**ARM® Cortex®- M**

**32-bit Microcontroller**

**NuMicro® Family**

**ISP Programming Tool**

**Revision History**

*The information described in this document is the exclusive intellectual property of  
 Nuvoton Technology Corporation and shall not be reproduced without permission from Nuvoton.*

*Nuvoton is providing this document only for reference purposes of NuMicro® microcontroller based system design. Nuvoton assumes no responsibility for errors or omissions.*

*All data and specifications are subject to change without notice.*

*For additional information or questions, please contact:* [*Nuvoton Technology Corporation*](https://www.nuvoton.com/)*.*

TABLE OF CONTENTS

[1 Revision History 4](#_Toc89692251)

[2 Supported Microcontroller - NuMicro® Family 8](#_Toc89692252)

[3 Supported Microcontroller - NuVoice® Family 14](#_Toc89692253)

[4 Resources 15](#_Toc89692254)

# Revision History

|  |  |  |
| --- | --- | --- |
| **Version** | **Release Date** | **Description** |
| **4.13** | **2024/01/26** | * Added supported seires: * M55M1 series * Added supported microcontroller: * M2L31SG4AE, M2L31SE4AE, M2L31LG4AE, M2L31LE4AE, M2L31LD4AE, M2L31YG4AE, M2L31YE4AE, M2L31YD4AE, M2L31ZE4AE, M2L31ZD4AE, M2L31XD4AE for M2L31 series * Added new USB VID\_0x0416 PID\_0x2009 for Nu-Link2-Me ISP-I2C |
| **4.12** | **2023/10/20** | * Added interfaces: * LIN interface * Wifi interface * BLE interface |
| **4.11** | **2023/08/02** | * Added supported seires: * M2L31 series. * MG51 series * N76S003 * Added supported microcontroller: * M463K3GCAC, M463S3GCAC, M463L3GCAC for M460 series * M253ZE3BE, M253LD3BE, M253LE3BE for M253 series |
| **4.10** | **2022/10/25** | * Added supported seires: * N574 series. * NM1800 series. * NUC1263 series * Added supported microcontroller: * NUC029MDE for NUC029 series * M0A23OC1ACU and M0A23EC1ACU for M0A21 series. |
| **4.09** | **2022/07/19** | * Added new USB VID\_0x0416 PID\_0x2006 for Nu-Link2-Pro (firmware version >= 7380r) |
| **4.07** | **2021/12/06** | * Added supported microcontroller: * NuMicro M0 Family: M031G series, N32F030 series and NM18407Y. * NuMicro M23 Family: NUC1262 series, M256D series and M258G series. * NuMicro M4 Family: M460 series * Added supported new Nu-Link2 USB product ID “0x5203” * Added new programming option for command line mode. * Added SPI programming option. * Added Data Flash programming option. |
| **4.03** | **2020/12/03** | * Added supported microcontroller: * NuMicro M0 Family: NM1240, M030G, M0A21 and M071 series. * NuMicro M23 Family: M253, M258 and M2354 series. * NuMicro M4 Family: M487KMCAN, M471 and M479 series. * NuMicro 8051 Family: ML56 series. * Added SPI programming options. * Added command line function for HID and UART interfaces. |
| **3.05** | **2019/10/16** | * Supported TF5100 for Motor MCU. * Supported M480LD for NuMicro M4 series. * Supported M252 for NuMicro M23 series. * Supported NUC1311 for NuMicro M0 series. * Supported M031G&I for NuMicro M0 series. * Modified DialogConfiguration\_I94000 CONFIG1 reserved bit to 0. * Added lost NUC029NAN flash information in FlashInfo.cpp. * Supported M261 for NuMicro M23 series. * Supported Nu-Link2 ISP-Bridge functionality. * Updated chip database version from V1.0.0.9 to V1.0.0.35 for NuVoice series. * Removed Visual Studio 2008 ISP project file.   The ISPTool samples repository is available on GitLab.  <https://gitlab.com/OpenNuvoton/nuvoton-tools/ISPTool> |
| **2.06** | **2019/03/13** | * Added support for NM1230 series. * Added support for NUC029xGE series. * Added support for M031 series. * Added support for ML51 series. * Added support for NUC1261 series. * Added support for MS51 series. * Added 8051-1T series ISP sample codes. |
| **2.05** | **2018/09/05** | * Added support for M4521 series. * Added M480 USBD High-Speed ISP Sample. * Added support for NUC2201 series. * Added support for NUC029xDE series. * Added support for NUC029xEE series. * Removed entry pin restriction for ISP\_USCI\_UART samples. (NM1120 and Mini57) * Added support for M2351 series. |
