

# Nu-Link Driver for Keil MDK Revision History

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## 1 Revision History

Version	Release Date	Description
3.05	2020/12/4	<ul style="list-style-type: none"> <li>Added supported microcontroller: <ul style="list-style-type: none"> <li>NuMicro 8051 Family: MS51EB0AE.</li> </ul> </li> </ul>
3.04	2020/9/24	<ul style="list-style-type: none"> <li>Added supported microcontroller: <ul style="list-style-type: none"> <li>NuMicro M0 Family: M031TE3AE.</li> <li>NuMicro M23 Family: M2351SFSIAAP.</li> </ul> </li> </ul>
3.03	2020/7/17	<ul style="list-style-type: none"> <li>Added supported microcontroller: <ul style="list-style-type: none"> <li>NuMicro M0 Family: NUC131LC2AEU, NUC131SC2AEU, NUC131LD2AEU, NUC131SD2AEU, NUC029MDE, M030FD2AE, NM18307Y, M071 series, M030G series, M0A21 series, M0515, NM1240 and N569J series.</li> <li>NuMicro M23 Family: NDA102SD, M258, M2354 series.</li> <li>NuMicro M4 Family: M487KMCAN, M471 series.</li> <li>NuMicro 8051 Family: ML56 series.</li> </ul> </li> <li>KEIL software pack upgrade to v1.3.9 (Add M071, M0A21, M030G, M258, M471, NM1240) and cdb file.</li> <li>Supported target chip auto detection.</li> </ul>
3.02	2020/2/1	<ul style="list-style-type: none"> <li>Added supported microcontroller: <ul style="list-style-type: none"> <li>NuMicro M4 Family: M48x8AE, M48xCAE, M479 series and M487KMCAN.</li> <li>NuMicro M0 Family: M031BTYE3AN, M030TD2AE, M030LD2AE, M031BTYD2AN, M058MDE, NM18202S, NM1232D, NM1220EBK0, NM1232Y.</li> </ul> </li> </ul>
3.01	2019/9/30	<ul style="list-style-type: none"> <li>Supported NUC1311, M032C/D for NuMicro M0 series.</li> <li>Supported MR63 for NuMicro M23 series.</li> </ul>
3.00	2019/5/3	<ul style="list-style-type: none"> <li>Added TF5100/ M031 (256/512 KB) for Cortex M0 series.</li> <li>Added M261 for Cortex M23 series.</li> <li>Supported Nu-Link2 ICE adapter.</li> </ul>
2.06	2019/02/26	<ul style="list-style-type: none"> <li>Cortex-M <ul style="list-style-type: none"> <li>Supported M480LD for NuMicro M4 series.</li> <li>Supported NM1230 for Motor MCU.</li> <li>Added part number NUC029KGE/NUC029TAE for NuMicro M0 series.</li> </ul> </li> <li>C51 <ul style="list-style-type: none"> <li>Supported ML51/MS51 for NuMicro 8051 series.</li> <li>Added PinView plug-in.</li> </ul> </li> </ul>
2.05	2018/09/06	<ul style="list-style-type: none"> <li>Cortex-M <ul style="list-style-type: none"> <li>Supported Nu-Link2 and NuTrace.</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Supported NUC029DE/EE/GE, NUC2201, NUC1261, NDA102, M031, NM1230 for NuMicro M0 series.</li> <li>- Supported M4521 for NuMicro M4 series.</li> <li>- Added "Nuvoton Device Family Pack" of MDK5 in the installer, you must install "Nuvoton Device Family Pack" if you are using KEIL MDK Nuvoton edition.</li> <li>• C51 <ul style="list-style-type: none"> <li>- Supported Nu-Link2 and NuTrace.</li> </ul> </li> </ul>
<b>2.04.6725</b>	<b>2018/04/03</b>	<ul style="list-style-type: none"> <li>• Cortex-M <ul style="list-style-type: none"> <li>- Improved download performance around 10~30%.</li> <li>- Enabled secure boot option for M480 series.</li> </ul> </li> <li>• C51 <ul style="list-style-type: none"> <li>- Added .ini file under project directory to save user configurations.</li> <li>- Supported SFR Page Selection and SPROM mapping.</li> </ul> </li> </ul>
<b>2.03.6674</b>	<b>2017/12/11</b>	<ul style="list-style-type: none"> <li>• Supported M2351 for NuMicro M23 series.</li> <li>• Merged Nu-Link KEIL C51 driver.</li> </ul>
<b>2.02.6629</b>	<b>2017/06/23</b>	<ul style="list-style-type: none"> <li>• Supported NuConsole, it can show printf log on screen via SWD interface. Please check "NuConsole Plug-in" section of user manual in installation directory.</li> <li>• Supported Mini57 for NuMicro M0 series.</li> <li>• Supported M480 for NuMicro M4 series.</li> <li>• Supported I94000 for NuVoice series.</li> </ul>
<b>2.01.6592</b>	<b>2017/01/13</b>	<ul style="list-style-type: none"> <li>• Supported NUC121, NUC125, NUC126, M0564, NM1810 and I91200 series.</li> <li>• Enable SRAM access less than 0x20000000 of general chip type.</li> </ul>
<b>2.00.6561</b>	<b>2016/07/22</b>	<ul style="list-style-type: none"> <li>• Supported ISD9032 for NuVoice series.</li> <li>• Updated SFR file of NM1120, NM1330, NM1820, Nano103 and N570 for register display.</li> <li>• Fixed the issue that can't find FLM path of M451 40K and N570 series.</li> <li>• Fixed the issue that can't erase SPROM.</li> </ul>
<b>1.31.6535</b>	<b>2016/02/01</b>	<ul style="list-style-type: none"> <li>• Supported Nano103, NM1120, NM1330, NM1820 for NuMicro M0 series.</li> <li>• Supported M4TK for NuMicro M4 series.</li> <li>• Supported N575, N576 and N570 for NuVoice series.</li> <li>• Updated SFR file of Mini58DE, M451 and NUC505 for register display.</li> <li>• Supported spin button edition of data flash.</li> <li>• Added the selection of connect type (connect normal and connect under reset).</li> <li>• Modified the behavior of option "memory verify code" in "Debug" tab. If checked and downloaded code to SRAM, it will do code verification.</li> </ul>

