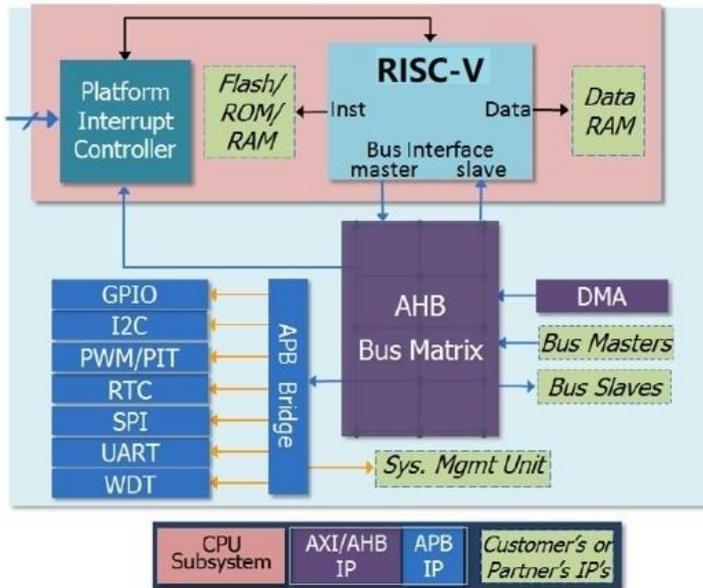


RISC-V

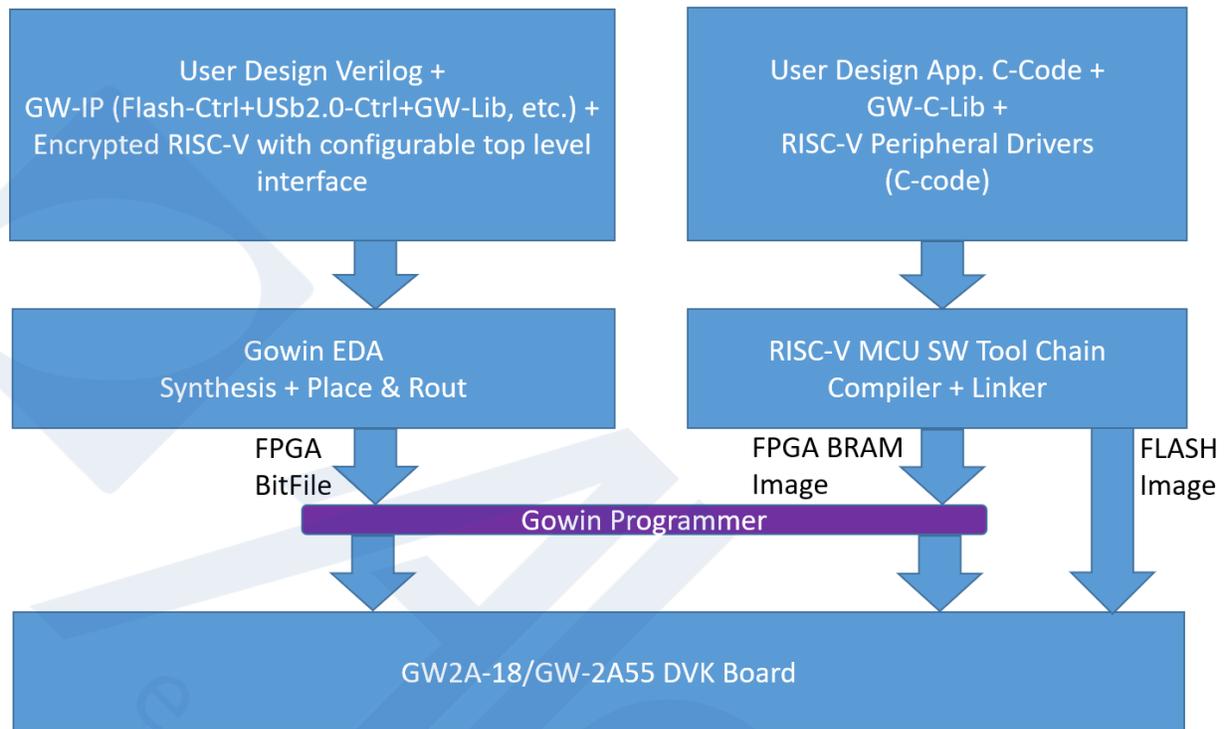
GOWIN Semiconductor now offers a solution of implementing configurable RISC-V IP in GW-2A FPGA. Here, the configurable RISC-V IP Core and System is a 32-bit RISC-V Microprocessor & Peripheral System with the following list of Architecture Structure and feature set:



Feature Set

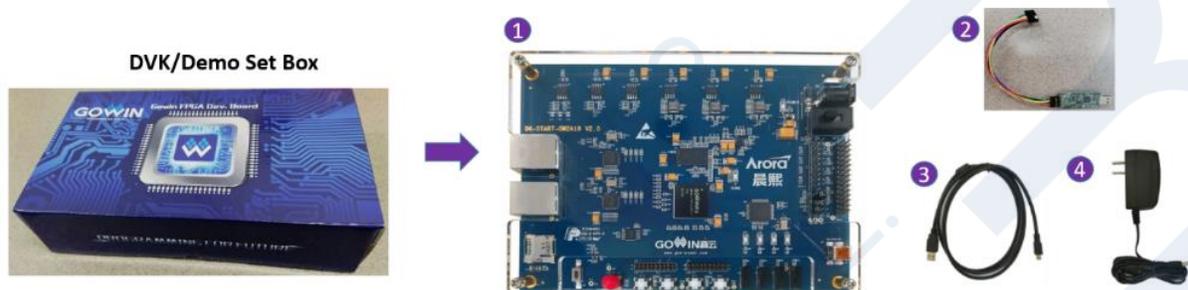
- RISC-V with 5 pipe-lined structure
- RISC-V RV32IMAC, Atomic instruction
- Individually configurable ILM and DLM
- standard JTAG interface
- PLIC
- DMA
- RTC
- GPIO
- UART
- QSPI
- I2C
- PWM/PIT
- Watch-Dog

The GOWIN Development Platform combines the RISC-V Microprocessor SW design flow and FPGA HW Design flow as a fully integrated single toolchain consisting of all GOWIN device model libraries and software driver libraries needed to program the GW2A-18/55 FPGA hosting with the configurable RISC-V & System Peripheral. The platform supports Application software compiling, linking, in-circuit-emulation/debugging on behalf of the embedded RISC-V microprocessor as well as synthesis and place & route of the FPGA design embedded with the RISC-V & System Soft IP.



A Development Board is also available to be used in conjunction with the GOWIN programming tools for implementing RISC-V Microprocessor & Peripherals System in FPGA-SoC Design.

Item Number	Description	QTY
1	DK_START_GW2A18_V2.0 → Gowin FPGA Dev. Board	1
2	AICE Module & Cable → For RISC-V SW Debug	1
3	USB Mini Cable → For FPGA BitFile download	1
4	5V 2A Power Adapter	1



RISC-V for GW2A Release – Software Package and Documentation:

1. Go to <http://gowinsemi.com/support/home/>
2. Click “Download GOWIN EDA (Registration is required)”

3. Choose Windows or Linux
4. Download Two Software Packages a. Download the Gowin_YunYuan_V1.8.1.01Beta(_win or _linux) or later b. Under “RISC V for GW2A Release Package”, click on the Dropbox link and download RISC-V for GW2A Release Package.
5. Go to <http://gowinsemi.com/support/home/> and Click on “Apply License” for the GOWIN EDA FPGA Design License.
6. Go to <http://www.gowinsemi.com/support/enquires/> and fill out form. Under “Enquiry” type “Request for AndeSight RDS for GOWIN SW Tool Chain License”