How to use "HexAreaChecker" (Hex file address space confirmation tool)

1 First of all

This file is the viewer of the Hex file. Main purpose is to check the address space.
It supports Motorola S-record format (.s19, .mot) and Intel HEX format (.hex), and automatically determines the format when reading.

> Correspondence:
> Motorola S-record format: Record Field=S0~S3, S5~S9 (S4 is not responding because it is Reserved)
> Intel HEX format: Recode Type=00~05

HexAreaChecker also checks the data length and checksum, so it can be used for confirming the checksum after editing data. Numbers are written in hexadecimal notation except for the "No." column of the Summary sheet.

Sample Hex file

sample_motorola.s19(更新)

```
S00F00006C65645F746573742E6D6F741E
S113000000000100000001000000010000000100E8
S113001000000100000001000000010000000100D8
S113002000000100000001000000010000000100C8
S113003000000100000001000000010000000100B8
S113004000000100000001000000010000000100A8
S113005000000100000001000000010000000100098
S113006000000100000001000000010000000100088
S113007000000100000001000000010000000100078
S113008000000100000001000000010000000100068
S113009000000100000001000000010000000100058
S11300A000000100000001000000010000000100048
S11300B000000100000001000000010000000100038
S11300C000000100000001000000010000000100028
S11300D000000100000001000000010000000100018
S11300E000000100000001000000010000000100008
S10700F000000100007
S11301007A07000FFF0E7A000000001627A01000FE7
S1130110DF107A02000FDF10690369930B800B81F3
S11301201FA145F45E00012A40D601006DF60FF6CA
S11301301B97FAFF3AD418AA3AD61AB32AD6170A42
S11301403AD601006FE3FFFC01006F62FFFC0DAAC9
S1130150046EA01006F62FFFC0B0201006FE2FFFC44
S105016040E673
S9030100FB
```

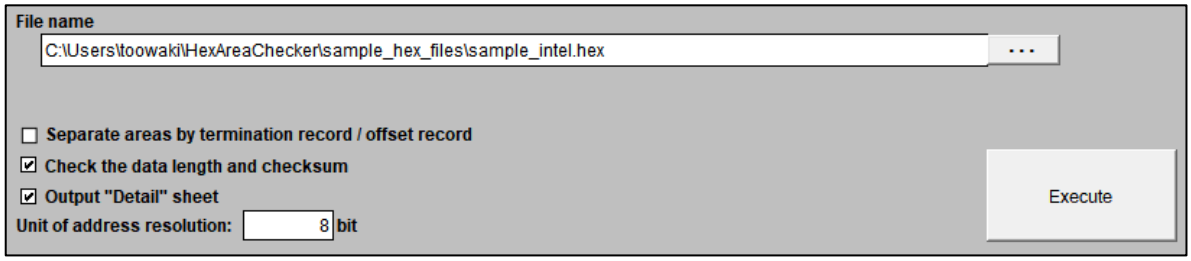
Detailed result: (Detail sheet)

	Type	Cnt	Address	Data	ChkSum	Address			START/END	Log
2	S0	0F	0000	6C65645F746573742E6D6F74	1E				(Start of file)	
3	S1	13	0000	00000100000001000000010000000100	E8	0000	-	000F	START	
4	S1	13	0010	00000100000001000000010000000100	D8	0010	-	001F		
5	S1	13	0020	00000100000001000000010000000100	C8	0020	-	002F		
6	S1	13	0030	00000100000001000000010000000100	B8	0030	-	003F		
7	S1	13	0040	00000100000001000000010000000100	A8	0040	-	004F		
8	S1	13	0050	00000100000001000000010000000100	98	0050	-	005F		
9	S1	13	0060	00000100000001000000010000000100	88	0060	-	006F		
10	S1	13	0070	00000100000001000000010000000100	78	0070	-	007F		
11	S1	13	0080	00000100000001000000010000000100	68	0080	-	008F		
12	S1	13	0090	00000100000001000000010000000100	58	0090	-	009F		
13	S1	13	00A0	00000100000001000000010000000100	48	00A0	-	00AF		
14	S1	13	00B0	00000100000001000000010000000100	38	00B0	-	00BF		
15	S1	13	00C0	00000100000001000000010000000100	28	00C0	-	00CF		
16	S1	13	00D0	00000100000001000000010000000100	18	00D0	-	00DF		
17	S1	13	00E0	00000100000001000000010000000100	08	00E0	-	00EF		
18	S1	07	00F0	00000100	07	00F0	-	00F3	END	
19	S1	13	0100	7A07000FFF0E7A000000001627A01000F	E7	0100	-	010F	START	
20	S1	13	0110	DF107A02000FDF10690369930B800B81	F3	0110	-	011F		
21	S1	13	0120	1FA145F45E00012A40D601006DF60FF6	CA	0120	-	012F		
22	S1	13	0130	1B97FAFF3AD418AA3AD61AB32AD6170A	42	0130	-	013F		
23	S1	13	0140	3AD601006FE3FFFC01006F62FFFC0DAA	C9	0140	-	014F		
24	S1	13	0150	46EA01006F62FFFC0B0201006FE2FFFC	44	0150	-	015F		
25	S1	05	0160	40E6	73	0160	-	0161	END	
26	S9	03	0100		FB				(Terminate)	

Summary results (Summary sheet)

1	Format:	Motorola S-record						
2	File:	C:¥Users¥toowaki¥Desktop¥HexAreaChecker¥sample_motorola.s19						
3								
4	No.	Address			Size			
5	1	0000	-	00F3	00F4			
6	2	0100	-	0161	0062			

2 Usage



[Step1]

Please select Hex file.

[Step2]

Please press the “Execute” button.

Detailed result is output on Detail sheet, summary result is output on Summary sheet.

* Do not edit other Excel files while scripts is running.

[Option setting]

You can choose whether or not to separate the address space by “Separate areas by termination record / offset record”.

Termination record

Motorola S-record format： Record Field=S7, S8, S9

Offset record

Intel HEXformat： Recode Type=02, 04

3 Reference: About Hex file

For Hex files, please see below

Motorola S-record format:

【SREC (file format) - Wikipedia】

https://en.wikipedia.org/wiki/SREC_(file_format)

Intel HEXformat:

【Intel HEX - Wikipedia】

https://ja.wikipedia.org/wiki/Intel_HEX

4 Operating environment

Excel2007、Excel2010, Excel2013, Excel2016,
Excel2019(Tested by Office365 MSO(16.0.11425.20220) 32bit)

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http://toowaki.web.fc2.com/

8 History

日付	内容	Ver.	編集者
2017/7/7	Create New	1.0	toowaki
2017/11/3	I made it easy to understand the progress situation	1.1	
2017/01/19	Corrected to open and analyze Hex file as read only	1.2	
2018/10/07	Added control of data length and checksum check	1.3	
2018/10/13	Added control of output detail sheet	1.4	
2019/04/14	VBA overflowed when the address exceeded 0x7FFFFFFF. Therefore, it has been fixed.	1.5	
2019/09/07	- When the address is larger than 0x7FFFFFFF, it was not displayed correctly. So, it was corrected. - Corrected the behavior of S5 and S6 in Motorola S-record format (S19) format.	1.6	
2020/10/12	- Added unit of address resolution.	1.7	