

Revision history

Use ABOV New S/W Version rule (2015. 9.21.Mon ~)

Version	Date	Description
V2.047.00	2024.11.22.Fri	Fixed : <ul style="list-style-type: none">- Checksum dialogbox : selectable one of 16, 24, 32bit checksum Added device(s) : <ul style="list-style-type: none">- A96T428- MC96F6432P
V2.046.00	2024. 7. 5. Fri	Fixed : <ul style="list-style-type: none">- KEIL symbol processing issue- MC96F8316P Flash user memory algorithm Added devices(s) : <ul style="list-style-type: none">- A94P830- A96G616- A96T430
V2.045.00	2024. 3.18.Mon	Fixed : <ul style="list-style-type: none">- KEIL DLL : A96L116 programming issue Added device(s) : <ul style="list-style-type: none">- MC96F8316P
V2.044.04	2024. 2.21.Wed	Fixed : <ul style="list-style-type: none">- IAR symbol processing Added device(s) : <ul style="list-style-type: none">- A96T3F6
V2.044.03	2023. 6.17.Sat	Fixed : <ul style="list-style-type: none">- Identify A96G148 not A96G140 Changed : <ul style="list-style-type: none">- Check newer executable version of this program
V2.044.01	2023. 4. 3.Mon	Fixed : <ul style="list-style-type: none">- A96G174 code protection areas of CFG dialog box- A96L116 programming issue
V2.044.00	2023. 3.13.Mon	Fixed : <ul style="list-style-type: none">- IAR symbol processing

		Added device(s) : - A96L116
V2.043.00	2022.12.21.Wed	Fixed : - Improve SDCC source file debugging Handle source files & SDCC output "*.ihx" (intel hex file) & "*.cdb" (debug information file)
V2.042.02	2022.10.26.Wed	Fixed : - Some device's code memory read protection was not cleared even if bulk erase had been executed. - Device name : MC97F6108A, MC97F6208, MC97F8324H
V2.042.01	2022. 9. 5.Mon	Changed : - A94P829 Flash SFR address
V2.042.00	2022. 7.20.Wed	Added device(s) : - A96H115 Changed device Spec. - A94P829 erase time Fixed - IAR DLL connectivity
V2.041.00	2022. 4.15.Fri	Added device(s) : - MC96F7816S - MC96F7864S - MC97F2664AS - A94P829 Fixed - KEIL, IAR DLL for A96G166
V2.040.00	2021. 7.30.Fri	Added device(s) : - A96T3A6 - A96G150 - A96L623 Fixed - You can run this program by normal mode without Administrator property
V2.039.02	2021. 4. 9.Fri	The same to V2.039.01 except followings: Include IAR EW8051 DLL

		<ul style="list-style-type: none"> - ABOV_OCD_IAR_1010.DLL for IAR 10.10 - ABOV_OCD_IAR_1030.DLL for IAR 10.30
V2.039.01	2021. 2.10.Wed	<p>Fix exe and DLL file's information (version number)</p> <ul style="list-style-type: none"> - V2.35.0.0 → V2.39.1.0
V2.039.00	2021. 2. 9.Tue	<p>Added device(s) :</p> <ul style="list-style-type: none"> - A94B920 - A94P137 - A94Q216 - A96L414/416 - A96L533/534 - A96T396 <p>Removed devices</p> <ul style="list-style-type: none"> - A94Q116 <p>Fixed</p> <ul style="list-style-type: none"> - Hex download : Fill unused area 0x00 (OK), 0xFF (NG → modified and OK) <p>Changed feature</p> <ul style="list-style-type: none"> - E-OCD II USB can supply under 100mA → 50mA.
V2.038.01	2020. 8. 4.Tue	<p>Added device(s) :</p> <ul style="list-style-type: none"> - A94B517 - A96G181 - A96T376 - A96T385 <p>Fixed</p> <ul style="list-style-type: none"> - A94Q427 : Allow manual code editing, ECC is changed automatically <p>Added feature</p> <ul style="list-style-type: none"> - Control E-OCD II Power source (PC USB, Target) - PC USB can supply under 100mA.
V2.037.00	2020. 5.28.Thu	<p>Added device(s) :</p> <ul style="list-style-type: none"> - A94B458 <p>Fixed</p> <ul style="list-style-type: none"> - Disappeared Local variables by download hex. - A96T418 password processing. - Support extended segment of Intel hex format. - DPTR variable display → little endian. The other variables are displayed by big endian.

