



GN4121 Gullwing-x1 RDK Release Notes

Thank you for purchasing the GN4121 Gullwing-x1 RDK from Gennum! (Part # RDK-GN4121-PCIE00)

GN4121 Gullwing-x1 RDK Hardware Package Contents

This package contains the following:

- **GN4121 Gullwing-x1 RDK Board:** Revision 0
- **Release Notes** (this document): Revision 1.0

GN4121 Gullwing-x1 RDK Support Files

This package contains the hardware portion of the GN4121 Gullwing-x1 RDK. The complete RDK package consists of the Gullwing hardware package and the support/installation files. In order to ensure that you have the latest support files, they are distributed through the MyGennum customer support portal found at:

www.gennum.com/mygennum

Users must register at MyGennum and be validated in order to access the files. Once this is complete, you will be able to access all the latest RDK files, including the software you need to run the board.

Once you have full access to MyGennum, please login and navigate to:

<http://www.gennum.com/mygennum/view.php/gn4121-gullwing-x1>

The document: GN4121 Master List of Documents & Electronic Files, will help to navigate the content of the available files. **Please read this document first.**

The primary companion document for the RDK board is the GN4121 Gullwing-x1 RDK User Guide. To begin using the RDK, please refer to the “Getting Started” Section of this document. Also, a requirement for RDK operation is the software download “GN412x_RDK_SW_1.x_Windows.exe” that should be installed for use with Windows or “GN412x_RDK_SW_1.x_Linux.tar.gz” for Linux.

This MyGennum page contains:

- Gullwing-x1 PCB files in PDF, Gerber, and Allegro format
- Gullwing-x1 schematics in PDF and OrCad format
- RTL source code, and FPGA project files (Xilinx and Altera versions)
- GN4121 Data Sheet, Family Reference Manual, User Manuals, and Design Guides
- GS4911B Data Sheet

Many of the files on MyGennum are either covered by an electronic NDA or a License Agreement. This happens online at the time of download, and there is no paper involved. If you do not have an account on MyGennum already, please be aware that you may not have

immediate access to the required files after you first register, as a Gennum employee is required to validate each registration. Once a Gennum employee has validated your account, the full file set will become available to you after login.

DMA Benchmark Application

As shipped, the GN4121 Gullwing-x1 RDK hardware will run the DMA benchmark application that is designed to measure system throughput. The DMA benchmark is run through the GenDiag software utility. This is part of the software download described above. See the GN412x Diagnostics Utility (GenDiag) User Manual for more details.

Source code for the FPGA IP used by GenDiag and the DMA benchmark are available from the FPGA IP download on MyGennum. The project folder is the “Lambo” project.

Video Capture RDK Requirements

Video capture requires the GN4121 Gullwing-x1 RDK hardware, in addition to a video receiver evaluation board such as part # EBK-GS2960-01 or an equivalent (sold separately). Software for video capture is also part of the software download indicated above. See the GN412x FPGA IP Hardware Design Guide for more details.

Source code for the FPGA IP used for video capture is available from the FPGA IP download on MyGennum. The project folder is the “Pinto” project.

When the video capture application layer is to be used (the “Pinto” FPGA IP), additional documents are provided with their associated Evaluation Board Kits: GS1559 Data Sheet, GS1531 Data Sheet, GS2960 Data Sheet, GS2962 Data Sheet, and their associated Evaluation Board User Guides. These Evaluation Board Kits are available upon request to your Sales Representative or FAE.

System Requirements

- PC with an available PCI Express x1, x4, x8, or x16 slot (full height)
- Windows XP
- 1GB system memory
- 200MB available disk space
- Internet connection (to download the files from MyGennum)

Customer Support

For MyGennum validation, updated information, warranty status, shipping, product issues and technical support, please call your Gennum Sales Office.

Technical support may be reached at:

Email: vbapps@gennum.com

Phone: 905-632-2996, ask for the Field Applications Engineering team.

PCIe and PCI Express mark are registered trademarks and/or service marks of PCI-SIG.
Gennum and the Gennum logo are registered trademarks of Gennum Corporation.
© Copyright 2009 Gennum Corporation. All rights reserved.