| **2.04** | **2018/03/29** | * Added support for M480 series. * Fixed NUC123 external clock bring up issue. * Fixed Mini58 reset failed issue caused by external clock stable bit. * Supplied Visual Studio 2008 ISP project. * Updated User Configuration Options for Nano100AN, Nano103, NUC123 and M051 series. * Added an option to reset and run code in APROM. * Updated NUC100BSP and NUC200BSP to fix USBD driver Zero Flag issue. * Added support for NuVoice chips include I91000, I91200, I94100, ISD9100 and N575 series. * Added support for NM1200\_NM1100 series.   The ISPTool samples repository is available on GitHub and GITEE.  Please check the following link to get the latest update.  <https://github.com/OpenNuvoton/ISPTool>  <https://gitee.com/OpenNuvoton/ISPTool> |
| **2.03** | **2017/06/21** | * Updated Mini51BSP, Mini55BSP, Mini58BSP, Nano100A\_BSP, Nano100B\_BSP, Nano103BSP and NUC472\_442BSP drivers to fix known issues. * Added support for M0564, NUC126 and NUC121 series. * Added backward capability for legacy ISP firmware. * Added support for NUC505 IAP function in MTP mode. * Added an option to specify Data Flash address for 8051 1T series. * Fixed the USB surprise removal issue. * Added support for Mini57 and Nano102\_112 series. |
| **2.00** | **2016/09/01** | * Updated all BSP versions to fix known issue. * Fixed bug in Data Flash programming error for all series. * Fixed bug in CONFIG programming for NUC472\_442 series. * Changed USB PID to 0x3F00. * Supported all M0, M4 and 8051-1T series in ISP Tool. |
| **1.47** | **2015/07/28** | * Supported PC tool and Firmware source code in “(1) Application Program” and “(2) Nuvoton Standard ISP Code” folder. * Supported M0519, NM1500, NM1200, Mini58 and NUC123AE series. * Supported NUC505 IAP function (non-FMC type of ISP). * Updated NUC029xAN firmware to use internal clock. * Fixed the firmware bug “jumping to APROM failed when ISP time-out happened” in NUC472 and ISD9100 series. * Fixed the bug in ISP PC tool for incorrect NUC120LC1DN flash size. * Supported NUC505 I2C Master and I2C Slave ISP firmware. * Supported NUC029xAN UART Master ISP firmware. |
| **1.46** | **2014/11/28** | * Supported NUC472 ISP connected via Ethernet interface. * Supported Mini51X, ISD9100, M45xD and M45xC series. |
| **1.45.1** | **2014/07/31** | * Supported NUC131 and M0518 series. |
| **1.45** | **2014/06/10** | * Added M451 Series and NUC029 support. * Added the form of the hardware connection for COM port or USB interface. * Modified description for Hardware Connection for ‘ISP through COM Port or USB’. |
| **1.44** | **2014/01/20** | * Added Mini51BN, MINI51DE, M051CN, M051DE, NUC200, and Nano112 support. * Added the User Configuration form for M051AN/BN, M051CN/DE, MINI51AN, MINI51BN, MINI51DE, Nano100, Nano112, NUC100, NUC122, NUC123, and NUC200 series. * Updated the project file format to include APROM and Data Flash images file body, not only file path. * Removed “Erase Flag”, which causes Data Flash be erased. Also, updated all ISP firmware to version 2.4. * Provided Nano112 ISP firmware. |
| **1.42.1** | **2012/08/28** | * Added NUC123 support. |
| **1.41.3** | **2011/11/17** | * Modified Data Flash base address error for Nano100 and Mini51 series. |
| **1.41.2** | **2011/08/29** | * Supported Nano100 and Mini51 series. |
| **1.41** | **2011/04/29** | * Supported ISP project file. |
| **1.40** | **2011/03/21** | * Updated Nuvoton Standard ISP Code to v2.3, which Integrated the ‘ISP through COM port’ and ‘ISP through USB’ function for NUC120/140/101, and improved the operation stability. * Added ‘Erase Flag’ for erasing control of Data Flash during ISP operation. * Fixed some application program bugs. |
| **1.32** | **2010/12/08** | * Preliminary version. |

