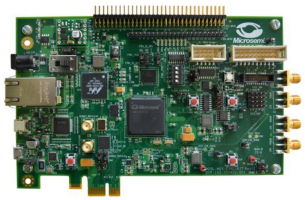

Microsemi IGLOO2 HPMS FPGA Evaluation Kit Instruction Manual

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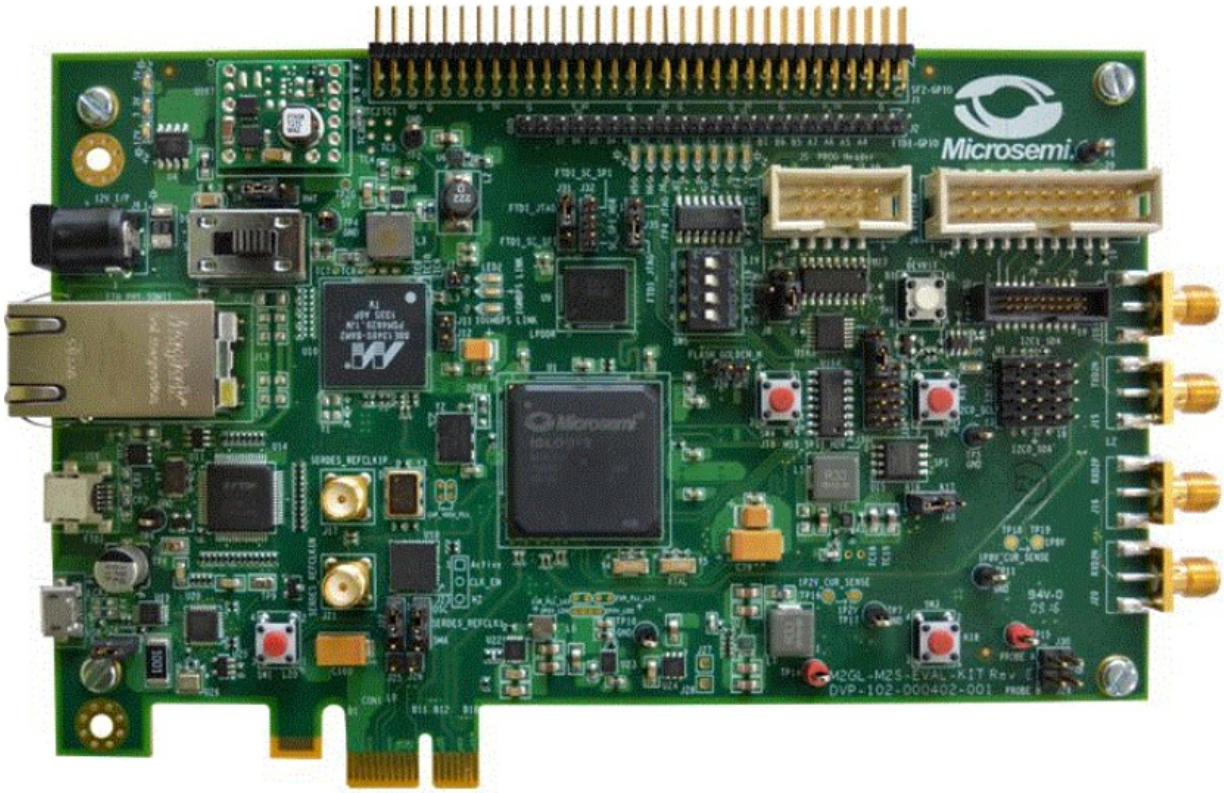
Microsemi IGLOO2 HPMS FPGA Evaluation Kit



Product Information

The IGLOO2 Peripheral DMA (PDMA) module is a feature of the IGLOO2 FPGA that enables users to initiate transfers between any of the following HPMS/Fabric peripherals:

- High-Performance Memory Subsystem (HPMS)
- Field Programmable Gate Array (FPGA) fabric peripherals

In order to use the PDMA, users must use System Builder to build a System Builder block that includes the PDMA. From the Device Feature page of System Builder, users need to check the HPMS Peripheral DMA (PDMA) checkbox.

For further details, consult the IGLOO2 User's Guide.

Product Usage Instructions

1. Use System Builder to build a System Builder block that includes the PDMA.
2. From the Device Feature page of System Builder, check the HPMS Peripheral DMA (PDMA) checkbox.
3. Refer to the IGLOO2 User's Guide for detailed instructions on using the PDMA.

