

DRAMeXchange Market Intelligence Membership Services

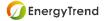
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DRAMeXchange Market Intelligent Service



Membership Service		Gen	eral	DR	AM	NA	ND	DRAM+NAND		
Item	Frequency	Silver	Gold	DRAM Platinum	DRAM Diamond	NAND Platinum	NAND Diamond	Memory Platinum	Memory Diamond	
Price Information										
Spot Price Early Notice	Daily	0	©	0	0	0	0	0	0	
Historical Price Download	Daily	0	0	0	0	0	0	0	0	
DRAM/NAND Contract Early Notice	Monthly		0	0	0	0	0	0	0	
Server DIMM Contract Price	Monthly									
Mobile Contract Prices Info.	Quarterly									
NAND Flash Wafer Spot Prices Info.	Weekly									
NAND Flash Wafer Contract Prices Info.	Monthly									
WW SSD Street Price	Biweekly									
Enterprise SSD Contract Price	Quarterly									
PC-Client OEM SSD Contract Price	Quarterly									
Report										
Research Report	Quarterly			0	0	0	0	0	0	
Special Report	Aperiodically			0	0	0	0	0	0	
Datasheet										
DRAM Platinum Datasheet	Monthly			0	0			0	0	
NAND Platinum Datasheet	Monthly					0	0	0	0	
DRAM Diamond Datasheet	Quarterly				0				0	
NAND Diamond Datasheet	Quarterly						0		0	
Server DRAM Datasheet	Quarterly									
Mobile Datasheet	Quarterly									
Enterprise SSD Datasheet	Quarterly									
SSD Datasheet	Quarterly									
Mobile Device Datasheet	Quarterly									
Foundry Datasheet	Quarterly									
SLC Datasheet	Quarterly									
Consumer DRAM Datasheet	Quarterly									
Other Service										
Analyst Con. Call	Quarterly			0	0	0	©	0	0	
Business Visiting	Arrange			0	0	0	0	0	0	
Price(USD) – Excluded Tax		2,000	6,000	10,000	18,000	10,000	18,000	18,000	33,000	

DRAMeXchange Market Intelligent Service



Membership Service	Single Purchase												
Item	Frequency	Nor Flash Report	Foundry Project	Mobile Package	Server DRAM Package	Server Platinum	Enterprise SSD Package	SSD Pro Package	SSD Package	Smartphone Market Decode	NAND Flash Wafer	SLC Datasheet	Consumer DRAM Datasheet
Price Information													
Spot Price Early Notice	Daily												
Historical Price Download	Daily												
DRAM/NAND Contract Early Notice	Monthly												
Server DIMM Contract Price	Monthly				0	0							
Mobile Contract Prices Info.	Quarterly			0									
NAND Flash Wafer Spot Prices Info.	Weekly										0		
NAND Flash Wafer Contract Prices Info.	Monthly										0		
WW SSD Street Price	Biweekly							0	0				
Enterprise SSD Contract Price	Quarterly					0	0	0					
PC-Client OEM SSD Contract Price	Quarterly							0	0				
Report													
Research Report	Quarterly			Mobile DRAM	0	0				©			
Special Report	Aperiodically	Once Only		0				0	0				
Datasheet													
DRAM Platinum Datasheet	Monthly												
NAND Platinum Datasheet	Monthly												
DRAM Diamond Datasheet	Quarterly												
NAND Diamond Datasheet	Quarterly												
Server DRAM Datasheet	Quarterly				0	0							
Mobile Datasheet	Quarterly			0									
Enterprise SSD Datasheet	Quarterly					0	0	0					
SSD Datasheet	Quarterly							0	0				
Smartphone Datasheet	Quarterly									0			
Foundry Datasheet	Quarterly		0										
SLC Datasheet	Quarterly											0	
Consumer DRAM Datasheet	Quarterly												©
Other Service													
Analyst Con. Call	Quarterly		0	0		0	0	0	0				
Business Visiting	Arrange		0			0	0	0					
Price(USD) – Excluded Tax		1,500	70,000	8,000	12,000	22,000	12,000	18,500	8,500	12,000	5,000	6,000	6,000

Silver Membership



As DRAMeXchange Silver Membership, you are allow to assess our services below:

I DRAM/NAND Contract/Spot Price Information

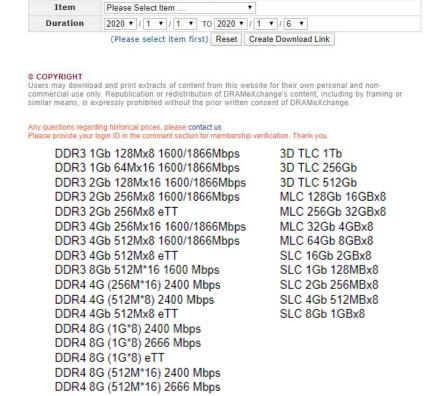
Authorize to download price on DRAMeXchange Price Database, and:

- 1. Download DRAM / NAND Flash daily spot prices or monthly contract prices from 2016 to current in excel format
- 2. View DRAM / NAND Flash spot / contract price trend in chart format on a weekly, monthly, quarterly and yearly basis, or on customized basis
- 3. Download DXI (DRAMeXchange Index) from 2019 to current in excel format
- 4. Compare the price trend between different densities in chart format (only for mainstream chips, and also on a weekly, monthly, quarterly and yearly basis)
- 5. Historical Daily Express a quick look at daily DRAM / NAND Flash spot markets from Nov. 28th, 2003 to current

Historical Price Download Center

Notice: We have made adjustments to the sampling base in our analysis, and these changes have been incorporated into our survey of specialty DRAM prices since Dec. 2017. As a result, the survey for Dec. 2017 shows significant price fluctuations.

● DRAM Spot ○ DRAM Contract ○ Flash Spot ○ Flash Contract ○ Memory Card



Silver Membership



I DRAM/NAND Market View

An overall and latest updated on DRAM, NAND Flash, PC and SSD industry

I DRAM/NAND Learning Center

Learning Center: an introduction of memory industry, separated into DRAM and NAND Flash.

I Daily News Alert

Provides Silver members daily update of DRAM, NAND FLASH, PC, Memory Card, etc. semiconductor industry news

I SSD Performance Test

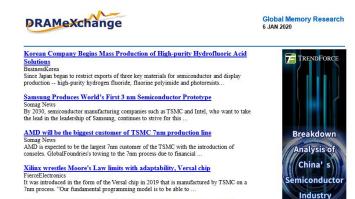
Samsung's next foldable phone: Feb. 11 launch likely, price, cameras and

Samsung is widely expected to Jaunch a new foldable phone on Feb. 11 in San Francisco at

its official Unpacked event. Invitations are out, subtly hinting at a ...

CNET

View our result of performance test on different SSD products







Gold Membership

Gold membership is the value-added membership that advances from Silver membership, Gold membership will enjoy all Silver membership Package and other services as below:



DRAMeXchange offers DRAM/NAND Contract and Spot Prices download, and as members, you can view the latest price information on the website.

I DRAM/NAND Flash Contract Price Early Notice

DRAMeXchange offers a monthly DRAM/NAND Flash contract price early notice. This notice provides the latest price information and send to members before our website is updated.



TrendForce Corp. www.trendforce.co

TRENDFORCE

NAND Flash Contract Price Dec. 2019

Rising Stock-Up Demand Led to a 3-5% MoM Increase in Prices of MLC Chips in December



TrendForce Corp. www.trendforce.com



DRAM Contract Price Dec. 2019

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PC DRAM Market Saw Price Stabilization and Volume Growth in December With 8GB Modules \$
Trading at an Average of US\$24.5



With the decline in PC DRAM prices tapering off, graphics and server DRAM are set to lead the ne cyclical rally in 1020



DRAM Contract Price Update		Nov. 2H			Dec. 2H		Change			
Item (Unit: USD)	Hi	Low	Avg	Hi	Low	Avg	Hi(%)	Low(%)	Avg(%)	
DDR4 8GB 50-DIMM 2133/2400Mbps										
DDR4 8GB U-DIMM 2133/2400Mbps										
DDR4 4GB SO-DIMM 2133/2400Mbps		I'R	E	VI	F	OF	CI	E.		
DDR4 4GB U-DIMM 2133/2400Mbps										
DDR4 8Gb 1G*8 2133/2400Mbps (based on 8GB module)										

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DRAM Platinum Membership



DRAM Platinum member will receive all data including Silver and Gold membership coverage. DRAM Platinum Service covers as below:

I DRAM Monthly Datasheet

DRAMeXchange offers you a complete analysis on DRAM industry supply/demand sufficiency, cost analysis and price forecast.

I DRAM Quarterly Research Report

DRAMeXchange Research report covers DRAM production overview, shipment update and forecast, new product and technology roadmap, industry and pricing trend.

I Analyst Consulting Service

Members could schedule quarterly conference call with DRAMeXchange Analysts.

I Business Visiting

Meet DRAMeXchange Analysts by person! Schedule business visiting with DRAMeXchange Analysts.

Additional purchase for the DRAM Market Bulletin

We are newly added the value-added services in order to help the client to catch up the DRAM market highlight on a weekly basis!



