.obj +diskio.obj +idelib.obj +redbug.obj +fpem/em187.obj
+unasm/unasm.obj
    wcl -c -q -mc -zdp -zu -s -zp1 -oi -os -1 -fpi87 -DSBC188=3 -DROM=32 -DCHIP=64
-fo=cprintf.obj cprintf.c
    wdis -l -s cprintf.obj
    wcl -c -q -mc -zdp -zu -s -zp1 -oi -os -1 -fpi87 -DSBC188=3 -DROM=32 -DCHIP=64
-fo=sio.obj sio.c
    wdis -l -s sio.obj
    wcl -c -q -mc -zdp -zu -s -zp1 -oi -os -1 -fpi87 -DSBC188=3 -DROM=32 -DCHIP=64
-fo=nvram.obj nvram.c
    wdis -l -s nvram.obj
    wcl -c -q -mc -zdp -zu -s -zp1 -oi -os -1 -fpi87 -DSBC188=3 -DROM=32 -DCHIP=64
-fo=strtoul.obj strtoul.c
    wdis -l -s strtoul.obj
    wcl -c -q -mc -zdp -zu -s -zp1 -oi -os -1 -fpi87 -DSBC188=3 -DROM=32 -DCHIP=64
-fo=libc.obj libc.c
    wdis -l -s libc.obj
    wcl -c -q -mc -zdp -zu -s -zp1 -oi -os -1 -fpi87 -DSBC188=3 -DROM=32 -DCHIP=64
-fo=debug.obj debug.c
    wdis -l -s debug.obj
    wcl -c -q -mc -zdp -zu -s -zp1 -oi -os -1 -fpi87 -DSBC188=3 -DROM=32 -DCHIP=64
-fo=kbd.obj kbd.c
    wdis -l -s kbd.obj
    wcl -c -q -mc -zdp -zu -s -zp1 -oi -os -1 -fpi87 -DSBC188=3 -DROM=32 -DCHIP=64
-fo=m8563lib.obj m8563lib.c
    wdis -l -s m8563lib.obj
    wcl -c -q -mc -zdp -zu -s -zp1 -oi -os -1 -fpi87 -DSBC188=3 -DROM=32 -DCHIP=64
-fo=vga3lib.obj vga3lib.c
    wdis -l -s vga3lib.obj
    wlib -q -n cbios.lib +cprintf.obj +sio.obj +nvram.obj +libc.obj +strtoul.obj +debug.obj
    wlib -q cbios.lib +m8563lib.obj +vga3lib.obj +kbd.obj

```

```
wcl -lr -q -k1024 -fe=rbios.exe -fm=rbios.map copyright.obj rbios.obj abios.lib cbios.lib
Warning! W1014: stack segment not found
nasm -DHAS_FASTCALL=1 -O9 -DSBC188=3 -DROM=32 -DCHIP=64 -f bin -o
startup.bin -l startup.lst startup.asm
tools\exe2rom.exe rbios.exe rbios.bin -s startup.bin -r 32 -e 64
ROM=32 EPROM=64 StartUpFile="startup.bin"
EXEfile="rbios.exe" EPROMfile="rbios.bin"
Relocation constant 0F800h
tools\bin2hex.exe -o rbios.hex rbios.bin
nasm -DHAS_FASTCALL=1 -O9 -DSBC188=3 -DROM=32 -DCHIP=64 -f bin -o tbasic.bin
-l tbasic.lst tbasic.asm
tools\bin2hex.exe -o tbasic.hex tbasic.bin
nasm -DHAS_FASTCALL=1 -O9 -DSBC188=3 -DROM=32 -DCHIP=64 -f bin -o font.bin -l
font.lst font.asm
tools\bin2hex.exe -o font.hex font.bin
wcl -lr -q -k1024 -fe=em187.exe -fm=em187.map fpem\em187.obj
Warning! W1014: stack segment not found
Warning! W1023: no starting address found, using 0000:0000
tools\exe2rom.exe em187.exe em187.bin -s NUL -r 32K -e 32K
ROM=32 EPROM=32 StartUpFile="NUL"
EXEfile="em187.exe" EPROMfile="em187.bin"
Relocation constant 0F800h
tools\bin2hex.exe -o em187.hex em187.bin
tools\hex2bin.exe -o bios064.bin -R64K rbios.hex tbasic.hex -d26K font.hex -d18k
em187.hex
tools\hex2bin.exe -R 64K -o space64.bin
copy/b space64.bin + bios064.bin bios128.bin
space64.bin
bios064.bin
1 file(s) copied.
copy/b space64.bin + space64.bin + bios128.bin bios256.bin
space64.bin
space64.bin
bios128.bin
1 file(s) copied.
```

---

Subject: Re: Recompiling bios for the sbc-188  
Posted by [microbit](#) on Mon, 20 Jun 2022 09:55:05 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

btw, the page on the download of Open Watcom vaguely states "download is on this page".  
What it really means is that you have to go on a nice big Sherlock Holmes to find it :)

I d/l'd it here :

<https://sourceforge.net/projects/openwatcom/files/open-watcom-1.9/>

Cheers.

If you wanna discuss do send me a PM and we can exchange email, it'll be nice to discuss playing with SBC-188 rather than a forum riddled with lurkers but where no one actually bothers replying.

---

---

Subject: Re: Recompiling bios for the sbc-188  
Posted by [oldefool](#) on Wed, 22 Jun 2022 22:42:17 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

Hi Kriss

Sorry for the late response, been getting the sbc-188 closer to working, not quite there yet.

I tried the instructions you gave,  
I didn't bother with my XP machine as the world no longer wants to talk to it since Google doesn't support XP and other web sites only use newer versions ( just one of my gripes! )

I just went straight for the Win 10 operation and,

IT WORKED!!!

Thanks ever so much.

In order to see if the .bin files it created actually work, I need to get the board up and running better.

I have had to use all the components as specified in the BOM, though this wasn't the way I wanted to go as I have a bunch of 128Kb Ram chips lying around. But the board does work, of sorts!

This is what I get when reset:-

( The first time it boots it counts memory, complains that NVRAM is invalid I have to set time / date etc. etc. )

[22;24;37;40;25m [2J [01;01H [?25h [?7IVideo BIOS (C) 2010 Sergey Kiselev  
Detected 16550C UART, FIFO is enabled