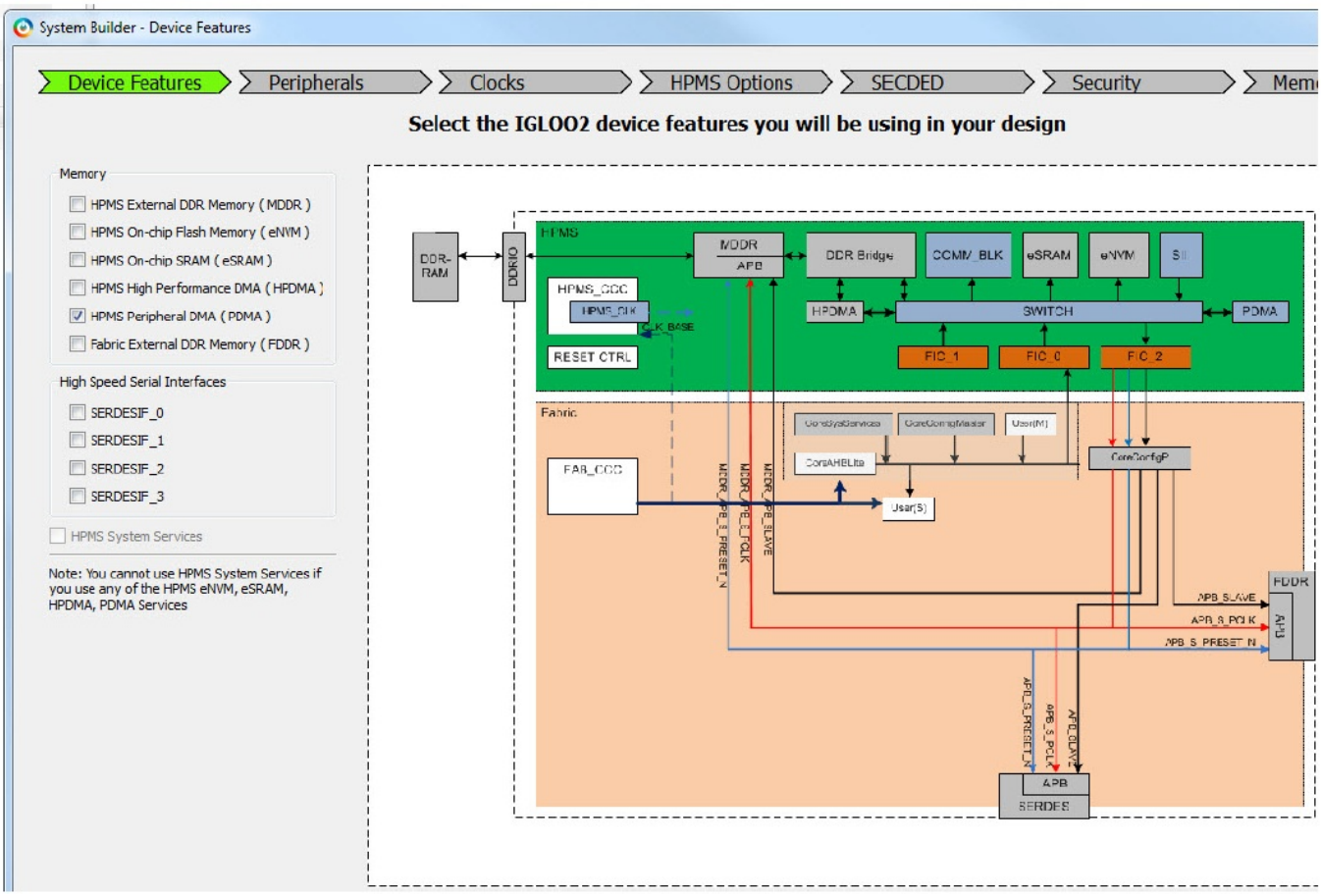
Configuration Options

The IGLOO2 Peripheral DMA (PDMA) module enables you to initiate transfers between any of the following HPMS/Fabric peripherals:

- eNVM (read only)
- eSRAM
- Fabric Slaves

Configuration

In order to use the PDMA, you must use System Builder to build a System Builder block that includes the PDMA. From the Device Feature page of System Builder, check the HPMS Peripheral DMA (PDMA) checkbox, as shown in Figure 1.



System Builder builds a block that exposes a Fabric Master port at the top level, as shown in Figure 2. You must connect your Fabric AMBA Master to this port to access the PDMA Configuration registers. Use the Fabric Master to configure Start Address, End Address, number of bytes to transfer, etc. System Builder also exposes the DMA_DMAREADY_FIC_0 and DMA_DMAREADY_FIC1 at the top level.

For details, consult the IGLOO2 User's Guide.

