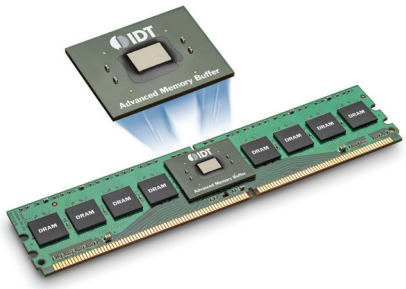
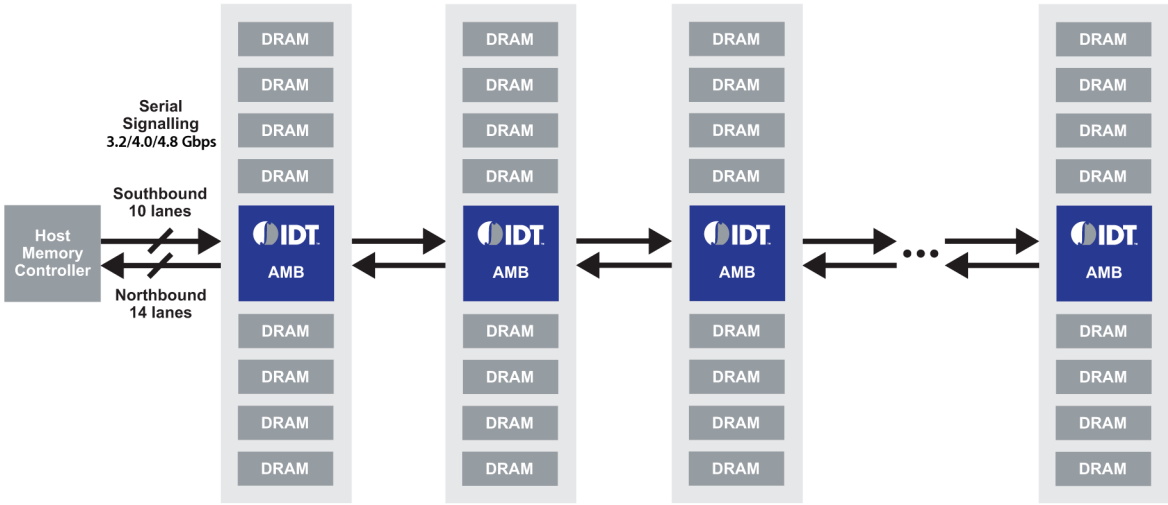
Improve FB-DIMM Performance with IDT Advanced Memory Buffers

Advanced Memory Buffers, the next generation of FDIMM controllers, allow more DIMMS in a single system, ideal for servers, workstations, storage devices and communication applications. The unique channel structure of the IDT AMB chip alleviates buffer loading issues. The IDT AMB+ family offers unparalleled power saving over standard AMB, which translates into a dramatic improvement in overall cost and energy efficiency.



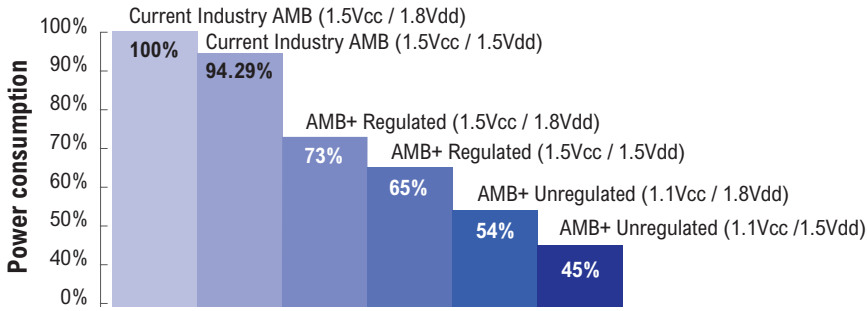
The essential building block for next-generation, high-bandwidth applications