# Supported Microcontroller - NuMicro® Family

|  |  |  |
| --- | --- | --- |
| **Product Line** | **Series** | **Part Number** |
| **NuMicro® 8051 Family** | **MG51** | MG51XB9AE, MG51XB9BE, MG51FB9AE, MG51XC9AE, MG51XC9BE, MG51FC9AE |
| **ML51** | ML51BB9AE, ML51DB9AE, ML51FB9AE, ML51OB9AE, ML51XB9AE, ML51EB9AE, ML51UB9AE, ML51PB9AE, ML51TB9AE, ML51EC0AE, ML51UC0AE, ML51PC0AE, ML51TC0AE, ML51TD1AE, ML51LD1AE, ML51SD1AE |
| **ML54** | ML54MD1AE, ML54LD1AE, ML54SD1AE |
| **ML56** | ML56MD1AE, ML56LD1AE, ML56SD1AE |
| **MS51** | MS51BA9AE, MS51DA9AE, MS51XB9AE, MS51XB9BE, MS51FB9AE, MS51FC0AE, MS51XC0BE, MS51EC0AE, MS51TC0AE, MS51PC0AE, MS51EB0AE |
| **N76E003** | N76E003AT20, N76E003AS20, N76E003AQ20, N76E003BQ20, N76E003CQ20 |
| **N76E616** | N76E616AL48, N76E616AF44, N76E616AM44 |
| **N76E885** | N76E885AT28, N76E885AT20, N76E885AQ20, N76E885AS28 |
| **N76S003** | N76S003AQ20, N76S003AT20 |
| **NuMicro® M0 Family** | **Mini51** | MINI51LAN, MINI51ZAN, MINI51TAN, MINI51LDE, MINI51QDE, MINI51ZDE, MINI51TDE, MINI51FDE |
| **Mini52** | MINI52LAN, MINI52ZAN, MINI52TAN, MINI52LDE, MINI52QDE, MINI52ZDE, MINI52TDE, MINI52FDE |
| **Mini54** | MINI54LAN, MINI54ZAN, MINI54TAN, MINI54LDE, MINI54QDE, MINI54ZDE, MINI54TDE, MINI54FDE, MINI54FHC |
| **Mini55** | MINI55LDE, MINI55ZDE, MINI55TDE |
| **Mini57** | MINI57EDE, MINI57FDE, MINI57XDE, MINI57TDE |
| **Mini58** | MINI58FDE, MINI58LDE, MINI58QDE, MINI58TDE, MINI58ZDE |
| **M029G** | M029GGC0AE |
| **M030** | M030TD2AE, M030LD2AE, M030FD2AE |
| **M030G** | M030GGD1AE, M030GTD1AE, M030GGC1AE, M030GTC1AE, M030GGC0AE, M030GTC0AE |
| **M031** | M031BTYD2AN, M031BTYE3AN, M031LE3AE, M031SE3AE, M031TE3AE, M031TD2AE, M031LD2AE, M031LC2AE, M031SD2AE, M031SC2AE, M031FC1AE, M031EC1AE, M031TC1AE, M031FB0AE, M031EB0AE, M031TB0AE, M031SIAAE, M031KIAAE, M031LG8AE, M031SG8AE, M031KG8AE, M031LG6AE, M031SG6AE, M031KG6AE |
| **M031G** | M031GGD2AE, M031GTD2AE, M031GGC2AE, M031GTC2AE, M031GGC1AE, M031GTC1AE |
| **M032** | M032LE3AE, M032SE3AE, M032SIAAE, M032KIAAE, M032LG8AE, M032SG8AE, M032KG8AE, M032LG6AE, M032SG6AE, M032KG6AE, M032TD2AE, M032LD2AE, M032LC2AE, M032FC1AE, M032EC1AE, M032TC1AE |
| **M051** | M0516LAN, M0516ZAN, M0516LBN, M0516ZBN, M0516LDN, M0516ZDN, M0516LDE, M0516ZDE |
| **M0515** | M0515LDE |
| **M0518** | M0518LD2AE, M0518LC2AE, M0518SD2AE, M0518SC2AE |
| **M0519** | M0519LD3AE, M0519LE3AE, M0519SD3AE, M0519SE3AE, M0519VE3AE |
| **M052** | M052LAN, M052ZAN, M052LBN, M052ZBN, M052LDN, M052ZDN, M052LDE, M052ZDE |
| **M054** | M054LAN, M054ZAN, M054LBN, M054ZBN, M054LDN, M054ZDN, M054LDE, M054ZDE |
| **M0564** | M0564LE4AE, M0564LG4AE, M0564SE4AE, M0564SG4AE, M0564VG4AE |