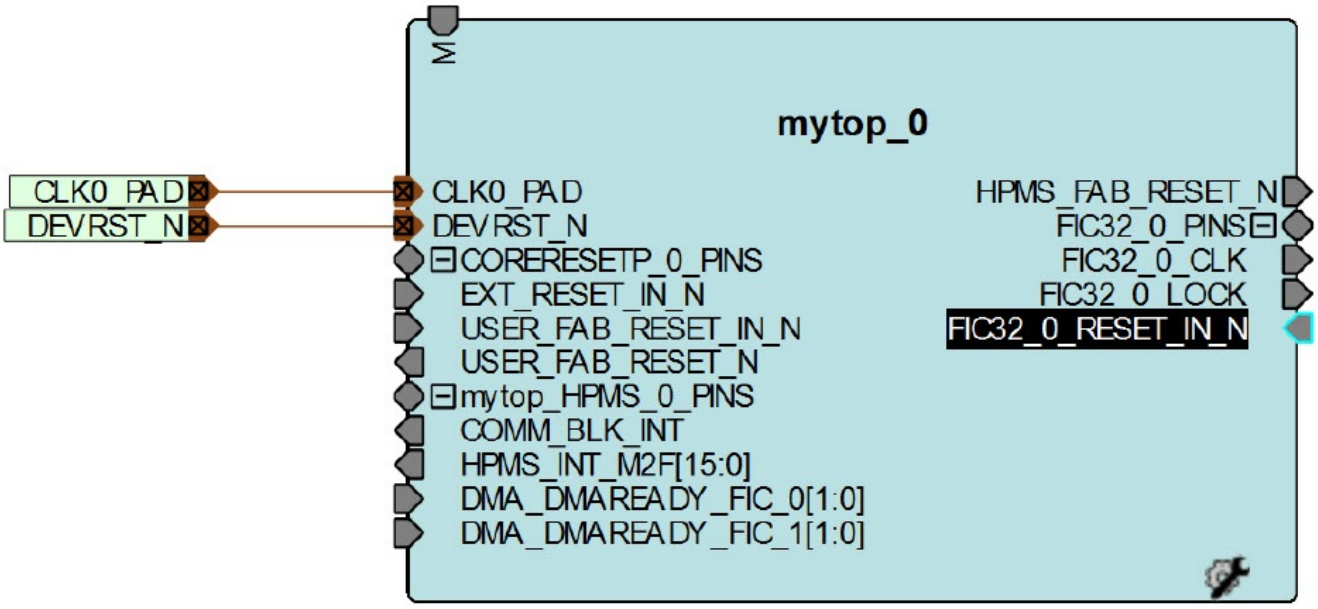


***Figure 2* • System Builder Generated Block**

If you want a Fabric slave to participate in PDMA transfers, you must add it to the appropriate HPMS FIC_0 or FIC_1 Master Subsystem in the Peripherals page of System Builder. Figure 3 shows a User Fabric Slave accessed by the PDMA via FIC_1.