The fully buffered dual in-line memory module (FB-DIMM) is the next generation memory architecture to meet the growing memory requirement of servers and workstations. The IDT advanced memory buffer (AMB) chip is the essential building block located on each FB-DIMM. The IDT AMB receives commands and data from the host controller to control and write/read data to/from the DRAMs on the DIMM. Commands and write data are sent southbound from the host controller to AMBs in a daisy chain fashion and interpreted by the target AMB. Status and read data are sent northbound from AMBs to the host controller also in a daisy chain fashion, passing through non-target AMBs. This unique channel structure alleviates buffer loading issues common in registered DIMM technology, enabling designers to use a large number of DIMMs within a single system. The IDT AMB complies with the latest JEDEC specification for AMB and supports DDR2-533/667/800 DRAM. It also enables serial data transfer at 3.2, 4.0 and 4.8 Gbps. The IDT AMB supports servers, workstations, storage devices and communication applications that support the next generation FB-DIMM architecture.



Reduce your FB-DIMM Power with IDT AMB+

The IDT AMB+ family of ultra-low power AMB devices offers unparalleled power savings over standard AMB offerings. This family of devices leverages the industry-proven AMB design and systems expertise that has made IDT the market leader for memory interface solutions. With regulated (JEDEC plug and play) and unregulated versions, an unparalleled feature set, frequencies up to 800MHz and standard and low voltage DRAM support, the AMB+ sets a new standard for next generation FB-DIMM designs. By leveraging the capabilities of low voltage core and DRAM supplies, power savings greater than 50% are achievable versus today's standard power AMB devices. This translates into a dramatic improvement in overall cost and energy efficiency, both from power and cooling, when AMB+ based memory subsystems are used in today's new crop of advanced servers and workstations.



Type of AMB technology Ultra low power FB-DIMM enabled by IDT AMB+

Features	Benefits
Leverages high-speed serial technology for DRAM interface	• Serial technology provides increased scalability for future growth; therefore, meeting the needs of increasing server processing power • Minimizes memory interface pin-count to ease board design issues • PC boards have fewer layers and simpler trace routing which reduce manufacturing and design costs.
Supports 3.2, 4.0 and 4.8 Gbits serial speeds (DDR2-533/667/800)	• High-speed memory support for increased performance • Multiple speed FB-DIMMs can be built using the same product
Support for 14 northbound lanes (read) and 10 southbound lanes (write)	• Optimized architecture for real-world usage patterns
Support for up to 8 DIMMs per channel	• Higher flexibility in memory size selection allowing user to utilize cost-effective DRAM sizes • Increased expandability beyond traditional DIMMs, for example, systems with 4 channels can support up to 128 GB of memory using 4 GB DIMMs
Can be used as a repeater for extending FB-DIMM links	• Allows greater flexibility of memory subsystem placement within a system
Supports failover and channel detection error modes	• Increased data channel redundancy that minimizes system down time and increases system reliability
Built to industry standard JEDEC support	• Allows compatibility for end-user plug & play
SMBus protocol interface with PEC support	• Allows alternate access mechanism to the AMB configuration and status registers
Testing features supported include: – Integrated thermal sensor and status indicator – Supports MEMBIST, IBIST and virtual host mode design-for-test functions – Transparent mode and direct access mode for DRAM testing	• Built in self-test modes allow enhanced test coverage without the need for expensive test equipment • Eases debugging tasks
AMB protocol supports high-speed lane-to-lane de-skewing	• Reduces the need for time consuming bit-length matching of PC board traces

For complete parametric information, technical documentation, AMB-related white papers and press releases, as well as comprehensive information on the wide variety of related parts that IDT offers, please visit

www.IDT.com/go/amb

You can also receive IDT product-related newsletters and updates and find local distributors by registering at myIDT.com. Select the myIDT menu on the upper right tab of the www.IDT.com web page, and select "Register for myIDT" or go directly to www.IDT.com/go/register.

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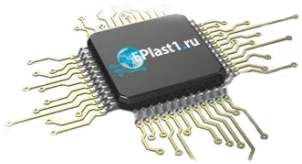
Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

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

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