		<ul style="list-style-type: none"> <li>Supported breakpoint setting and memory window periodically updating while the CPU is running.</li> <li>Supported data and conditional breakpoint functions completely.</li> </ul>
<b>1.30.6491</b>	<b>2015/07/21</b>	<ul style="list-style-type: none"> <li>NUC230/240AE: Supported 8 KB LDROM (4 KB in previous version).</li> <li>Mini58: Supported 2.5 KB LDROM (2 KB in previous version).</li> <li>Nano112: Fixed ICE connection failed when target chip is in Power-down mode.</li> <li>Supported Mini55LDE, Mini55ZDE for NuMicro M0 series.</li> <li>NUC100, M051: Supported to keep previous Config0[10] value after whole chip erase.</li> <li>Renamed NUC123BE to NUC123AE.</li> </ul>
<b>1.29.6425</b>	<b>2015/03/27</b>	<ul style="list-style-type: none"> <li>Improved user interface to be resizable and scrollable.</li> <li>Increased NUC505 download speed 3 times in 1 MHz ICE clock.</li> <li>Replaced ICE clock 16 MHz with 12 MHz for compatibility issue.</li> <li>Added part number: NUC220LE3AE.</li> <li>Supported M0519, NM1320 and Mini58 for NuMicro M0 series.</li> <li>Provided an option to install Bulk USB driver when Nu-Link driver installation completed.</li> </ul>
<b>1.28.6386</b>	<b>2015/01/14</b>	<ul style="list-style-type: none"> <li>Supported USB Bulk mode which can improve downloading and programming speed on Win7.</li> <li>Added part number: NUC120LD2DE.</li> <li>Supported NUC029 for NuMicro M0 series.</li> <li>Fixed Configure Setting dialog GUI for Nano102/112 series.</li> </ul>
<b>1.27.6340</b>	<b>2014/9/29</b>	<ul style="list-style-type: none"> <li>Supported NUC505 for NuMicro M4 series.</li> <li>Added part numbers: M4LEDRG6AE, M4LEDRE6AE, M4LEDLG6AE, M4LEDLE6AE.</li> <li>Added part number: NUC100VE3DE.</li> </ul>
<b>1.26.6314</b>	<b>2014/07/21</b>	<ul style="list-style-type: none"> <li>Supported M0518 for NuMicro M0 series.</li> <li>Added M452 and M453 part number for M451 series.</li> </ul>
<b>1.25.6287</b>	<b>2014/05/22</b>	<ul style="list-style-type: none"> <li>Supported NUC131 for NuMicro M0 series.</li> <li>Supported M451 for NuMicro M4 series.</li> <li>Supported ISD9300 for ISD series.</li> <li>Supported one computer can be connected to 10 Nu-Link devices simultaneously.</li> <li>Supported PinView function which can help user to debug and observe pin status on a user friendly GUI.</li> <li>Added data breakpoint support.</li> <li>Renamed the part number MT530 to NM1530.</li> </ul>
<b>1.24.6211</b>	<b>2014/01/16</b>	<ul style="list-style-type: none"> <li>Supported Nano112AN and AU9110 for NuMicro M0 series.</li> <li>Added chip support table in KEIL menu: Help -&gt; Open Books Window</li> </ul>