DRAM Platinum Membership

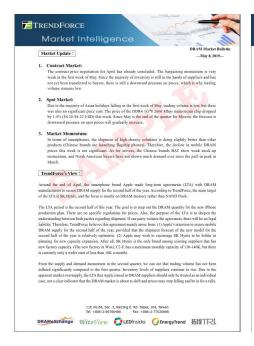


The DRAM Market Bulletin – Additional purchase

DRAMeXchange offers an additional purchase which only applies to the above DRAM Platinum members, a comprehensive market update on the Contract, Spot and the DRAM market momentum.

We also provide our point of view on the instant hot topic analysis on the weekly basis.

*At least 40 publication reports in a year.





Additional fee:
USD 3,500/year
Language:
English / Chinese / Simple Chinese
Format:
PDF
Frequency:
Wednesday of the published week

DRAM Platinum Membership



DRAM Platinum Monthly Datasheet

DRAM Worldwide Supply Update

DRAM Market Forecast

DRAM Makers' Revenue

DRAM Makers Quarterly Revenue Ranking

DRAM Operating Margin By Each Vendors

DRAM Makers' Capex

DRAM Worldwide 12" Quarterly Wafer Starts

DRAM Makers' Fab Capacity breakdown by Brand

DRAM Makers' Fab Capacity breakdown by Fab

DRAM Worldwide Monthly Production Summary

DRAM Worldwide Monthly Production breakdown by Type

DRAM Worldwide Monthly Production breakdown by Region

DRAM Worldwide Process Ratio by quarter

Technology breakdown by Company

DRAM Makers' Quarterly Production Output breakdown by Density

DRAM Supply v.s. Demand Sufficiency Analysis

DRAM Supply v.s. Demand Sufficiency

DRAM Supply and Demand Model

DRAM Worldwide Demand Update

Worldwide Monthly Motherboard shipment

Worldwide Monthly Notebook shipment

Worldwide Monthly PC shipment

Worldwide Monthly PC shipment (including Tablet)

Worldwide Quarterly Server & Workstation Shipment

Worldwide Quarterly Graphics Shipment

Worldwide Quarterly Handset Production Volume

DRAM Content Per Box in MB, NB

DRAM Market Forecast

DRAM Spot and Contract Prices Forecast by Month

Worldwide DRAM Production Forecast

DRAM Cost Structure Update

DRAM Diamond Package (DRAM Monthly & Quarterly Datasheet)



DRAM Diamond member will receive all data including DRAM Platinum membership coverage. DRAM Diamond Service covers as below:

I DRAM Monthly Datasheet

DRAMeXchange offers you a complete analysis on DRAM industry supply/demand sufficiency, cost analysis and price forecast.

I DRAM Quarterly Datasheet

DRAMeXchange Offers you a complete analysis on DRAM industry wafer input, production output, technology node...etc. by each company.

I DRAM Quarterly Research Report

DRAMeXchange Research report covers DRAM production overview, shipment update and forecast, new product and technology roadmap, industry and pricing trend.

I Analyst Consulting Service

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I Business Visiting

Meet DRAMeXchange Analysts by person! Schedule business visiting with DRAMeXchange Analysts.

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DRAM Diamond Quarterly Datasheet

DRAM Fab Capacity Update

DRAM Makers' Capex

DRAM Makers' Quarterly DRAM Revenue

DRAM Makers' Quarterly Revenue Ranking

DRAM Makers' Capacity Breakdown by Brand

DRAM Makers' Capacity Breakdown by Fab

DRAM Makers' Output by Brand

DRAM Makers' Output by Fab

Samsung DRAM Fabs' Capacity/Output by Design Rule SK Hynix DRAM Fabs' Capacity/Output by Design Rule Micron DRAM Fabs' Capacity/Output by Design Rule Powerchip DRAM Fabs' Capacity/Output by Design Rule Nanya DRAM Fabs' Capacity/Output by Design Rule Winbond DRAM Fabs' Capacity/Output by Design Rule JHICC DRAM Fabs' Capacity/Output by Design Rule CXMT DRAM Fabs' Capacity/Output by Design Rule

DRAM Production Output Update

Technology Breakdown by Company

DRAM Makers' Production Output Breakdown by Density

Density Production Output Breakdown by DRAM Maker

DRAM Makers' Production Output by Type

Samsung DRAM Production Output by Type

SK Hynix DRAM Production Output by Type

Micron DRAM Production Output by Type

Nanya DRAM Production Output by Type

Powerchip DRAM Production Output by Type

Winbond DRAM Production Output by Type

Prices Forecast

Spot and Contract Prices Forecast by Quarter





TrendForce & TRI Research Areas



IC



Memory

Consumer Electronics



Green Energy



Display Panel





Innovative Technology



Intelligent Living



Automotive Industry 4.0 Technology











Cloud Computing & IoT

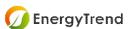
Sales & Services



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WitsView

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Communication & Broadband. Consumer Electronics, Innovative Technological Applications, Automotive, Industry 4.0, Gov. & Ent.

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