| **M058** | M058LAN, M058ZAN, M058LBN, M058ZBN, M058LDN, M058ZDN, M058LDE, M058ZDE, M058MDE |
| **M058S** | M058SLAN, M058SZAN, M058SSAN, M058SFAN |
| **M071** | M071MC2AE, M071MD2AE, M071R1D3AE, M071R1E3AE, M071SD3AE, M071SE3AE, M071VG4AE |
| **M0A21** | M0A21OB1AC, M0A21OC1AC, M0A21EB1AC, M0A21EC1AC |
| **M0A23** | M0A23OC1AC, M0A23EC1AC, M0A23OC1ACU, M0A23EC1ACU |
| **NDA102** | NDA102SD2, NDA102UD2, NDA102TD2, NDA102SE3 |
| **NUC029** | NUC029NAN, NUC029LAN, NUC029TAN, NUC029CIG1, NUC029ZAN, NUC029TAE, NUC029FAE, NUC029LDE, NUC029SDE, NUC029LEE, NUC029SEE, NUC029LGE, NUC029SGE, NUC029KGE |
| **NUC100** | NUC100LE3AN, NUC100LD3AN, NUC100RE3AN, NUC100RD3AN, NUC100VE3AN, NUC100VD3AN, NUC100VD2AN, NUC100LE3DN, NUC100LD3DN, NUC100LD2DN, NUC100LD1DN, NUC100LC1DN, NUC100RE3DN, NUC100RD3DN, NUC100RD2DN, NUC100RD1DN, NUC100RC1DN, NUC100VE3DN, NUC100VD3DN, NUC100VD2DN, NUC100VE3DE |
| **NUC120** | NUC120LE3AN, NUC120LD3AN, NUC120RE3AN, NUC120RD3AN, NUC120VE3AN, NUC120VD3AN, NUC120VD2AN, NUC120LE3DN, NUC120LD3DN, NUC120LD2DN, NUC120LD1DN, NUC120LC1DN, NUC120VE3DN, NUC120VD3DN, NUC120VD2DN, NUC120RE3DN, NUC120RD3DN, NUC120RD2DN, NUC120RD1DN, NUC120RC1DN, NUC120LD2DE |
| **NUC121** | NUC121ZC2AE, NUC121LC2AE, NUC121SC2AE, NUC121WC2AE, NUC121Y25CN |
| **NUC122** | NUC122LD2AN, NUC122LC1AN, NUC122SD2AN, NUC122SC1AN, NUC122ZD2AN, NUC122ZC1AN, NUC122ZD2DN, NUC122LD2DN, NUC122SD2DN, NUC122ZC1DN, NUC122LC1DN, NUC122SC1DN |
| **NUC123** | NUC123SC2AN1, NUC123SD4AN0, NUC123LC2AN1, NUC123LD4AN0, NUC123ZC2AN1, NUC123ZD4AN0, NUC123SC2AE1, NUC123SD4AE0, NUC123LC2AE1, NUC123LD4AE0, NUC123ZC2AE1, NUC123ZD4AE0 |
| **NUC125** | NUC125ZC2AE, NUC125LC2AE, NUC125SC2AE |
| **NUC126** | NUC126LE4AE, NUC126LG4AE, NUC126SE4AE, NUC126SG4AE, NUC126VG4AE, NUC126NE4AE |
| **NUC1261** | NUC1261NE4AE, NUC1261LE4AE, NUC1261LG4AE, NUC1261SE4AE, NUC1261SG4AE |
| **NUC130** | NUC130LE3CN, NUC130LD2CN, NUC130LC1CN, NUC130RE3CN, NUC130RD2CN, NUC130RC1CN, NUC130VE3CN |
| **NUC131** | NUC131LD2AE, NUC131LC2AE, NUC131SD2AE, NUC131SC2AE, NUC131LD2AEU, NUC131LC2AEU, NUC131SD2AEU, NUC131SC2AEU |
| **NUC1311** | NUC1311LD2AE, NUC1311LC2AE |
| **NUC140** | NUC140LE3CN, NUC140LD2CN, NUC140LC1CN, NUC140RE3CN, NUC140RD2CN, NUC140RC1CN, NUC140VE3CN |
| **NUC200** | NUC200LE3AE, NUC200LE3AN, NUC200LD2AN, NUC200LC2AN, NUC200VE3AN, NUC200SE3AN, NUC200SD2AN, NUC200SC2AN |
| **NUC220** | NUC220LE3AE,NUC220LE3AN, NUC220LD2AN, NUC220LC2AN, NUC220VE3AN, NUC220SE3AN, NUC220SD2AN, NUC220SC2AN |
| **NUC2201** | NUC2201LE3AE, NUC2201SE3AE |
| **NUC230** | NUC230LC2AE, NUC230LD2AE, NUC230LE3AE, NUC230SC2AE, NUC230SD2AE, NUC230SE3AE, NUC230VE3AE |