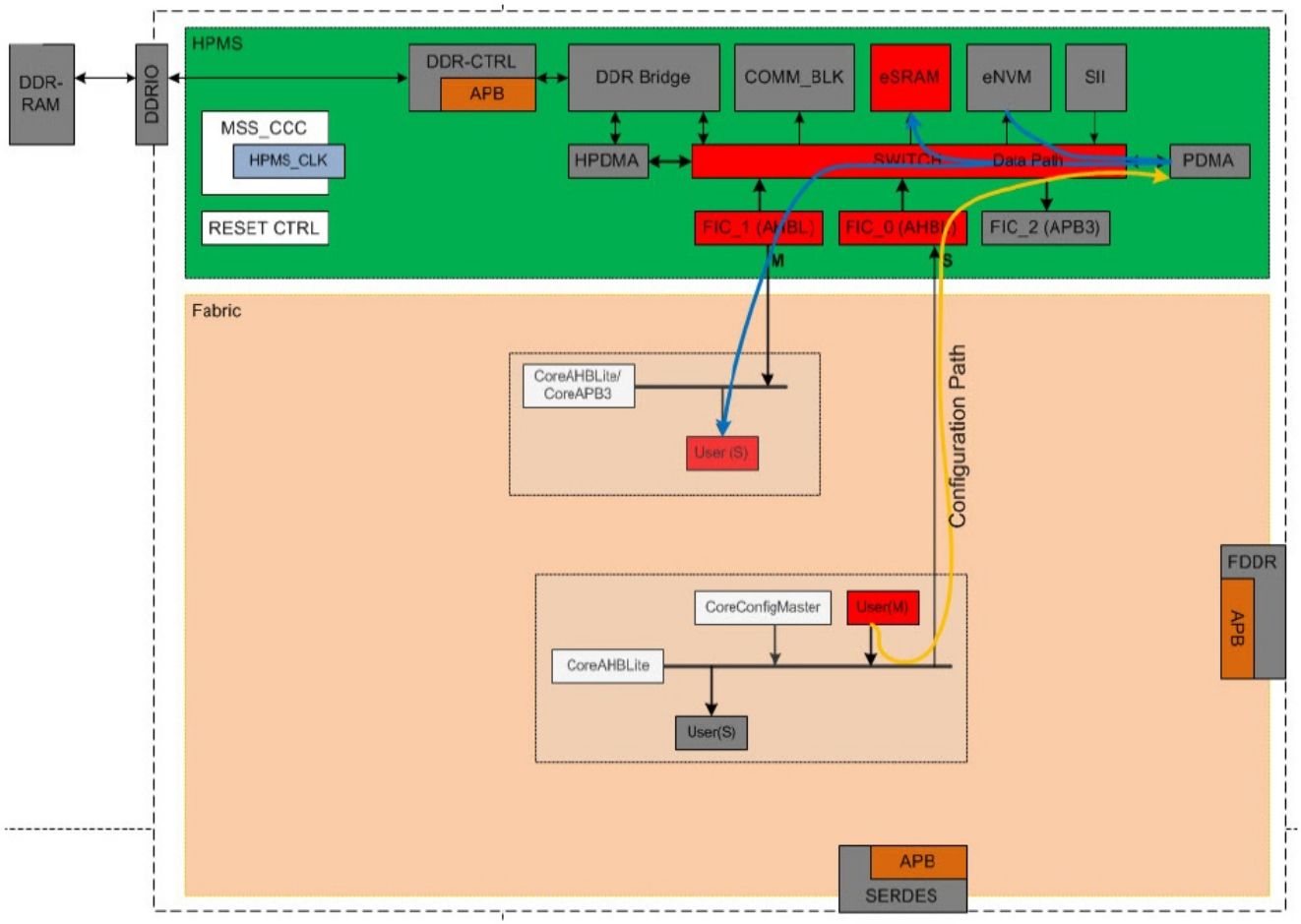


***Figure 3* • User Fabric Master Configuring PDMA to Initiate Transfers between eNVM, eSRAM and Fabric Slave**

Product Support

Microsemi SoC Products Group backs its products with various support services, including Customer Service, Customer Technical Support Center, a website, electronic mail, and worldwide sales offices. This appendix contains information about contacting Microsemi SoC Products Group and using these support services.

Contact Information
Microsemi SoC Products Group provides various support services, including Customer Service, Customer Technical Support Center, a website, electronic mail, and worldwide sales offices.

Customer Service

Contact Customer Service for non-technical product support such as product pricing, product upgrades, update information, order status, and authorization.

- From North America, call 800.262.1060
- From the rest of the world, call 650.318.4460
- Fax, from anywhere in the world, 408.643.6913

Customer Technical Support Center

Visit the Customer Support website for technical support and more information at **www.microsemi.com/soc/support/search/default.aspx**.

- **Email**
  You can communicate your technical questions to our email address and receive answers back by email, fax, or phone. The technical support email address is **soc_tech@microsemi.com**.
- **My Cases**
  Microsemi SoC Products Group customers may submit and track technical cases online by going to My Cases.
- **Outside the U.S.**
  Customers needing assistance outside the US time zones can either contact technical support via email (**soc_tech@microsemi.com**) or contact a local sales office. Sales office listings can be found at **www.microsemi.com/soc/company/contact/default.aspx**.

Contacting the Customer Technical Support Center

Highly skilled engineers staff the Technical Support Center. The Technical Support Center can be contacted by email or through the Microsemi SoC Products Group website. Microsemi SoC Products Group staffs its Customer Technical Support Center with highly skilled engineers who can help answer your hardware, software, and design questions about Microsemi SoC Products. The Customer Technical Support Center spends a great deal of time creating application notes, answers to common design cycle questions, documentation of known issues, and various FAQs. So, before you contact us, please visit our online resources. It is very likely we have already answered your questions.

Technical Support

Visit the Customer Support website (**www.microsemi.com/soc/support/search/default.aspx**) for more information and support. Many answers available on the searchable web resource include diagrams, illustrations, and links to other resources on the website.

Website
You can browse a variety of technical and non-technical information on the SoC home page, at

www.microsemi.com/soc.

ITAR Technical Support

For technical support on RH and RT FPGAs that are regulated by International Traffic in Arms Regulations (ITAR), contact us via soc_tech_itar@microsemi.com. Alternatively, within My Cases, select Yes in the ITAR drop-down list. For a complete list of ITAR-regulated Microsemi FPGAs, visit the ITAR web page.

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Documents / Resources

	Microsemi IGLOO2 HPMS FPGA Evaluation Kit [pdf] Instruction Manual IGLOO2 HPMS FPGA Evaluation Kit, IGLOO2 HPMS, FPGA Evaluation Kit, Evaluation Kit, Kit

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