```
SSS BBBB CCC      1  888  888
S S B B C C      11  8 8 8 8
S  B B C          1  8 8 8 8
S BBBB C  HHHH  1  888  888
S B B C          1  8 8 8 8      rev. 3.5-1
S S B B C C      1  8 8 8 8      of 29-Apr-2021
SSS BBBB CCC      11111 888  888      (ANSI)
```

Copyright (C) 2010-2020 by The RetroBrew Users' Group. All rights reserved.

Provided for hobbyist use on the RetroBrew SBC-188 board. All code may be used under the terms of the GNU General Public License, a copy of which is contained in the file COPYING in the top-level source directory.

This BIOS copy was built at 12:01:15 PST on 2021-04-29. [55]  
15 Mhz CPU clock, 640K memory installed

P.O.S.T. of memory BYPASSED

Press 's' to run NVRAM setup...

Floppy A: type 4  
PPI=0 IDE8=0 DISKIO=0 MFPIC=0 DIDE0=0 DIDE1=0 DSD=0 Units=0 bdisk=00

Fixed\_Disk\_Tab1: 00 00 00 00

Fixed\_Disk\_Tab2: 00 00 00 00

Now initializing floppy  
Trying to boot from drive A: OK  
Starting MS-DOS...

A:\>ver

MS-DOS Version 6.22

A:\>

I have a CF card plugged into a IDE adapter which I know works as on my Amstrad 80386sx pc but cannot get it to boot, I have tried all manner of combinations, but again I am stuck!

All I get is different values shown for `Fixed\_Disk\_Tab1:` and for Tab2. and then it hangs.

Oh, and it is plugged in directly next to the Floppy drive slot by the way, any ideas?

Once I get this one under my belt, I can get on building some add on cards of my own, but I have never used the ECB format, only ISA. But that`s for another day!



BTW I live in England so I suppose messages will always be out of sync!!

Best regards.

Colin.

( G7IAW )

...73

PS. I noticed in the preview that the `SBC-188` logo doesn't show properly  
I'm new to forums and unsure how to format the message correctly. I'll get there!

---

---

Subject: Re: Recompiling bios for the sbc-188  
Posted by [microbit](#) on Wed, 22 Jun 2022 23:38:10 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

That's great Colin!

The 40 pin connector next to floppy is IDE8, not 16 bit (PPIDE).  
Make sure you plug the CF in the 40 pin IDE on the edge of the board, and that the interrupt jumper IDE8 is removed and placed on PPIDE instead.

CF is \*supposed\* to be able to talk 8 bit, but I can't confirm it yet, I'm using a PQI 128 MB Disk On Module, which doesn't seem to talk 8 bit.

You're as good as there.

Another possibility is that the CF card isn't formatted properly to boot and to accommodate XT/8086 code.

Again, as far as I recall \*any\* device still gets formatted with the old 8086 boot code in its boot sector, even multi zillion gigabyte Flash drives...

I found to get it working I had to setup the disk (DOM or your CF) from the DOS setup floppy on the SBC-188.

Try that for now?

73 de VK3XON

---

---

Subject: Re: Recompiling bios for the sbc-188  
Posted by [oldefool](#) on Sat, 25 Jun 2022 12:45:07 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

Hi Kriss

So far everything has gone OK.  
I plugged the `IDE -> CF card` into the slot marked P801,

lifted pin 10 of ic U704 (74LS05), I switched on and:-

