



GW1NS-2C MCU Software and Hardware Reference Design **Release Note**

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Revision History

Date	Version	Description
8/31/2018	1.0E	Initial version.
11/30/2018	1.1E	<ul style="list-style-type: none">● GNU MCU Eclipse installation flow simplified;● MCU supports the operation system of uC/OS-III and FreeRTOS;● MCU software programming libraries supported;● Generates MCU soft core design by using IP Core Generator;
4/12/2019	1.2E	<ul style="list-style-type: none">● Extended peripheral I2C, SPI and UART hardware and software programming design supported;● Configurable SRAM with capacities of 2KB, 4KB, and 8KB supported;● MCU SRAM configuration options in the IP Core Generator supported;● MCU software programming libraries updated;

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1 About This Release

This release supports extended peripheral I2C, SPI and UART hardware and software programming design, supports configurable SRAM with capacities of 2KB, 4KB and 8KB, supports MCU SRAM configuration options in IP Core Generator, updates MCU hardware design and software programming library, and updates MCU hardware and software programming reference design.

1. Supports extended peripheral I2C, SPI and UART software programming design;
2. Supports configurable SRAM with capacities of 2KB, 4KB, and 8KB;
3. Updates SRAM configuration options in the IP Core Generator;
4. Updates MCU hardware design and software programming libraries;
5. Updates MCU hardware and software programming reference design.

MCU software programming library, hardware and software programming reference design can be downloaded from the Gowin official website. MCU hardware and software programming reference design has completed parameter configuration, which can be used and compiled in ARM Keil MDK, GoWin GNU MCU Eclipse and GoWin FPGA Designer.

2 Function and Enhancement Summary

The released IP functions and enhancement items are as follows:

Function	Description
Front-end synthesis tool: SynplifyPro, O-2018.09G-SP1 GowinSynthesis version 1.9.1 Beta	
GW1NS-2C MCU supported	Supports extended peripheral I2C, SPI and UART software programming design; Supports configurable SRAM with capacities of 2KB, 4KB, and 8KB Updates SRAM configuration options in the IP Core Generator; Updates MCU hardware design and software programming libraries; Updates MCU hardware and software programming reference design.
MCU IPs back-end placement and routing tool: GoWinYunYuan_V1.9.1 Beta MCU software compile and debug tools: Eclipse Neon Release(4.6.0) Keil uVision V5.24.2.0	
Enhancements	–
New Devices Supported	GW1NS-2C, GW1NSR-2C

3 Platform Supported

The corresponding software of the released GW1NS-2C MCU supports the following platforms:

Windows	Windows 7 (32/64-bit)
Linux	Red Hat Enterprise Linux 5/6/7 (64-bit)

4 Documents

The released GW1NS-2C MCU manuals are listed in the table below. You can download the PDF manuals at Gowin website or read online.

Documents	Usage
GW1NS-2C MCU Quick Design Reference Guide	Online, PDF
GW1NS-2C MCU Software Programming Reference Manual	Online, PDF
GW1NS-2C MCU Hardware Design Flow Reference Manual	Online, PDF
GW1NS-2C MCU IDE Software Reference Manual	Online, PDF
GW1NS-2C MCU Serial Debugging Reference Manual	Online, PDF
GW1NS-2C MCU Software and Hardware Reference Design Release Note	Online, PDF