		<p>New feature</p> <ul style="list-style-type: none"> - Support new E-OCD II (HID interface).
V2.036.00	2019.12. 5.Thu	<p>Added device(s) :</p> <ul style="list-style-type: none"> - A94Q427 - A94B346, A94B361, A94B391 - A96G166 (password) - A96L416 <p>Fixed</p> <ul style="list-style-type: none"> - List control did not refer screen scale
V2.035.01	2019. 9.05.Thu	<p>Added device(s) :</p> <ul style="list-style-type: none"> - A94B336 - A94B438 - A94B517 - A96T365 <p>Fixed</p> <ul style="list-style-type: none"> - Restoring device configuration after hex file download. <p>New feature</p> <ul style="list-style-type: none"> - Device trim data check before code hex programming - Setup our OCD debugging DLL to KEIL ("Tools.ini") automatically during installation / uninstallation.
V2.034.00	2018.12. 5.Wed	<p>Added device(s) :</p> <ul style="list-style-type: none"> - AL4000 - A96L322 - A96G174 - A94Q116 - A94B428 <p>Fixed</p> <ul style="list-style-type: none"> - A96R150 was hidden device → open - Global variable window → Save/Load for each project
V2.033.00	2018. 7. 2.Mon	<p>Added device(s) :</p> <ul style="list-style-type: none"> - A96G140 - A96R140 - A96R150 - A96R725 - A96L302 <p>New feature</p>

		- Symbolic debugging for IAR output (*.d51)
V2.032.00	2018. 3.26.Mon	Added device(s) : - A96T356 Fixed - Infinite reset message with OCD1 dongle ➔ MC96F6432, MC96F8316
V2.031.06	2018. 1.16.Tue	Fixed - C procedure address range confliction
V2.031.05	2018. 1. 9.Tue	Fixed - Improve connection between OCD1 dongle and target device (OCD1 vs Device initialization)
V2.031.04	2017.12.19.Tue	Fixed - GPIO : Reset default (ex: A96T218) - OCD initialization is not cleared during GPIO(reset) is Low - Add initialize sequence for these devices
V2.031.01	2017.11.24.Fri	Added device(s) : - A94B316
V2.031.00	2017.11.16.Thu	Added device(s) : - A96R739 Added features - Show CPU instruction bug in HEX download dialog box - M8051 : PUSH SP - CM8051 : PUSH SP, POP SP, DA A
V2.030.00	2017. 9.15.Fri	Add - Add A94B114 to KEIL plug-in Modification - A96R136 Lock / Unlock
V2.029.00	2017. 8. 10.Thu	Fixed - A94B114 real time monitoring (XDATA) - A96T346 : bulk erase include pre-program - A97C450 : bulk erase exclude user configuration restoring Modification

		<ul style="list-style-type: none"> - Remove RUN Time display because following devices does not include it - A96T316/326/336/346 - MC96F1206 <p>Added device(s) :</p> <ul style="list-style-type: none"> - A96L312 - A96T346 - MC97F6108M
V2.028.00	2017. 4.10.Mon	<p>Changed features</p> <ul style="list-style-type: none"> - Expand dump display cell width - Expand register display cell width - Do not reset the target MCU when it is attached. <p>Added feature</p> <ul style="list-style-type: none"> - A94B114 configuration dialog box <p>Added device(s) :</p> <ul style="list-style-type: none"> - MC97F2664A
V2.027.03	2017. 2.10.Fri	<p>Fixed</p> <ul style="list-style-type: none"> - If KEIL uVision5 C-project used separated output folders, source file mismatching problem occurred.
V2.027.02	2017. 2. 7.Tue	<p>Fixed</p> <ul style="list-style-type: none"> - A94A332B : flash downloader image file was not included
V2.027.01	2017. 1.23.Mon	<p>Changed feature</p> <ul style="list-style-type: none"> - If newer version found, ask to user . (download setup program and execute it). <p>KEIL DLL</p> <ul style="list-style-type: none"> - Add new DLL for code banking (ABOV_OCD_banked.DLL) - Distinguish banked and no banked DLL - Display checksum : no banked DLL only
V2.026.00	2016.12.22.Thu	<p>Changed features</p> <ul style="list-style-type: none"> - Environment file save "Keep code area address" within Download hex dialog box <p>Fixed</p> <ul style="list-style-type: none"> - KEIL DLL : Allow XDATA edit
V2.025.00	2016.12.15.Thu	<p>Added device(s) :</p>

