

## Gowin YunYuan Software

**Release Note** 

RN100-1.9.2.01BetaE,10/17/2019

### Copyright<sup>©</sup>2019 Guangdong Gowin Semiconductor Corporation. All Rights Reserved.

No part of this document may be reproduced or transmitted in any form or by any denotes, electronic, mechanical, photocopying, recording or otherwise, without the prior written consent of GOWINSEMI.

#### Disclaimer

GOWINSEMI®, LittleBee®, Arora™, and the GOWINSEMI logos are trademarks of GOWINSEMI and are registered in China, the U.S. Patent and Trademark Office, and other countries. All other words and logos identified as trademarks or service marks are the property of their respective holders, as described at www.gowinsemi.com. GOWINSEMI assumes no liability and provides no warranty (either expressed or implied) and is not responsible for any damage incurred to your hardware, software, data, or property resulting from usage of the materials or intellectual property except as outlined in the GOWINSEMI Terms and Conditions of Sale. All information in this document should be treated as preliminary. GOWINSEMI may make changes to this document at any time without prior notice. Anyone relying on this documentation should contact GOWINSEMI for the current documentation and errata.

### **Contents**

Contents	i
1 About This Release	1
2 Function and Enhancement Summary	2
3 Platform Supported	3
4 Ports	4
5 Environment Variables Setting	5
6 Document	6
7 Known Issues	7

RN100-1.9.2.01BetaE i

## 1 About This Release

The release contents of YunYuan software V1.9.2.01Beta are as follows:

- Devices supported: GW1NSR-4, GW1NSER-4C;
- Update of the supported device: GW1NS-4
- Package supported: GW1NSR-4-QN48P, GW1NSR-4-QN48G, GW1NSR-4-MG64P, GW1N-1-LQ100X;
- IP soft core released: LPDDR;
- IP soft core updated: Gowin\_PicoRV32, FLASH Controller, PSRAM\_2CH, FIFO, DDRx, CAN, HyperRam;
- The usage of mfgiref in programmer\_cli.exe fixed;
- The identification of the third-party "EM9304" JTAG device in Programmer added;
- User-defined IR length in Programmer supported;
- SPI Flash import/export added in Programmer. This operation supports the Flash with the capacity of more than 128Mbit.

For the complete functions and enhancements of this release, please refer to 2 Function and Enhancement Summary.

#### Note!

Gowin Synthesis tool is required to support 32-bit system.

RN100-1.9.2.01BetaE 1(7)

# **2**Function and Enhancement Summary

The following table summarizes the functions and enhancements:

Function	Description			
YunYuan Software: V1.9.2.01Beta				
Functions	<ul> <li>Devices supported: GW1NSR-4, GW1NSER-4C;</li> <li>Update of the supported device: GW1NS-4</li> <li>Package supported: GW1NSR-4-QN48P, GW1NSR-4-QN48G, GW1NSR-4-MG64P, GW1N-1-LQ100X;</li> <li>IP soft core released: LPDDR;</li> <li>The identification of the third-party "EM9304" JTAG device in programmer added;</li> <li>User-defined IR length in programmer supported;</li> <li>SPI Flash import/export added in Programmer. This operation supports the Flash with the capacity of more than 128Mbit.</li> </ul>			
Enhancements	<ul> <li>IP soft core updated: Gowin_PicoRV32, FLASH Controller, PSRAM_2CH, FIFO, DDRx, CAN, HyperRam;</li> <li>The usage of mfgiref in programmer_cli.exe fixed.</li> <li>The hang issue after the loss of the programmer during jtagserver running fixed.</li> </ul>			

RN100-1.9.2.01BetaE 2(7)

# 3 Platform Supported

The software is supported on the platforms listed below:

Windows	Windows 7/8/10(32bit/64 bit) Windows XP/7 (32bit)
Linux	Centos6.8/7.0/7.5(64 bit) Ubuntu 18.04 LTS

RN100-1.9.2.01BetaE 3(7)

## $\mathbf{4}_{\mathsf{Ports}}$

Port No.	Port Type	Port Description
36545	User-defined protocol	Used to communicate with JTAG SERVER for the GAO
30343	port	(Gowin Analyzer Oscilloscope) display.
36546 User-defined protocol Used to communicate w		Used to communicate with JTAG SERVER for the GAO
30340	port	(Gowin Analyzer Oscilloscope) display.
10559	User-defined protocol	The license server port of the Gowin software back-end
10559	port	tool.
27020	TCP port	The license server port of the Gowin software front end
21020	TOP PUIT	tool "synplifyPro".

RN100-1.9.2.01BetaE 4(7)

## 5 Environment Variables Setting

### LM\_LICENSE\_FILE Environment Variables Setting

- Node-Locked license variable value: The license files location, such as: "D:\Synopsys\license.txt";
- 2. Floating license variable value: license files location, such as: 27020@192.168.31.220. "192.168.31.220" is the IP address of starting the floating license.

RN100-1.9.2.01BetaE 5(7)

### 6 Document

The released software manuals are listed in the table below. You can download the PDF manuals and/or read them at the Gowin website.

Document	Usage
SUG100-1.9E_Gowin YunYuan Software User Guide.pdf	PDF
SUG101-1.7E_Gowin Design Constraints Guide.pdf	PDF
SUG114-1.9E_Gowin Analyzer Oscilloscope User Guide.pdf	PDF
SUG282-1.7E_Gowin Power Analyzer User Guide.pdf	PDF
SUG283-1.8E_Gowin Primitive User Guide.pdf	PDF
SUG284-1.8E_Gowin IP Core Generator User Guide.pdf	PDF

RN100-1.9.2.01BetaE 6(7)

## **7** Known Issues

The following issues will be fixed in the next version.

- 1. It is not available to generate IP soft core using the GAO and IP Core in a 32-bit system for the time being;
- 2. Hierarchy display function does not support VHDL design analysis. When VHDL design is added, ERROR information will be reported in IDE output window, but it does not affect synthesis by synplifyPro. ERROR: Hierarch cannot support VHDL;
- GowinSynthesis does not support VHDL design synthesis. When synthesis contains VHDL design, ERROR information will be reported in IDE output window. Please use synplifyPro to synthesise. Error (EXT3044): Analyze: cannot read format VHDL in this product Error (EXT0304): Fail to analyze the input design file;
- Try to reduce the number of capture signals and capture depth if there
  are any problems with the GAO capturing. If the problem still exists,
  please contact GOWINSEMI technical support;
- For DSP RTL design synthesis, the synthesis tool does not support the followings. If there are synthesis problems, please contact GOWINSEMI technical support;
  - ALU54D does not support ACCLOAD\_REG mapping in the asynchronous mode;
  - The MULTALU36X18/MULTADDALU18X18 outputs may not be synthesized to mode 2 when passing through registers.

RN100-1.9.2.01BetaE 7(7)