		-> Tools User's Guide -> Nu-Link Release Notes.
<b>1.23.6103</b>	<b>2013/10/25</b>	<ul style="list-style-type: none"> <li>Supported M051DN, M051DE, Mini51DE, NUC100EN, NUC200AE, MT500BE for NuMicro M0 series.</li> <li>Supported NUC442/472 for NuMicro M4 series.</li> </ul>
<b>1.22.6040</b>	<b>2013/07/09</b>	<ul style="list-style-type: none"> <li>Supported M058SAN, M051DN, NANO100AN and MINI51BN series.</li> <li>Enabled user to edit core registers R0-R14 in KEIL registers panel.</li> <li>Added an error message to terminate the download process if image size is larger than APROM size.</li> <li>Added the boot select options "APROM (LDROM visible)" and "LDROM (APROM visible)" for NuMicro series chips.</li> <li>Fixed the bug that selecting NUC1xx series and BOD set to 2.7V, and entering Debug mode will cause Keil crash.</li> </ul>
<b>1.21.5905</b>	<b>2012/12/27</b>	<ul style="list-style-type: none"> <li>Fixed the display of 68k and 36k flash size.</li> <li>Updated some naming and grouping of register.</li> <li>Updated the database in target option.</li> </ul>
<b>1.20.5881</b>	<b>2012/12/19</b>	<ul style="list-style-type: none"> <li>Separated NUC123 registers from NUC1xx.</li> <li>Enabled the DFVSEN bit in config0.</li> <li>Modified NUC1xxDN series config dialog header.</li> <li>Removed the clock filter option from config file.</li> <li>Added config0 and config1 value display in NUC100AN config dialog window.</li> <li>Supported registers display of NUC100DN/NUC200AN series.</li> <li>Updated register contents of M051CN series.</li> </ul>
<b>1.19.5786</b>	<b>2012/10/24</b>	<ul style="list-style-type: none"> <li>Supported NUC100DN, NUC123, NUC200, NANO100BN, MT500, MINI51BN and M051CN series.</li> <li>Added "System View Description" in the driver installer.</li> <li>Modified the number of UART in NUC100RE3AN NUC100RD3AND to 2.</li> <li>Integrated Viewer Tool.</li> </ul>
<b>1.18.5320</b>	<b>2011/11/17</b>	<ul style="list-style-type: none"> <li>Supported C51 section in TOOLS.INI.</li> </ul>
<b>1.17.5218</b>	<b>2011/08/11</b>	<ul style="list-style-type: none"> <li>Supported NANO100 and MINI51 series.</li> <li>Supported to select multiple Nu-Links.</li> <li>Renamed "Nu-Link Debugger" to "Nuvoton Nu-Link M0 Debugger".</li> <li>Added a debug option "Not reset".</li> <li>Updated to not to show firmware update dialog if Nu-Link firmware is compatible.</li> <li>Fixed bugs about error when writing M051's LDROM.</li> <li>Updated register definition for NUC100 CN.</li> </ul>
<b>1.05.5008</b>	<b>2011/05/04</b>	<ul style="list-style-type: none"> <li>Supported M051 BN and NUC100 CN series.</li> </ul>