```
[22;24;37;40;25m [2J [01;01H [?25h [?7IVideo BIOS (C) 2010 Sergey Kiselev
Detected 16550C UART, FIFO is enabled
```

```
SSS BBBB CCC      1  888  888
S S B B C C      11  8 8 8 8
S  B B C          1  8 8 8 8
S BBBB C  HHHH  1  888  888
S  B B C          1  8 8 8 8      rev. 3.5-1
S S B B C C      1  8 8 8 8      of 29-Apr-2021
SSS BBBB CCC      11111 888  888      (ANSI)
```

Copyright (C) 2010-2020 by The RetroBrew Users' Group. All rights reserved.

Provided for hobbyist use on the RetroBrew SBC-188 board. All code may be used under the terms of the GNU General Public License, a copy of which is contained in the file COPYING in the top-level source directory.

This BIOS copy was built at 12:01:15 PST on 2021-04-29. [55]  
15 Mhz CPU clock, 640K memory installed

P.O.S.T. of memory BYPASSED

Press 's' to run NVRAM setup...

Floppy A: type 4

PPI=1 IDE8=0 DISKIO=0 MFPIC=0 DIDE0=0 DIDE1=0 DSD=0 Units=1 bdisk=01

Fixed\_Disk\_Tab1: 02 00 00 00

Fixed\_Disk\_Tab2: 02 00 00 00

PPIDE fixed disk C: (0x80)  
Model: ATP COMPACT FLASH  
Serial: AF CF 26E28CF8  
Firmware: 20121024  
Geometry: 991:16:63 with LBA support  
Current: 991:16:63 capacity: 998928  
LBA Sectors: 998928 (48-bit): 0x000000000

Now initializing floppy

Trying to boot from drive A: Disk read failed AX=8500

Trying to boot from drive C: OK

HIMEM: DOS XMS Driver, Version 3.07 - 02/14/92  
Extended Memory Specification (XMS) Version 3.0  
Copyright 1988-1992 Microsoft Corp.

ERROR: HIMEM.SYS requires an 80x86-based machine.  
XMS Driver not installed.

CON code page driver cannot be initialized  
HMA not available : Loading DOS low

C>rem C:\WINDOWS\SMARTDRV.EXE

C>rem 'C:\WINDOWS\mouse.COM /Y

Code page operation not supported on this device  
Device error during select  
C:\>dir

Volume in drive C is 512MB  
Volume Serial Number is 4012-14F0  
Directory of C:\

```
COMMAND COM  47845 11/11/91  5:00
TIM  BAT    32 01/01/80  21:42
BAS   <DIR>  03/05/20  13:20
BIPBOP2 <DIR>  03/05/20  13:20
DOS   <DIR>  03/05/20  13:20
EASYPC <DIR>  03/05/20  13:20
GP    <DIR>  03/05/20  13:20
HC    <DIR>  03/05/20  13:20
LEMMINGS <DIR> 03/05/20  13:20
MAHJONGG <DIR> 03/05/20  13:20
PRINCE <DIR>  03/05/20  13:20
PROCOMM <DIR> 03/05/20  13:20
QB    <DIR>  03/05/20  13:20
SM    <DIR>  03/05/20  13:21
TC    <DIR>  03/05/20  13:21
TIM   <DIR>  03/05/20  13:21
VGA   <DIR>  03/05/20  13:21
WINDOWS <DIR> 03/05/20  13:21
QB  INI    34 01/01/88  0:12
AUTOEXEC BAT  324 01/01/88  0:08
BIPBOP BAT   73 27/02/88  18:53
PROCOMM BAT  31 28/08/02  10:51
ASM   <DIR>  03/05/20  13:21
```

