



Flash Memory Component (FMC) subscription service FAQ

What is SI's Flash Memory Component (FMC) subscription service

Semiconductor Insights' Flash Memory Component (FMC) subscription service offers a quarterly view of the NAND and NOR flash market. It provides a complete understanding of the memory industry and specifics about selected NAND and NOR devices. The service covers flash chips, not flash cards, although there may be statements concerning a flash chip found within a flash card. The FMC concentrates on the top manufacturers, with other companies being included at SI's discretion.

- Quarterly rollup of new NOR and NAND memory manufacturer announcements with SI commentary
- Provides high quality images with identification of 4 memory devices each quarter (16 per year) to provide:
 - Manufacturer (if possible), part number, and origin
 - Density
 - Package
 - Die size and markings
 - Transistor gate length
- Contrast rolling 36 month NOR and NAND memory device to compare density, die size and Mb/mm²
- More detailed analysis of the most innovative device each quarter (4 per year) to include at least one of:
 - Analysis of device structure
 - Waveform analysis

Who needs this information and why?

The information provided by SI's FMC subscription service has targeted applications for various individuals in a technology organization including:

Semiconductor companies

Business unit leaders, product managers, and marketing engineers need to understand what the competitors are doing in the memory market. This FMC subscription service offers a cost effective way to see the latest innovations in memory products and a quarterly summary of what is happening in the market. This lets chip companies make educated product and market decisions.

Mobile Application Manufacturers

Mobile application manufacturers need to know which chips are being deployed in the market and a better understanding of why to choose one over another. SI's FMC subscription service provides a view of both NAND and NOR memory products.

Equity/Financial Community

For regulatory and ethical reasons, there is now a very clear separation of the research and investment arms of financial services firms. This has left many in the equity community seeking quality sources of new objective research. A strong and impartial view into what is happening in the memory market provides a strong predictor of a company's future market and financial success. As well, this information provides a sanity check for market research forecasts and a company's public statements.

Market Research Firms

Market analysts are always challenged to make sense of tons of data coming from diverse sources, often with competing agendas. The FMC subscription service helps market researchers make sense of what is happening in the market and gives credence to an analyst's forecasts and/or highlights areas requiring additional diligence. SI recognizes that analysts may wish to incorporate some of the FMC data in their own reports and is supportive of this direction.



Which memory products are available in the service?

The FMC subscription service follows a calendar quarter schedule. Memory devices currently available (as well as upcoming products) in the Flash Memory Component subscription service are listed below:

Quarter	Manufacturer	Density	Type	Part #
Q4/05	Samsung	4Gb	NAND Flash	K9F4G08U0MPCB0
Q4/05	Hynix	2Gb	NAND Flash	HY27UG082G2M
Q4/05	Sandisk/Toshiba	2Gb	NAND Flash	CU4530874
Q4/05	STMicroelectronics	256Mb	NOR Flash	M30L0R7700
Q1/06	Intel	64Mb	90nm Wireless Flash	28F640EW
Q1/06	Intel	512Mb	90nm MLC StrataFlash	28F512M18
Q1/06	Toshiba	512Mb	NAND Flash	TV7000W010AABD
Q1/06	Samsung	4Gb	90nm MLC NAND Flash	K9G4G08UOM

Press releases reviewed are from a variety of different vendors. We track the major players in both the NOR and NAND markets.

Manufacturers Covered	
NOR Vendors Tracked	NAND Vendors Tracked
Intel	AMD
Spansion	Samsung
Sharp	Toshiba-Sandisk
Toshiba	Renesas
NEC	Hynix
Micron	Macronix
ST Microelectronics	M-Systems
Samsung	Infineon

What is included in the the FMC subscription service?

The Preferred Flash Memory Component (FMC) subscription service offers a quarterly rollup of announcements in the memory market with expert SI commentary, high quality images of 4 memory devices per quarter, a contrast rolling 36 month NOR and NAND memory device to compare density, die size and Mb/mm² and focused analysis of 1 innovative memory device per quarter.