		<ul style="list-style-type: none"> <li>Changed "external 12 MHz crystal clock" to "4-24 MHz".</li> <li>Removed Simplified Chinese documents for Traditional Chinese installer.</li> <li>Supported LED indication for USB/Target power.</li> <li>Supported to adjust target power by Nu-Link pro.</li> <li>Supported to debug the code around semihosting BKPT.</li> </ul>
<b>1.03.4228</b>	<b>2010/12/08</b>	<ul style="list-style-type: none"> <li>Supported NUC122 series.</li> <li>Fixed a bug to avoid Keil IDE lock in step debugging.</li> <li>Supported semihosting command SYS_READ.</li> <li>Fixed a bug to drive target chip to run when connected.</li> <li>Fixed a bug to avoid crash when stopping debug.</li> <li>Updated NUC100 registers script.</li> <li>Supported to check update from network.</li> </ul>
<b>1.02.3814</b>	<b>2010/04/20</b>	<ul style="list-style-type: none"> <li>Release primary version.</li> </ul>

## 2 Supported Debugger and Programmer

Debugger and Programmer	Device Type	Supported Product
Nu-Link2-Pro	Stand-alone	NuMicro 8051 (1T) / M0 / M23 / M4 Family
Nu-Link-Pro	Stand-alone	NuMicro 8051 (1T) / M0 / M23 / M4 Family
Nu-Link	Stand-alone	NuMicro 8051 (1T) / M0 / M23 / M4 Family
Nu-Link2-Me	Attached to NuMicro EVB	NuMicro 8051 (1T) / M0 / M23 / M4 Family
Nu-Link-Me	Attached to NuMicro EVB	NuMicro 8051 (1T) / M0 / M23 / M4 Family



## 3 Supported Microcontroller

Product Line	Series	Part Number
NuMicro® 8051 Family	MS51	MS51BA9AE, MS51DA9AE, MS51XB9AE, MS51XB9BE, MS51FB9AE, MS51FC0AE, MS51XC0BE, MS51EC0AE, MS51TC0AE, MS51PC0AE, MS51EB0AE
	ML51	ML51BB9AE, ML51DB9AE, ML51FB9AE, ML51OB9AE, ML51XB9AE, ML51EB9AE, ML51UB9AE, ML51PB9AE, ML51TB9AE, ML51EC0AE, ML51UC0AE, ML51PC0AE, ML51TC0AE, ML51TD1AE, ML51LD1AE, ML51SD1AE, ML54MD1AE, ML54LD1AE, ML54SD1AE, ML56MD1AE, ML56LD1AE, ML56SD1AE
	N76E003	N76E003AT20, N76E003AS20, N76E003AQ20, N76E003BQ20, N76E003CQ20
	N76E616	N76E616AL48, N76E616AF44, N76E616AM44
	N76E885	N76E885AT28, N76E885AT20, N76E885AQ20, N76E885AS28
NuMicro® M0 Family	Mini51	MINI51LAN, MINI51ZAN, MINI51TAN, MINI52LAN, MINI52ZAN, MINI52TAN, MINI54LAN, MINI54ZAN, MINI54TAN, MINI51LDE, MINI51QDE, MINI51ZDE, MINI51TDE, MINI51FDE, MINI52LDE, MINI52QDE, MINI52ZDE, MINI52TDE, MINI52FDE, MINI54LDE, MINI54QDE, MINI54ZDE, MINI54TDE, MINI54FDE, MINI54FHC
	Mini55	MINI55LDE, MINI55ZDE, MINI55TDE
	Mini57	MINI57EDE, MINI57FDE, MINI57XDE, MINI57TDE
	Mini58	MINI58FDE, MINI58LDE, MINI58QDE, MINI58TDE, MINI58ZDE
	M030G	M030GGD1AE, M030GTD1AE, M030GGC1AE, M030GTC1AE M030GGC0AE, M030GTC0AE
	M030	M030TD2AE, M030LD2AE, M030FD2AE
	M031	M031BTYD2AN, M031BTYE3AN, M031BTY, M031LE3AE, M031SE3AE, M031TE3AE, M031TD2AE, M031LD2AE, M031LC2AE, M031SD2AE, M031SC2AE, M031FC1AE, M031EC1AE, M031TC1AE, M031FB0AE, M031EB0AE, M031TB0AE, M031SIAAE, M031KIAAE, M031LG8AE, M031SG8AE, M031KG8AE, M031LG6AE, M031SG6AE, M031KG6AE
	M032	M032LE3AE, M032SE3AE, M032SIAAE, M032KIAAE, M032LG8AE, M032SG8AE, M032KG8AE, M032LG6AE, M032SG6AE, M032KG6AE, M032TD2AE, M032LD2AE, M032LC2AE, M032FC1AE, M032EC1AE, M032TC1AE
	M051	M052LAN, M052ZAN, M054LAN, M054ZAN, M058LAN, M058ZAN, M0516LAN, M0516ZAN, M052LBN, M052ZBN, M054LBN, M054ZBN, M058LBN, M058ZBN, M0516LBN, M0516ZBN, M052LDN, M052ZDN, M054LDN, M054ZDN, M058LDN, M058ZDN, M0516LDN, M0516ZDN, M052LDE, M052ZDE, M054LDE, M054ZDE, M058LDE, M058ZDE, M058MDE, M0516LDE, M0516ZDE
	M0515	M0515LDE
	M0518	M0518LD2AE, M0518LC2AE, M0518SD2AE, M0518SC2AE
	M0519	M0519LD3AE, M0519LE3AE, M0519SD3AE, M0519SE3AE, M0519VE3AE

