

UNLIMITED INGENUITY

MEMORY & STORAGE SOLUTIONS FOR INDUSTRIAL & EMBEDDED APPLICATIONS



Your one-stop
solution provider for
DRAM COMPONENTS
DRAM MODULES
FLASH MEMORY



WHO WE ARE

- Serving global embedded and industrial customers for over 30 years, offering a variety of interfaces, form factors, and capacities
- Your one-stop shop for memory solutions: From standard to special, legacy to mainstream
- Commercial and logistical support, reliability, and quality across the globe
- Complete in-house support: From design, to manufacturing & testing capabilities, through to applications
- A wide variety of unique, complex, and niche memory solutions
- Offering a comprehensive portfolio of DRAM components, DRAM modules, and NAND Flash products
- Long product lifetimes ensure longevity with continued support
- Locked BOMs and product lifecycle management with no surprises
- Customizable configurations and feature-rich products across a range of solutions
- Supply stability and availability through strategic partnerships



For more information or to
request samples, please visit us at
www.intelligentmemory.com

You may also contact
our sales team directly at
sales@intelligentmemory.com

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INDUSTRY SEGMENTS



NAND FLASH PRODUCT OVERVIEW

Key Features

- Legacy products such as CompactFlash cards as well as latest PCIe technology
- Available as removable media, embedded form factors and BGA components
- Equipped with high quality hardware and industrial grade firmware
- Developed and tested for demanding operating environments
- Offered in various temperature grades and customized for specific applications to optimize performance, lifetime, and reliability
- All products come with a full range of tools and technical support

IM's NAND line-up includes 3 family categories (classified by their endurance):



	eMMC	SD	SATA	PCIe	PATA	USB
Form Factors	100-ball 14x18mm 153-ball 11.5x13mm	SD microSD	M.2 (2242, 2280) 2.5" mSATA mSATA mini CFast BGA	M.2 (2230, 2242, 2280) U.2 CFX BGA (1113, 1620) E1.S	CompactFlash	USB-Stick
Product Families	Silver Ruby Emerald	Silver Ruby Emerald	Silver Ruby Emerald	Silver Ruby Emerald	Emerald	Emerald
Temperature Ranges	Extended Commercial: -25°C to +85°C Industrial: -40°C to +85°C Auto. Grade 3: -40°C to +85°C Auto. Grade 2: -40°C to +105°C	Extended Commercial: -25°C to +85°C Industrial: -40°C to +85°C	Commercial: 0°C to +70°C Industrial: -40°C to +85°C	Commercial: 0°C to +70°C Industrial: -40°C to +85°C	Commercial: 0°C to +70°C Industrial: -40°C to +85°C	Commercial: 0°C to +70°C Industrial: -40°C to +85°C

DRAM COMPONENTS

DRAM Components*	64Mb	128Mb	256Mb	512Mb	1Gb	2Gb	4Gb	8Gb	16Gb	24Gb	32Gb	64Gb
SDRAM	✓	✓	✓✓	✓✓								
DDR			✓	✓	✓✓							
DDR2				✓	✓✓	✓✓						
DDR3L					✓✓	✓	✓	✓✓	✓			
DDR4							✓	✓	✓✓			
LPDDR2					✓	✓	✓					
LPDDR3								✓	✓			
LPDDR4							✓✓	✓✓	✓		✓	✓
LPDDR4x							✓	✓	✓	✓	✓	✓
Features:	✓ Available Now ✓ On-chip ECC option available ✓ x4 configuration available											
*BGA Leaded Balls package option available; AEC-Q parts offered upon request. Please contact IM for details.												

DRAM MODULES

DRAM Modules	LRDIMM	RDIMM	UDIMM	RSODIMM	SODIMM	MINI-RDIMM	MINI-UDIMM
SDRAM (3.3V, max: PC-133)			✓✓ Max: 512MB		✓✓ Max: 512MB		
DDR (2.5V, max: PC-3200)		✓ Max: 1GB	✓✓ Max: 1GB		✓✓ Max: 1GB		
DDR2 (1.8V, max: PC2-6400)		✓ Max: 8GB	✓✓ Max: 4GB		✓✓ Max: 4GB	✓✓ Max: 512MB	
DDR3 (1.5V/1.35V, max: PC3-14900)	✓ Max: 32GB	✓✓ Max: 32GB	✓✓ Max: 16GB	✓ Max: 16GB	✓✓ Max: 16GB	✓✓ Max: 16GB	✓✓ Max: 16GB
DDR4 (1.2V, max: PC4-25600)	✓ Max: 64GB	✓✓ Max: 64GB	✓✓ Max: 32GB		✓✓ Max: 32GB	✓✓ Max: 16GB	✓✓ Max: 32GB
DDR5 (1.1V, max: PC5-44800)		✓ Max: 32GB	✓✓ Max: 32GB		✓✓ Max: 32GB		
Features:	✓ ECC or Non-ECC are optional ✓ VLP / ULP (Very Low Profile / Ultra Low Profile) are available ✓ Available now						

IM provides two lines of DRAM Modules, allowing for more flexibility and customization:

- **IMOriginal** modules which utilize exclusively IM's own quality components
- **IMSelect** modules which can be configured with various third-party components

SPOTLIGHT PRODUCTS

DRAM Modules:

- High Density **IMOriginal** 64GB & 32GB DDR4
- Industrial Standard **IMSelect** DDR5
- Longevity for 7 years+ and long-term support on legacy technologies DDR3 through SDRAM

DRAM Components:

- High Density 32Gb & 16Gb DDR4
- Comprehensive Range of LPDDR4 & LPDDR4x
- High Density 16Gb & 8Gb DDR3

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LOCATIONS



Intelligent Memory has three main headquarters:

AMERICAS California, USA | **APAC** Hong Kong | **EMEA** Frankfurt, Germany

Other branches are also operating out of Japan, Taiwan, and UK, as well as other cities within Germany and the USA, all of which offer product development and technical support.

AMERICAS

USA – HEADQUARTERS

Intelligent Memory AMERICA Inc.
1 Venture, Suite # 250
Irvine, CA 92618, USA
im-amer-sales@intelligentmemory.com

EMEA

GERMANY – HEADQUARTERS

Intelligent Memory EMEA GmbH
Mergenthaler Allee 15-21
65760 Eschborn, Germany
im-emea-sales@intelligentmemory.com
Phone: +49 6196 93496 11

UK

Intelligent Memory EMEA GmbH
im-emea-sales@intelligentmemory.com
Phone: +44 1844 237029

APAC

HONG KONG – HEADQUARTERS

Intelligent Memory Ltd.
Unit 1 - 6 A, 11/F, Mita Centre
552-566 Castle Peak Road, Kwai Chung
Hong Kong
info@intelligentmemory.com
+852 2422 0422

JAPAN

Intelligent Memory Japan Inc.
#418, Sotokanda Stork bldg. 4F
6-15-14, Sotokanda, Chiyoda-ku
Tokyo, 101 0021, Japan
im-apac-jp-sales@intelligentmemory.com
Phone: +813 5807 6787

TAIWAN

Intelligent Memory Ltd.
Room H, 12/F, No.118
Ciyun Road East District, Hsinchu City
Taiwan, R.O.C.
im-apac-sales@intelligentmemory.com
Phone: +886 3577 9787



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