| **NUC240** | NUC240LC2AE, NUC240LD2AE, NUC240LE3AE, NUC240SC2AE, NUC240SD2AE, NUC240SE3AE, NUC240VE3AE |
| **Nano100** | 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 |
| **Nano102** | Nano102ZB1AN, Nano102ZC2AN, Nano102LB1AN, Nano102LC2AN, Nano102SC2AN |
| **Nano103** | Nano103ZD3AE, Nano103LD3AE, Nano103SD3AE |
| **Nano110** | Nano110KE3BN, Nano110SE3BN, Nano110KD3BN, Nano110KD2BN, Nano110SD3BN, Nano110SD2BN, Nano110KC2BN, Nano110SC2BN, Nano110RC2BN, Nano110RD2BN, Nano110RD3BN |
| **Nano112** | Nano112LB1AN, Nano112LC2AN, Nano112SB1AN, Nano112SC2AN, Nano112RB1AN, Nano112RC2AN, Nano112VC2AN |
| **Nano120** | Nano120VD3AN, Nano120VD2AN, Nano120SD3AN, Nano120SD2AN, Nano120LD3AN, Nano120LD2AN, Nano120SC2AN, Nano120LC2AN, Nano120ZD3AN, Nano120ZD2AN, Nano120ZC2AN, Nano120KE3BN, Nano120SE3BN, Nano120LE3BN, Nano120KD3BN, Nano120SD3BN, Nano120SD2BN, Nano120LD3BN, Nano120LD2BN, Nano120SC2BN, Nano120LC2BN |
| **Nano130** | Nano130VD3AN, Nano130KE3BN, Nano130SE3BN, Nano130KD3BN, Nano130KD2BN, Nano130SD3BN, Nano130SD2BN, Nano130KC2BN, Nano130SC2BN |
| **NuMicro® M23 Family** | **M2351** | M2351KIAAE, M2351SIAAE, M2351ZIAAE, M2351SFSIAAP, M2351CIAAE |
| **M2354** | M2354ES, M2354KJFAE, M2354SJFAE, M2354LJFAE |
| **M251** | M251FC2AE, M251EC2AE, M251ZC2AE, M251SC2AE, M251LC2AE, M251SD2AE, M251LD2AE, M251ZD2AE, M251KE3AE, M251SE3AE, M251LE3AE, M251KG6AE, M251SG6AE, M251LG6AE |
| **M252** | M252FC2AE, M252EC2AE, M252ZC2AE, M252SC2AE, M252LC2AE, M252SD2AE, M252LD2AE, M252ZD2AE, M252KE3AE, M252SE3AE, M252LE3AE, M252KG6AE, M252SG6AE, M252LG6AE |
| **M253** | M253ZE3AE, M253LE3AE, M253LD3AE, M253ZE3BE, M253LE3BE, M253LD3BE |
| **M254** | M254SD3AE, M254SE3AE, M254KE3AE, M254SD2AE, M254MD3AE, M254KG6AE, M254SG6AE |
| **M256** | M256SE3AE, M256KE3AE, M256SD2AE, M256MD3AE, M256KG6AE, M256SG6AE |
| **M258** | M258SE3AE, M258KE3AE, M258KG6AE, M258SG6AE |
| **M261** | M261KIAAE, M261SIAAE, M261ZIAAE |
| **M262** | M262KIAAE, M262SIAAE, M262ZIAAE |
| **M263** | M263KIAAE, M263SIAAE, M263ZIAAE |
| **M2L31** | M2L31KIDAE, M2L31KGDAE, M2L31SIDAE, M2L31SGDAE, M2L31SG4AE, M2L31SE4AE, M2L31LIDAE, M2L31LGDAE, M2L31LG4AE, M2L31LE4AE, M2L31LD4AE, M2L31YIDAE, M2L31YGDAE, M2L31YG4AE, M2L31YE4AE, M2L31YD4AE, M2L31ZE4AE, M2L31ZD4AE, M2L31CIDAE, M2L31CGDAE, M2L31XD4AE |
| **NUC1262** | NUC1262NE4AE, NUC1262LE4AE, NUC1262SE4AE, NUC1262YE4AE |
| **NUC1263** | NUC1263SD4AE, NUC1263LD4AE, NUC1263ND4AE, NUC1263ZD4AE, NUC1263SD4CE, NUC1263LD4CE, NUC1263ND4CE, NUC1263ZD4CE |
| **NuMicro® M4 Family** | **M451** | M451VG6AE, M451VE6AE, M451RG6AE, M451RE6AE, M451LG6AE, M451LE6AE, M451RD3AE, M451RC3AE, M451LD3AE, M451LC3AE, M451MLG6AE, M451MLE6AE, M451MSD3AE, M451MSC3AE, M451MLD3AE, M451MLC3AE |