<b>M0564</b>	M0564LE4AE, M0564LG4AE, M0564SE4AE, M0564SG4AE, M0564VG4AE
<b>M058S</b>	M058SLAN, M058SZAN, M058SSAN, M058SFAN
<b>M071</b>	M071MC2AE, M071MD2AE, M071R1D3AE, M071R1E3AE, M071SD3AE, M071SE3AE, M071QE4AE, M071QG4AE, M071VG4AE
<b>M0A21</b>	M0A21OB1AC, M0A21OC1AC, M0A21EB1AC, M0A21EC1AC, M0A23OC1AC, M0A23EC1AC
<b>NUC029</b>	NUC029NAN, NUC029LAN, NUC029TAN, NUC029CIG1, NUC029ZAN, NUC029TAE, NUC029FAE, NUC029LDE, NUC029SDE, NUC029MDE, NUC029LEE, NUC029SEE, NUC029LGE, NUC029SGE, NUC029KGE
<b>NUC100</b>	NUC100LE3AN, NUC100LD3AN, NUC100RE3AN, NUC100RD3AN, NUC100VE3AN, NUC100VD3AN, NUC100VD2AN, NUC100LE3DN, NUC100LD3DN, NUC100LD2DN, NUC100LD1DN, NUC100LC1DN, NUC100RE3DN, NUC100RD3DN, NUC100RD2DN, NUC100RD1DN, NUC100RC1DN, NUC100VE3DN, NUC100VD3DN, NUC100VD2DN, NUC100VE3DE, NUC120LE3AN, NUC120LD3AN, NUC120RE3AN, NUC120RD3AN, NUC120LE3AN, NUC120VE3AN, NUC120VD3AN, NUC120VD2AN, NUC120LE3DN, NUC120LD3DN, NUC120LD2DN, NUC120LD1DN, NUC120LC1DN, NUC120VE3DN, NUC120VD3DN, NUC120VD2DN, NUC120RE3DN, NUC120RD3DN, NUC120RD2DN, NUC120RD1DN, NUC120RC1DN, NUC120LD2DE
<b>NUC121</b>	NUC121ZC2AE, NUC121LC2AE, NUC121SC2AE, NUC121WC2AE, NUC121Y25CN
<b>NUC122</b>	NUC122LD2AN, NUC122LC1AN, NUC122SD2AN, NUC122SC1AN, NUC122ZD2AN, NUC122ZC1AN, NUC122ZD2DN, NUC122LD2DN, NUC122SD2DN, NUC122ZC1DN, NUC122LC1DN, NUC122SC1DN
<b>NUC123</b>	NUC123SC2AN1, NUC123SD4AN0, NUC123LC2AN1, NUC123LD4AN0, NUC123ZC2AN1, NUC123ZD4AN0, NUC123SC2AE1, NUC123SD4AE0, NUC123LC2AE1, NUC123LD4AE0, NUC123ZC2AE1, NUC123ZD4AE0
<b>NUC125</b>	NUC125ZC2AE, NUC125LC2AE, NUC125SC2AE
<b>NUC126</b>	NUC126LE4AE, NUC126LG4AE, NUC126SE4AE, NUC126SG4AE, NUC126VG4AE, NUC126NE4AE
<b>NUC1261</b>	NUC1261LE4AE, NUC1261LG4AE, NUC1261SE4AE, NUC1261SG4AE
<b>NUC130</b>	NUC130LE3CN, NUC130LD2CN, NUC130LC1CN, NUC130RE3CN, NUC130RD2CN, NUC130RC1CN, NUC130VE3CN
<b>NUC131</b>	NUC131LD2AE, NUC131LC2AE, NUC131SD2AE, NUC131SC2AE, NUC131LD2AEU, NUC131LC2AEU, NUC131SD2AEU, NUC131SC2AEU
<b>NUC1311</b>	NUC1311LD2AE, NUC1311LC2AE
<b>NUC140</b>	NUC140LE3CN, NUC140LD2CN, NUC140LC1CN, NUC140RE3CN, NUC140RD2CN, NUC140RC1CN, NUC140VE3CN
<b>NUC200</b>	NUC200LE3AN, NUC200LD2AN, NUC200LC2AN, NUC200VE3AN, NUC200SE3AN, NUC200SD2AN, NUC200SC2AN, NUC220LE3AN, NUC220LD2AN, NUC220LC2AN, NUC220VE3AN, NUC220SE3AN, NUC220SD2AN, NUC220SC2AN
<b>NUC2201</b>	NUC2201LE3AE, NUC2201SE3AE