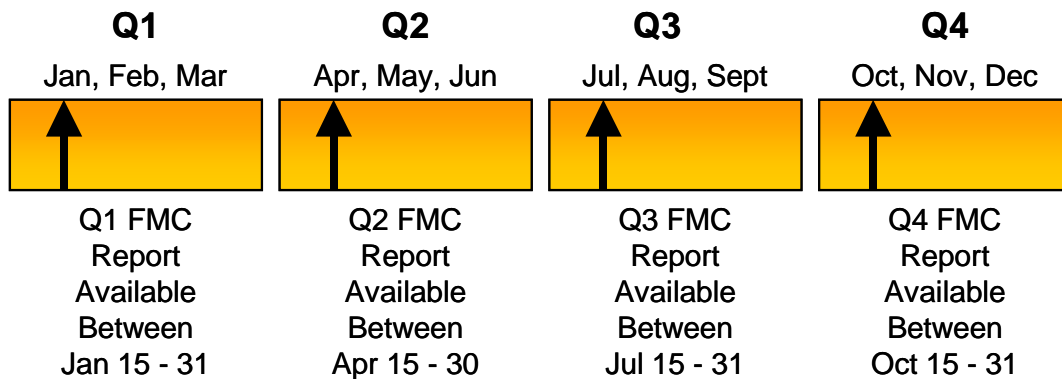
An expanded version of the FMC subscription service will be offered in the Gold Flash Memory Component (FMC) subscription service. The Gold service will offer the same high quality as the Preferred service, and will offer addition information on the 4 memory devices covered each quarter (16 per year). This information will include process measurements, number of metal and poly layers, cell size and IC cost. Please contact for availability and pricing.



A new evolution of the Preferred FMC subscription service will be available. This version of the FMC will be focused on the DRAM market. The quality and type of content will remain the same as the Preferred FMC, but will be devoted to the DRAM products. Please contact for availability and pricing.

How and when are the reports delivered?

The FMC subscription service works on standard calendar quarters, with the compilation and delivery of 1 report per quarter (4 total per year) available within the first 2 weeks of each calendar quarter detailed in the figure below.

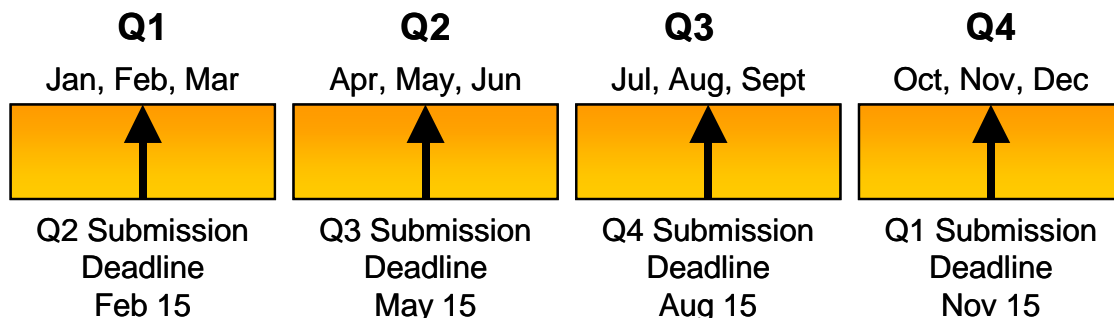


The report is available in PDF format, accessible via the web from the subscriber's MySI Account under the "Download Tab". The image sensors are processed during the previous quarter. For example, the image sensors that appear in the Q3 FMC Report would be processed during Q2 (April, May and June) for a delivery date in the beginning of Q3 (July).

Can I submit requests for specific memory products?

Yes. We encourage all existing subscribers (and any potential new ones) to submit specific memory product requests. To do this, please email your request to: subscriptions@semiconductor.com. We will endeavor to add all requested memory devices (at SI's discretion) to the service based on availability and the overall fit of the requested product into SI's currently queued devices. SI reserves the right to allow requests on a "first come, first served" basis, and each request will be queued accordingly. In order to have a better chance of the desired memory device to appear in the report, identification of a system in which the memory product can be found, or samples of the desired memory product, should be provided to SI.

To plan our ongoing analysis of memory devices in-house, the following diagram outlines the submission deadlines for each upcoming quarter. These dates assume that the submitted part has been received at our facilities.





Frequently Asked Questions about the FMC subscription service?

Will I received a soft copy version of the report?

Yes. At this time, PDF format soft copies of the report will be made available for download via the web from the subscriber's MySI Account under the "Download Tab".

Why are you analyzing NOR and NAND technology?

Both NOR and NAND memory products are being used in a variety of different devices, but they each type is working on entering the market currently dominated by the opposing technology. To best understand what is happening in the memory market, both types of technologies must be examined.

How are the memory devices found in the FMC subscription service selected?

Memory devices are selected based on both customer input and SI expertise. Customers are welcome to recommend memory products that they would like to see in future editions of the FMC subscription service. These products will be more likely to appear if samples, or information about where we can find them, can be provided.

Semiconductor Insights watches the memory market very closely. We perform hundreds of circuit and structural analyses every year, allowing us to identify innovative devices. These devices will be included in the FMC subscription service.

How do I sign up for the FMC subscription service?

To sign up for Semiconductor Insights' FMC subscription service, please request a quote from subscriptions@semiconductor.com

How do I get more information?

Please direct any questions and comments regarding this service to subscriptions@semiconductor.com