



## FEATURES AND BENEFITS

- Host controller bus isolation from the DRAM memory during NVDIMM “save” and “restore” operations between DRAM and non-volatile memory
- AC and DC parameters optimized for DDR4, enabling the highest possible memory channel performance for NVDIMMs even when intermixed with other DIMM types
- 12-bit bus switch/multiplexer to best match the eight DQ pins and four DQS pins from each DRAM
- Make-before-break circuit to prevent glitches during switching operations
- Simple CMOS select and enable pins (SELO, SEL1, EN)
- Available in a 3 x 8 mm 48-ball VFBGA package with 0.65 mm ball pitch that can replace data buffers on the DIMM for NVDIMM applications

## APPLICATIONS

- DDR4 NVDIMM
- DDR3 NVDIMM

The 4MX0121V is a 12-bit bus switch/multiplexer designed for 2.5 V or 3.3 V supply voltage operation in DDR3 and DDR4 memory bus systems.

The device has a 1:2 switch or 2:1 multiplex topology. Each 12-bit wide A-port can be switched to one of two ports B and C, for all bits simultaneously. Each port is bidirectional for high-speed and high-bandwidth switch multiplexer applications. Port selection uses two simple input selection pins and all ports can be disconnected via an enable pin. The device is divided into two 6-bit bus switch/multiplexers for additional flexibility.

The 4MX0121V uses a high-speed switch architecture providing high bandwidth, low insertion loss, low return loss, and very low propagation delay, allowing use in many applications requiring switching or multiplexing of high-speed signals. It is available in a 3 x 8 mm 48-ball VFBGA package with 0.65 mm ball pitch for optimal size versus board layout density.

Discover what IDT know-how can do for you:  
[IDT.com/go/DDR4](http://IDT.com/go/DDR4) | [IDT.com/go/DDR3](http://IDT.com/go/DDR3)

DISCLAIMER Integrated Device Technology, Inc. (IDT) and its subsidiaries reserve the right to modify the products and/or specifications described herein at any time and at IDT's sole discretion. All information in this document, including descriptions of product features and performance, is subject to change without notice. Performance specifications and the operating parameters of the described products are determined in the independent state and are not guaranteed to perform the same way when installed in customer products. The information contained herein is provided without representation or warranty of any kind, whether express or implied, including, but not limited to, the suitability of IDT's products for any particular purpose, an implied warranty of merchantability, or non-infringement of the intellectual property rights of others. This document is presented only as a guide and does not convey any license under intellectual property rights of IDT or any third parties. IDT's products are not intended for use in life support systems or similar devices where the failure or malfunction of an IDT product can be reasonably expected to significantly affect the health or safety of users. Anyone using an IDT product in such a manner does so at their own risk, absent an express, written agreement by IDT.

Integrated Device Technology, IDT and the IDT logo are registered trademarks of IDT. Other trademarks and service marks used herein, including protected names, logos and designs, are the property of IDT or their respective third party owners. © Copyright 2015. All rights reserved.

PB\_NVDIMM-MUX\_REVA0315



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.