	<b>NUC230</b>	NUC230LC2AE, NUC230LD2AE, NUC230LE3AE, NUC230SC2AE, NUC230SD2AE, NUC230SE3AE, NUC230VE3AE
	<b>NUC240</b>	NUC240LC2AE, NUC240LD2AE, NUC240LE3AE, NUC220LE3AE, NUC240SC2AE, NUC240SD2AE, NUC240SE3AE, NUC240VE3AE
	<b>Nano100</b>	Nano100ZD3AN, Nano100ZD2AN, Nano100VD3AN, Nano100VD2AN, Nano100SD3AN, Nano100SD2AN, Nano100LD3AN, Nano100LD2AN, Nano100ZC2AN, Nano100SC2AN, Nano100LC2AN, Nano100KE3BN, Nano100SE3BN, Nano100LE3BN, Nano100KD3BN, Nano100SD3BN, Nano100SD2BN, Nano100LD3BN, Nano100LD2BN, Nano100SC2BN, Nano100LC2BN, Nano100NE3BN, Nano100ND3BN, Nano100ND2BN, Nano100WE3BN
	<b>Nano102</b>	Nano102ZB1AN, Nano102ZC2AN, Nano102LB1AN, Nano102LC2AN, Nano102SC2AN
	<b>Nano103</b>	Nano103ZD3AE, Nano103LD3AE, Nano103SD3AE
	<b>Nano110</b>	Nano110KE3BN, Nano110SE3BN, Nano110KD3BN, Nano110KD2BN, Nano110SD3BN, Nano110SD2BN, Nano110KC2BN, Nano110SC2BN, Nano110RC2BN, Nano110RD2BN, Nano110RD3BN
	<b>Nano112</b>	Nano112LB1AN, Nano112LC2AN, Nano112SB1AN, Nano112SC2AN, Nano112RB1AN, Nano112RC2AN, Nano112VC2AN
	<b>Nano120</b>	Nano120VD3AN, Nano120VD2AN, Nano120SD3AN, Nano120SD2AN, Nano120LD3AN, Nano120LD2AN, Nano120SC2AN, Nano120LC2AN, Nano120ZD3AN, Nano120ZD2AN, Nano120ZC2AN, Nano120KE3BN, Nano120SE3BN, Nano120LE3BN, Nano120KD3BN, Nano120SD3BN, Nano120SD2BN, Nano120LD3BN, Nano120LD2BN, Nano120SC2BN, Nano120LC2BN
	<b>Nano130</b>	Nano130VD3AN, Nano130KE3BN, Nano130SE3BN, Nano130KD3BN, Nano130KD2BN, Nano130SD3BN, Nano130SD2BN, Nano130KC2BN, Nano130SC2BN
	<b>NDA102</b>	NDA102EC1, NDA102FC1, NDA103EC1, NDA103FC1, NDA102SD2
<b>NuMicro® M23 Family</b>	<b>M251</b>	M251FC2AE, M251EC2AE, M251ZC2AE, M251SC2AE, M251LC2AE, M251SD2AE, M251LD2AE, M251ZD2AE, M251KE3AE, M251SE3AE, M251LE3AE, M251KG6AE, M251SG6AE, M251LG6AE, M252FC2AE, M252EC2AE, M252ZC2AE, M252SC2AE, M252LC2AE, M252SD2AE, M252LD2AE, M252ZD2AE, M252KE3AE, M252SE3AE, M252LE3AE, M252KG6AE, M252SG6AE, M252LG6AE, M254SD3AE, M254SE3AE, M254PD3AE, M254PE3AE, M254KD3AE, M254KE3AE, M256SD3AE, M256SE3AE, M256PD3AE, M256PE3AE, M256KD3AE, M256KE3AE, M258SD3AE, M258SE3AE, M258PD3AE, M258PE3AE, M258KD3AE, M258KE3AE, M253ZE3AE, M253LE3AE, M253LD3AE
	<b>M261</b>	M261KIAAE, M261SIAAE, M261ZIAAE, M262KIAAE, M262SIAAE, M262ZIAAE, M263KIAAE, M263SIAAE, M263ZIAAE
	<b>M2351</b>	M2351KIAAE, M2351SIAAE, M2351ZIAAE, M2351SFSIAAP
	<b>M2354</b>	M2354ES, M2354KJFAE, M2354SJFAE, M2354LJFAE
<b>NuMicro® M4 Family</b>	<b>M451</b>	M451VG6AE, M451VE6AE, M451RG6AE, M451RE6AE, M451LG6AE, M451LE6AE, M451RD3AE, M451RC3AE, M451LD3AE, M451LC3AE, M452VG6AE, M452VE6AE, M452RG6AE, M452RE6AE, M452LG6AE, M452LE6AE, M452RD3AE, M452LD3AE, M452LC3AE, M453VG6AE, M453VE6AE, M453RG6AE, M453RE6AE, M453LG6AE,