| **M452** | M452VG6AE, M452VE6AE, M452RG6AE, M452RE6AE, M452LG6AE, M452LE6AE, M452RD3AE, M452LD3AE, M452LC3AE |
| **M4521** | M4521SE6AE, M4521LE6AE |
| **M453** | M453VG6AE, M453VE6AE, M453RG6AE, M453RE6AE, M453LG6AE, M453LE6AE, M453VD3AE, M453RD3AE, M453LD3AE, M453LC3AE, |
| **M460** | M460KGCAE, M460SGCAE, M460LGCAE, M460YGCAE |
| **M463** | M463KGCAE, M463VGCAE, M463SGCAE, M463LGCAE, M463YGCAE, M463S2GCAC, M463L2GCAC, M463K2GCAC |
| **M467** | M467SJHAE, M467KJHAE, M467JJHAE, M467HJHAE, M467H3KJHAE, M467H3JJHAE, M467SJHAN, M467KJHAN, M467JJHAN, M467HJHAN, M467S2JHAE, M467K2JHAE, M467J2JHAE, M467H2JHAE |
| **M471** | M471KI8AE, M471VI8AE, M471VG7AE, M471R1E6AE, M471R1D6AE, M471SE6AE, M471SD6AE, M471MD6AE, M471CI8AE |
| **M479** | M479SG8AEE, M479LG8AEE, M479NG8AEE |
| **M481** | M481SIDAE, M481LIDAE, M481ZIDAE, M481SGCAE, M481SE8AE, M481SGCAE2A, M481LGCAE, M481LGCAEU, M481LE8AE, M481ZGCAE, M481ZE8AE |
| **M482** | M482KIDAE, M482SIDAE, M482LIDAE, M482ZIDAE, M482KGCAE, M482SGCAE, M482SE8AE, M482LGCAE, M482LE8AE, M482ZGCAE, M482ZE8AE |
| **M483** | M483KIDAE, M483SIDAE, M483KGCAE, M483SGCAE, M483SE8AE, M483KGCAE2A, M483SGCAE2A |
| **M484** | M484KIDAE, M484SIDAE, M484SIDAE2U |
| **M485** | M485KIDAE, M485SIDAE, M485LIDAE, M485YIDAE, M485ZIDAE |
| **M487** | M487JIDAE, M487KIDAE, M487SIDAE, M487KMCAN, |
| **M4LED** | M4LEDRG6AE, M4LEDRE6AE, M4LEDLG6AE, M4LEDLE6AE |
| **M4TK** | M4TKVG6AE, M4TKVE6AE, M4TKRG6AE, M4TKRE6AE, M4TKLG6AE, M4TKLE6AE |
| **NUC442** | NUC442JI8AE, NUC442JG8AE, NUC442KI8AE, NUC442KG8AE, NUC442VI8AE, NUC442VG8AE, NUC442RI8AE, NUC442RG8AE |
| **NUC472** | NUC472HI8AE, NUC472HG8AE, NUC472JI8AE, NUC472JG8AE, NUC472KI8AE, NUC472KG8AE, NUC472VI8AE, NUC472VG8AE |
| **NUC505** | NUC505DLA, NUC505YLA, NUC505YLA2Y, NUC505DSA, NUC505DL13Y, NUC505DS13Y, NUC505YO13Y |
| **Motor Control** | **NM1100** | NM1100XBAE, NM1100FBAE |
| **NM1120** | NM1120FC1AE, NM1120EC1AE, NM1120XC1AE, NM1120ZC1AE |
| **NM1200** | NM1200LBAE, NM1200TBAE, NM1200ZBAE |
| **NM1230** | NM1234D, NM1232D, NM1220EBK0, NM1234Y, NM1232Y, NM1233D, NM1233Y |
| **NM1240** | NM1243D48, NM1243Y48, NM1243Y NM1244D48, NM1244Y48, NM1244Y, NM18407Y, NM18402Y, NM18407SY |
| **NM1320** | NM1320LC2AE |
| **NM1330** | NM1330LC1AE, NM1330LD2AE |
| **NM1500** | NM1510LC1AE, NM1520LC2AE, NM1520LD2AE, NM1520RC2AE, NM1520RD2AE, NM1530VD3AE, NM1530VE3AE, NM1530LE3AE |
| **NM1800** | NM18002Y |
| **NM1810** | NM18100Y, NM18101Y, NM18105Y, NM18107Y, NM1817NT |
| **NM1820** | NM18200S, NM18201S, NM18202S, NM1820ZB0AE, NM18200D, NM18200Y, NM18201Y, NM18202Y |
| **NM1830** | NM18307Y |
| **TF5100** | TF5103D, TF5103Y, TF5102Y |
| **N32F030** | N32F030D, N32F030Y, N32F030X |