		<ul style="list-style-type: none"> - MC94A332B - A96T228 distinguish from A96T218 - A96R136 <p>Added feature</p> <ul style="list-style-type: none"> - A97C450 option GUI <p>Modification</p> <ul style="list-style-type: none"> - MC96F7864 trim recover
V2.024.00	2016.11. 1.Tue	<p>Changed features</p> <ul style="list-style-type: none"> - 96F6432, 96F7464 option page erase -> byte erase - 96FR364C boot area size - A96T316, A96T218 Disable GPIO /reset input during Flash programming - Distinguish A96T316/326/336
V2.023.01	2016. 8. 4.Thu	<p>Fixed code area range</p> <ul style="list-style-type: none"> - A96T218 : 24KB -> 32KB
V2.023.00	2016. 7.29.Fri	<p>Changed feature</p> <ul style="list-style-type: none"> - A96T218 boot code size
V2.022.01	2016. 4.12.Tue	<p>Fixed devices</p> <ul style="list-style-type: none"> - A96FT218, A96T316 : XDATA edit allowed <p>Changed feature</p> <ul style="list-style-type: none"> - Extend dump window address area width.
V2.022.00	2016. 3.21.Mon	<p>Added device(s) :</p> <ul style="list-style-type: none"> - 96FR364C - 96F8204 - 97C624 - A96T218 - A96T316 <p>Modify 96FT242 option display (/Reset)</p>
V2.021.00	2015.10.14.수	<p>Change IRC backup from trim, not user option</p> <ul style="list-style-type: none"> - 97F6108A - 97F8324H
V2.020.00	2015. 9. 7.Mon	<p>Support newer S/W version check via internet</p> <p>Added device(s) :</p>

		<ul style="list-style-type: none"> - 97F68128A Improve CFG backup <ul style="list-style-type: none"> - 96F6832/7064/7816
V2.019.00	2015. 7.27. Mon	Update code, XDATA every 1 sec during OCD2 device emulation
V2.018.00	2015. 7.23.Thu	Added device(s) : <ul style="list-style-type: none"> - 93F5632 - 96F1206 Modify 97F2664 page erase to byte erase Support global variable save/load function Fixed large/small icon display bug Update IDATA every 1 sec during OCD2 device emulation
V2.017.00	2015. 5. 8.Fri	Added device(s) : <ul style="list-style-type: none"> - 97FG316 - 96F7848C : avoid bulk erase bug Warning notice : device with bit branch bug
V2.016.00	2015. 3.24.Tue	Added device(s) : <ul style="list-style-type: none"> - 96FT1704, 96FK102 - MPW : 94FB704, 97F1202A Fixed symbol download error for MS-Windows8 Support OCD2 isolator dongle
V2.015.01	2014.12.17Wed	Fixed device option SPEC. error <ul style="list-style-type: none"> - Move 96F6809 VAPEN option bit
V2.015.00	2014.12.10. Wed	Support English, Chinese display switching Support 97F60128 double buffering Change device option SPEC. <ul style="list-style-type: none"> - Change 97F6108A default I/O option - Change 96FD316 option - Move 97F60128 /reset, boot size Added device(s) : <ul style="list-style-type: none"> - 96FM408, 96F8104, 96F6809
V2.014.00	2014. 8.12. Tue	Support Windows XP (32bit)
V2.013.00	2014. 7.29. Mon	Added device(s) : <ul style="list-style-type: none"> - 93F5616 - 96FC364, 96FR112C