```
WIN  BAT    17 01/01/88  1:32
CONFIG SYS   325 01/01/88  0:04
WINA20 386   9349 09/04/91  5:00
      26 file(s)  58030 bytes
      478109696 bytes free
```

C:\>mem

```
654336 bytes total conventional memory
655360 bytes available to MS-DOS
562544 largest executable program size
```

C:\>ver

MS-DOS Version 5.00

C:\>chkdsk

```
Volume 512MB    created 03/05/2020 13:13
Volume Serial Number is 4012-14F0
```

```
510631936 bytes total disk space
 98304 bytes in 4 hidden files
221184 bytes in 27 directories
32202752 bytes in 966 user files
478109696 bytes available on disk
```

```
8192 bytes in each allocation unit
62333 total allocation units on disk
58363 available allocation units on disk
```

```
916480 total bytes memory
562544 bytes free
```

C:\>

Next, I will try a recompiled bios, but I will wait for my Super Cap to arrive first.  
I get tired of repeatedly typing in the configuration details every time I switch on!

I used to work for an electronics manufacturer where we made some boards for a customer (some 200+ each month). The boards contained an 80188-16 processor a couple of gal chips, 128k flash rom and 128k ram, a couple of scc`s (85c30), and lots of i/o`s.

We sat on many duff boards that had been returned, so when we was told to scrap them, I pulled as many chip as I could.

I eventually made a board of my own based loosely ( very loosely ) on their design.

Board N01- was rubbish.

Board N02- great, had lots of fun. learned a great deal.

I literally wore it out with so many mods and changes

Board N03 will be My next project. I have made a couple of ISA cards,  
but I wish to integrate them into my next board.

However, if I can adapt them to work with the ECB system as with the SBC-188.  
Then, that could save me some work.

" It's been said before that this sort of stuff just isn't documented! "

Have a great weekend and thanks again for all your help Kriss.

Best regards

Colin.

( G7IAW ) 73

---

Subject: Re: Recompiling bios for the sbc-188  
Posted by [microbit](#) on Sat, 25 Jun 2022 13:46:19 GMT  
[View Forum Message](#) <> [Reply to Message](#)

Excellent!

I'm surprised it runs despite the relatively low amount of RAM ;-)

I'm in it to learn about DOS etc.

I've always been an embedded bare metal C guy, no OSs :)

To me SBC-188 is attractive cos it has source on BIOS etc.

73

---

Subject: Re: Recompiling bios for the sbc-188  
Posted by [cmacarthur](#) on Thu, 11 Aug 2022 19:50:50 GMT  
[View Forum Message](#) <> [Reply to Message](#)

Hello Colin

Where are you located ?

Before my accident I started to create a ECB to ISA adapter.

<https://oshwlab.com/cmacarthur/ECB-to-ISA-adapter>

I have the cards BUT have not been able to test them as I have not been able to solder anything with my right hand not working, BUT the surgery went well and I hope to be back to PLAYING soon.

As I have spare cards, I could send you one if you would like to try it...

Colin MacArthur

---

---

Subject: Re: Recompiling bios for the sbc-188  
Posted by [briano](#) on Mon, 23 Dec 2024 06:30:26 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

Hi - I'm hijacking this thread with a simple question because the forum does not let me start a new topic...

What is the SBC-188 serial port baud rate on start up? I can't find anywhere where it is mentioned what the terminal baud rate is at start up. I have been assuming 38400 but is that wrong? Where in the SBC-188 documentation is this little bit of information kept?

Also - does anyone know why the forum logs me out when I try to start a new topic in the general discussion area?

Thanks in advance, Brian

---

---

Subject: Re: Recompiling bios for the sbc-188  
Posted by [scruss](#) on Tue, 24 Dec 2024 17:50:23 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

briano wrote on Mon, 23 December 2024 01:30 What is the SBC-188 serial port baud rate on start up?

config.asm (from BIOS version 3.5-1 of 29-Apr-2021 ) suggests 9600:

```
; Define the UART startup bit rate - 1200-19200 are most common
;UART_RATE equ 0 ; 1200
;UART_RATE equ 1 ; 2400
;UART_RATE equ 2 ; 4800
UART_RATE equ 3 ; 9600
;UART_RATE equ 4 ; 19200
;UART_RATE equ 5 ; 38400
;UART_RATE equ 6 ; 57600
;UART_RATE equ 7 ; 115200
```

(can't seem to stop that smiley appearing in the message. I'm not being snarky, it's this board's software being weird)

---