# Supported Microcontroller - NuVoice® Family

|  |  |
| --- | --- |
| **Product Line** | **Series** |
| **Audio Control** | **I91000, I91200, I94100, ISD9100 , N574 and N575** |

# Resources

|  |  |
| --- | --- |
| **Website** | **Details** |
| [**ISPTool**](https://www.nuvoton.com/tool-and-software/software-development-tool/) **on** [**nuvoton.com**](https://www.nuvoton.com/) | <https://www.nuvoton.com/tool-and-software/software-development-tool/programmer/> |
| * Download the latest NuMicro ISP programming Tool. * View the ISPTool revision history. |
| **ISPTool git repositories** | <https://github.com/OpenNuvoton/ISPTool>  <https://gitee.com/OpenNuvoton/ISPTool>  <https://gitlab.com/OpenNuvoton/nuvoton-tools/ISPTool> |
| * Check the source code of ISPTool. |

**Important Notice**

**Using this software indicates your acceptance of the disclaimer hereunder:**

**THIS SOFTWARE IS FOR YOUR REFERENCE ONLY AND PROVIDED "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. YOUR USING THIS SOFTWARE/FIRMWARE IS BASED ON YOUR OWN DISCRETION, IN NO EVENT SHALL THE COPYRIGHT OWNER OR PROVIDER BE LIABLE TO ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.**