		<ul style="list-style-type: none"> - 97F8264 : expand option to 4 page
V2.012.00	2014. 3.18. Tue	<p>Change option SPEC.</p> <ul style="list-style-type: none"> - Invert 96FT242 /Reset pin select option
V2.011.00	2013. 9.17. Tue	<p>Add OCD2 I/F voltage selecting option Enable step over function Support CM8051 core Support long length line source file Improve Hex download, select unused area to 0x00/0xFF Added device(s) :</p> <ul style="list-style-type: none"> - 97F2208H EVA - 96F6416P, 96F116C - 96FD316, 96FT242 - 97F6064, 97F6108A, 97F8264
V2.010.00	2013. 8.28. Wed	<p>Change option SPEC.</p> <ul style="list-style-type: none"> - Remove 97F1316 AMP option <p>Added device(s) :</p> <ul style="list-style-type: none"> - 96FT1616, 96FT1504 - 97F60128 - 96FR332B - 97F1316 EVA rev.
V2.009.00	2013. 5.27. Mon	<p>If Hex file size is bigger than device code, remove extra hex Improve OCD2 device OSC measuring Add checksum function Support extended SFR</p> <ul style="list-style-type: none"> - XSP, XSPCR(if device embedded it) <p>Added device(s) :</p> <ul style="list-style-type: none"> - 93F5516 - 96FR116B, 96FR364B - 96F6508A, 96FB504 - 97F38128 test device - 97F1316 EVA - 97F2208H EVA MPW - MCE8112
V2.008.00	2012. 9.18. Tue	<p>Fixed dump window</p> <ul style="list-style-type: none"> - Scroller offset
V2.007.00	2012. 8. 6. Mon	<p>Disable step over function</p>

		<ul style="list-style-type: none"> - It is still unstable Omit duplicate source line number
V2.006.00	2012. 7.17. Tue	Environment file name use Mac address Check Server based OS environment
V2.005.00	2012. 7.12. Thu	Fixed Cypress F/W downloader
V2.004.00	2012. 7.10. Tue	Improve readability of OCD dongle initialize dialog box Support symbol endian <ul style="list-style-type: none"> - Big endian : OMF, OMF2 - Little endian : CDB Improve disassemble window <ul style="list-style-type: none"> - Support mouse wheel scroll - Add vertical scroll bar
V2.003.00	2012. 6.14. Thu	Fixed RAM break dialog popup when using OCD1 dongle
V2.002.00	2012. 6. 8. Fri	Improve I/F with low freq. target
V2.001.00	2012. 6. 7. Thu	Improve time delay function Added device(s) : <ul style="list-style-type: none"> - ADC2011
V2.000.00	2012. 5.25. Fri	Support OCD1 and OCD2 dongle First released version

Device list

Series	Devices			
MC/A93	MC93CV401 MC93F5508 MC93F5516	MC93F5508B MC93F5616	MC93F5509 MC93F5632	
MC/A94	MC94A332 MC94F1202A MC94FB204 MC94PU20 A94B114 A94B316 A94B391 A94B428 A94B517 A94B920 A94P137 A94Q116 A94Q427	MC94FB704 A94B336 A94B438 A94P829 A94Q216	A94B346 A94B458 A94P830	A94B361
MC/A95	MC95FG0128 MC95FG104 MC95FR332 MC95FT081	MC95FG204 MC95FR364	MC95FG308	
MC/A96	MC96F1206 MC96F4548 MC96F5216 MC96F6416P MC96F6508A MC96F7064 MC96F7848C MC96F8104 MC96FB504EVA MC96FC364	MC96F5304 MC96F6432 MC96F6509 MC96F7616A MC96F7864 MC96F7864S MC96F8204 MC96FC864 MC96FC864A	MC96F6432P MC96F6832 MC96F7816 MC96F7816S MC96F8316 MC96F8316P	

	MC97F6108A MC97F6108M MC97F6208 MC97F68128A MC97F8264 MC97FG316 A97C450 A97C624	MC97F8324H		
Etc	MC91CS801	MCE811	MH2E23N	AL4000