		M453LE6AE, M453VD3AE, M453RD3AE, M453LD3AE, M453LC3AE, M451MLG6AE, M451MLE6AE, M451MSD3AE, M451MSC3AE, M451MLD3AE, M451MLC3AE, M4LEDRG6AE, M4LEDRE6AE, M4LEDLG6AE, M4LEDLE6AE, M4TKVG6AE, M4TKVE6AE, M4TKRG6AE, M4TKRE6AE, M4TKLG6AE, M4TKLE6AE
	<b>M4521</b>	M4521SE6AE, M4521LE6AE
	<b>M471</b>	M471KI8AE, M471VI8AE, M471VG7AE, M471QI8AE, M471QG7AE, M471R1E6AE, M471R1D6AE, M471SE6AE, M471SD6AE, M471MD6AE
	<b>M479</b>	M479SG8AEE, M479LG8AEE, M479NG8AEE
	<b>M480</b>	M481SIDAE, M481LIDAE, M481ZIDAE, M482KIDAE, M482SIDAE, M482LIDAE, M482ZIDAE, M483KIDAE, M483SIDAE, M485KIDAE, M485SIDAE, M485LIDAE, M487JIDAE, M487KIDAE, M487SIDAE, M487KMCAN, M481SGCAE, M481SGCAE2A, M481LGCAE, M481LE8AE, M481ZGCAE, M481ZE8AE, M482KGCAE, M482SGCAE, M482SE8AE, M482LGCAE, M482LE8AE, M482ZGCAE, M482ZE8AE, M483KGCAE, M483SGCAE, M483SE8AE, M483KGCAE2A, M483SGCAE2A
	<b>NUC400</b>	NUC472HI8AE, NUC472HG8AE, NUC472JI8AE, NUC472JG8AE, NUC472KI8AE, NUC472KG8AE, NUC472VI8AE, NUC472VG8AE, NUC442JI8AE, NUC442JG8AE, NUC442KI8AE, NUC442KG8AE, NUC442VI8AE, NUC442VG8AE, NUC442RI8AE, NUC442RG8AE
	<b>NUC505</b>	NUC505DLA, NUC505YLA, NUC505YLA2Y, NUC505DSA, NUC505DL13Y, NUC505DS13Y, NUC505YO13Y
<b>Motor Control</b>	<b>NM1100</b>	NM1100XBAE, NM1100FBAE
	<b>NM1120</b>	NM1120FC1AE, NM1120EC1AE, NM1120XC1AE, NM1120ZC1AE
	<b>NM1200</b>	NM1200LBAE, NM1200TBAE, NM1200ZBAE
	<b>NM1230</b>	NM1234D, NM1232D, NM1220EBK0, NM1234Y, NM1232Y, NM1233D, NM1233Y
	<b>NM1240</b>	NM1243D48, NM1243Y48, NM1243Y NM1244D48, NM1244Y48, NM1244Y
	<b>NM1320</b>	NM1320LC2AE
	<b>NM1330</b>	NM1330LC1AE, NM1330LD2AE
	<b>NM1500</b>	NM1510LC1AE, NM1520LC2AE, NM1520LD2AE, NM1520RC2AE, NM1520RD2AE, NM1530VD3AE, NM1530VE3AE, NM1530LE3AE
	<b>NM1810</b>	NM18100Y, NM18101Y, NM18105Y, NM18107Y, NM1817NT
	<b>NM1820</b>	NM18200S, NM18201S, NM18202S, NM1820ZB0AE, NM18200D, NM18200Y, NM18201Y, NM18202Y
	<b>NM1830</b>	NM18307Y
	<b>TF5100</b>	TF5103D, TF5103Y, TF5102Y
<b>Audio Control</b>	<b>I94000</b>	I94124A, I94123A, I94121A, I94120A, I94114A, I94113A, I94111A, I94110A, I94134A, I94133A, I94131A, I94130A, I94124B, I94123B, I94113B, I94124C, I94123C, I94113C, I94124E, I94124D, I94124P, I94124N, I94124G, I94124S, I94124Z, I94100A, I941R00A
	<b>I9160</b>	ISD9160, ISD9160, ISD9140, ISD9130, ISD9160V, ISD9160I, ISD9160S, ISD9160C,

