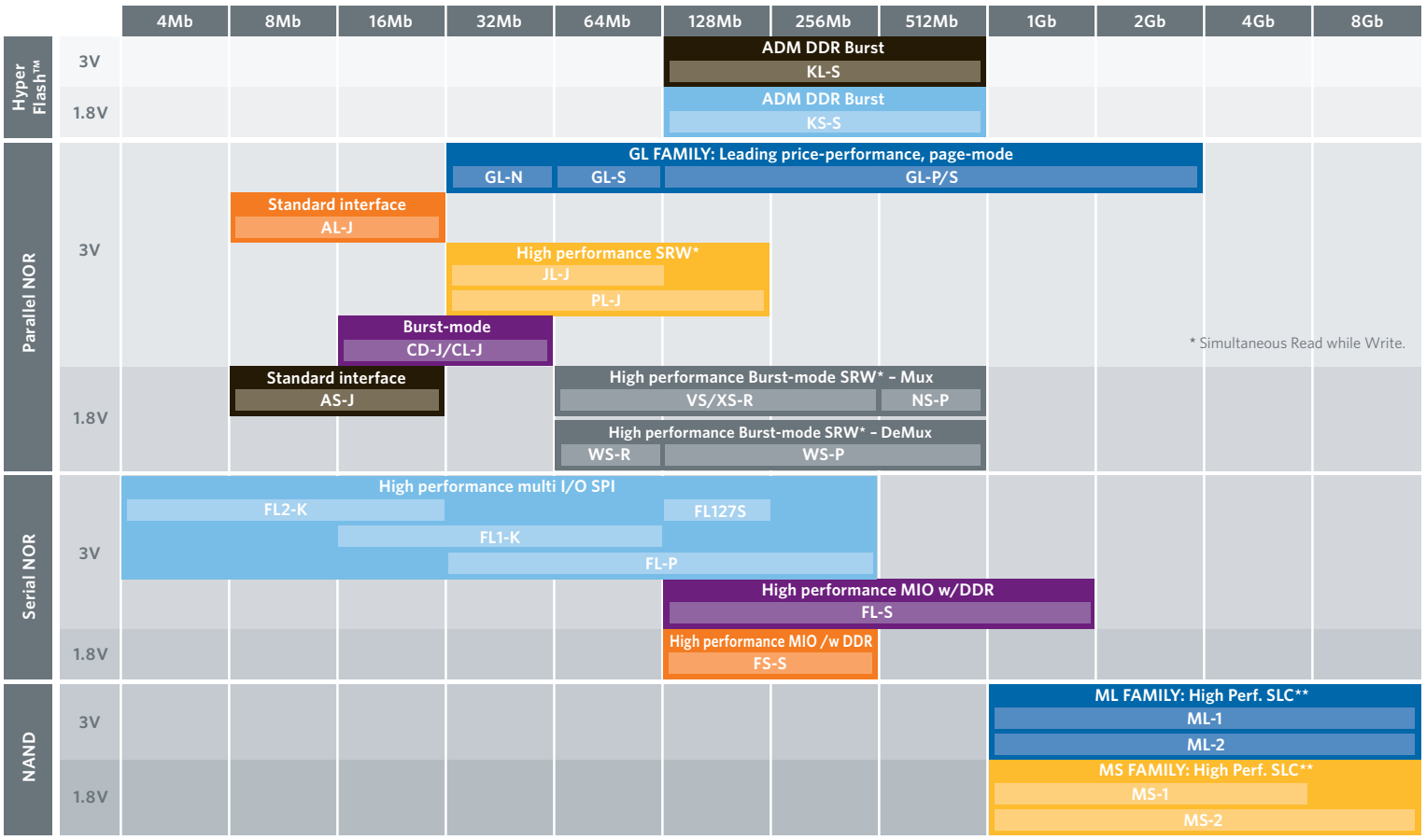
SPANSION®

Spansion® Flash Memory Reference Guide

SPANSION'S PRODUCT PORTFOLIO



UNIVERSAL FOOTPRINT FOR ULTIMATE FLEXIBILITY

		4Mb	8Mb	16Mb	32Mb	64Mb	128Mb	256Mb	512Mb	1Gb	2Gb	4Gb	8Gb
Hyper Flash	24-BALL BGA						S26KL128S S26KS128S	S26KL256S S26KS256S	S26KL512S S26KS512S				
Parallel NOR	48-PIN TSOP		S29AL008J S29AS008J	S29AL016J S29AS016J	S29GL032N S29JL032J	S29GL064S S29JL064J							
	56-PIN TSOP				S29GL032N	S29GL064S	S29GL128S S29GL128P S29PL127J	S29GL256S S29GL256P	S29GL512S S29GL512P	S29GL01GS S29GL01GP			
	48-BALL FBGA (0.8 MM PITCH)		S29AL008J S29AS008J	S29AL016J S29AS016J	S29GL032N S29JL032J S29PL032J	S29GL064S S29JL064J S29PL064J							
	56-BALL FBGA (0.8MM PITCH)						S29GL128S	S29GL256S	S29GL512S				
	64-BALL FORTIFIED BGA (1.0 MM PITCH)			S29AL016J	S29GL032N S25FL123K	S29GL064S	S29GL128S S29GL128P	S29GL256S S29GL256P	S29GL512S S29GL512P	S29GL01GS S29GL01GP	S70GL02GS		
Serial NOR	8-PIN SO (150 MIL)	S25FL204K	S25FL208K	S25FL216K S25FL116K	S25FL132K								
	8-PIN SO (208 MIL)	S25FL204K	S25FL208K	S25FL216K S25FL116K	S25FL032P S25FL132K	S25FL164K	S25FS128S						
	16-PIN SO (300 MIL)				S25FL032P	S25FL064P S25FL164K	S25FL128S S25FL128P S25FL129P S25FL127S	S25FL256S S25FS256S	S25FL512S	S70FL01GS			
	8-CONTACT WSON (6x5 MM)			S25FL116K	S25FL032P S25FL132K	S25FL164K	S25FS128S S25FL127S						
	8-CONTACT WSON (6X8 MM)				S25FL032P	S25FL064P	S25FL128S S25FL128P S25FL129P	S25FL256S S25FS256S					
	24-BALL BGA			S25FL116K	S25FL032P S25FL132K	S25FL064P S25FL164K	S25FL128S S25FS128S S25FL127S S25FL129P	S25FL256S S25FS256S	S25FL512S	S70FL01GS			
NAND	48-PIN TSOP									S34ML01G1 S34ML01G2	S34ML02G1 S34ML02G2	S34ML04G1 S34ML04G2 S34MS04G1 S34MS04G2	S34ML08G1 S34ML08G2
	63-BALL BGA									S34ML01G1 S34ML01G2 S34MS01G1 S34MS01G2	S34ML02G1 S34MS02G1 S34ML02G2 S34MS02G2	S34ML04G1 S34ML04G2 S34MS04G1 S34MS04G2	S34ML08G1 S34MS08G2

** Additional NAND offerings in development. Contact Spansion Sales for information.

(S) SPANSION ORDERING PART NUMBER CONSTRUCTION / SINGLE-DIE PRODUCTS

Generic OPN	Ordering Options

Speed Option (Parallel NOR and SPI)

Asynchronous (no CLK input) "Speed Option" represents random access time (ns). If greater than 100ns, use the two leftmost digits.

Synchronous (CLK input) "Speed Option" represents clock frequency (MHz). First character represents the data rate, combined with the speed in 100s of MHz:

0 SDR, <100 MHz **A** SDR, 100 MHz **D** DDR, <100 MHz

Second character represents the speed between 0 and 99 MHz:

A 0-4	**D** 15-19	**G** 30-34	**K** 45-49	**N** 60-64	**R** 75-79	**U** 90-94
B 5-9	**E** 20-24	**H** 35-39	**L** 50-54	**P** 65-69	**S** 80-84	**W** 95-99
C 10-14	**F** 25-29	**J** 40-44	**M** 55-59	**Q** 70-74	**T** 85-89	**X** 100-108

Bus Width (NAND)

00 = x8 NAND, single die
01 = x8 NAND, dual die
04 = x16 NAND, single die
05 = x16 NAND, dual die

Product Series

25 = Serial Peripheral Interface (SPI) Flash memory
26 = HyperFlash Memory
29 = Sector Erase NOR Flash memory
34 = Floating Gate NAND
70 = Dual Die Flash Package

Density

001-512 = 1 Mb-512 Mb
204-216 = 4 Mb-16 Mb*
116-164 = 16Mb-64Mb**
127 = 128 Mb***
01G-64G = 1 Gb-64Gb

Temperature Grade

C = Commercial (0° to +70°C)
W = Wireless (-25° to +85°C)
I = Industrial (-40° to +85°C)
V = In-Cabin (-40° to +105°C)
N = Extended (-40° to +125°C)

Packaging Type

0 = Tray
1 = Tube
2 = 7" Tape & Reel
3 = 13" Tape & Reel

Prefix	Series		Family		G Density			Tech	Speed / Bus Width		Package		Temp	Model Number		Pack type
S	2	9	G	L	0	1	G	S	1	0	D	H	I	0	1	3

Prefix

S = Spansion

Flash Interface and Simultaneous Read-write

	SRW	NO SRW
Standard	J	A
Page	P	G
Burst (ADP)	W	
Burst (ADM)	N/V	
Burst (AADM)	X	
Serial (SPI)		F
Burst (ADM)		K
Automotive Burst (Demux)	C	
NAND		M

ADP = Address data parallel
ADM = Address data mux
AADM = Address-address data mux

Core Volatge

L = 3-volt VCC
D = 2.5-volt VCC
S = 1.8-volt VCC

Process Technology

J = 110nm, Floating Gate Technology
K = 90nm, Floating Gate Technology
N = 110nm, MirrorBit Technology
P = 90nm, MirrorBit Technology
R = 65nm, MirrorBit Technology
S = 65nm, MirrorBit Technology (Eclipse)
1 = NAND Revision 1 (4X nm)
2 = NAND Revision 2 (3X nm)

Package Type (Family)

A = BGA-0.5mm pitch
B = BGA-0.8mm pitch (PNOR), 1.0mm pitch (SPI, HyperFlash, NAND)
D = Fortified BGA, 9mm x 9mm
F = Fortified BGA, 11mm x 13mm
M = SOIC/SOP
N = SON
Q = PQFP
T = TSOP

Package Material Set (Varies by Package Type)

A = Leaded
F = Lead (Pb)-Free
H = Low Halogen Lead (Pb)-Free

Additional Ordering Options

Varies for each generic OPN (characters 00-ZZ). Meaning is defined in each datasheet.

* For FL2-K
** For FL1-K
*** For FL127S

Spansion: 915 DeGuigne Drive, PO Box 3453, Sunnyvale, CA 94088-3453 USA
+1 (408) 962-2500 | 1 866 SPANSION | www.spansion.com

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