		ISD9160C2, ISD9160T, ISD9145
	<b>I91300</b>	I91361, I91361C, I91331
	<b>I91200</b>	I91260, I91260C, I91230, I91230C, I91260B, I91260G, I91230G, I91230P
	<b>I91000</b>	I91032F, I91032C, I91032T
	<b>N569S</b>	N569S250, N569S500, N569S750, N569S1K0, N569S1K5, N569S2K0, N569S3K0, N569S4K0, N569S8K0, N569SAK0, N569S251, N569S501, N569S751, N569S1K1, N569S1K6, N569S2K1, N569S3K1, N569S4K1, N569S8K1, N569SAK1, N569SBK2, N569S502, N569SAK2
	<b>N569J</b>	N569J502L, N569J1K0L, N569J2K0L, N569J4K0L
	<b>N570</b>	N570F064, N570C064, N570B12, N570H064, N570HC64
	<b>N570J</b>	N570J08AL, N570J16AL, N570J32AL, N570J04DL, N570J08DL, N570J16DL, N570J32DL, N570J64DL, N570J131GL, N570J256GR, N570J512GR, N570J01GR, N570J08DF, N570J16DF, N570J09DF
	<b>N570S</b>	N570S04A, N570S08A, N570S16A, N570S32A, N570S64A, N570S128, N570SC04, N570SC08, N570SC16, N570SC32, N570SC64, N570SCA2, N570S04B, N570S08B, N570S16B, N570S32B, N570S64B, N570S129, N570SC05, N570SC09, N570SC17, N570SC33, N570SC65, N570SCA3, N570S256, N570S130
	<b>N571</b>	N571P032
	<b>N572</b>	N572F064, N572F065, N572F072, N572C065, N572C072, N572S08A, N572S16A, N572S32A, N572S64A, N572SC08, N572SC16, N572SC32, N572S6C4, N572U08A, N572U16A, N572U32A, N572U64A, N572U128, N572S08B, N572S16B, N572S32B, N572S64B, N572SC09, N572SC17, N572SC33, N572S6C5, N572U08B, N572U16B, N572U32B, N572U64B, N572U129
	<b>N575</b>	N575C145, N575F145, N575A145, N575S08A, N575S16A, N575S32A, N575S64A, N575S08B, N575S16B, N575S32B, N575S64B

## 4 Resources

Website	Details
<a href="#">NuTool</a> on <a href="#">nuvoton.com</a>	<a href="https://www.nuvoton.com/tool-and-software/software-development-tool/">https://www.nuvoton.com/tool-and-software/software-development-tool/</a>
	<ul style="list-style-type: none"> <li>Download the latest NuTool installation file.</li> <li>View the NuTool revision history.</li> </ul>
<a href="#">NuTool</a> on <a href="#">GitHub</a>	<a href="https://github.com/OpenNuvoton/Nuvoton_Tools">https://github.com/OpenNuvoton/Nuvoton_Tools</a>
	<ul style="list-style-type: none"> <li>Check the open source example code of NuTool for easier development.</li> </ul>

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