MACRONIX WLCSP Solutions

SERIAL NOR FLASH PRODUCT LIST WITH WLCSP

I-Grade (-40°C to +85°C)

Density	Voltage Range (Vcc)	Part Number	Organization			Read Speed per "cmd-addr-data" Bus Width (MHz)						SFDP Mode	HOLD Pin[1]	RESET Pin[1]	WLCSP Package Information				
			4 (KB)	32 (KB)	64 (KB)	FREAD 1-1-1	DREAD 1-1-2	2READ 1-2-2	QREAD 1-1-4	4READ 1-4-4	QPI 4-4-4				Active Ball	Dummy Ball	Ball Size (mm)	Ball Pitch (mm)	Package Height (mm)
512Kb	1.65V-3.6V	MX25R512FBFI	●	●	●	104	104	104	104	104		●	●	●	8	0	0.21		0.33
1Mb	1.65V-3.6V	MX25R1035FBFI	●	●	●	104	104	104	104	104		●	●	●	8	0	0.21		0.33
	2.7V-3.6V	MX25L1006EBAI	●		●	104	80					●	●		8	0	0.25	0.5	0.45
2Mb	1.65V-3.6V	MX25R2035FBDI	●	●	●	104	104	104	104	104		●	●	●	8	0	0.21		0.52
	1.65V-2.0V	MX25U2033EBAI	●	●	●	80		80		70		●	●		8	0	0.25	0.5	0.45
4Mb	1.65V-3.6V	MX25R4035FBDI	●	●	●	104	104	104	104	104		●	●	●	8	0	0.21		0.52
	1.65V-2.0V	MX25U4033EBAI	●	●	●	80		80		70		●	●		8	0	0.25	0.5	0.45
8Mb	1.65V-3.6V	MX25R8035FBDI	●	●	●	104	104	104	104	104		●	●	●	8	0	0.21		0.52
	1.65V-2.0V	MX25U8033EBAI	●	●	●	80	80	80		70		●	●		8	0	0.25	0.5	0.45
		MX25U8033EBCI	●	●	●	80	80	80		70		●	●		8	0	0.22	0.5	0.33
16Mb	1.65V-3.6V	MX25R1635FBDI	●	●	●	80	80	80	80	80		●	●	●	8	4	0.21		0.52
	1.65V-2.0V	MX25U1635FBAI	●	●	●	104	104	84	104	104	104	●		●	8	4	0.25	0.5	0.48
32Mb	1.65V-3.6V	MX25R3235FBDI	●	●	●	80	80	80	80	80		●	●	●	8	4	0.21		0.52
	1.65V-2.0V	MX25U3235FBAI	●	●	●	104	104	84	104	104	104	●		●	8	4	0.25	0.5	0.48
64Mb	2.7V-3.6V	MX25L6435EBBI	●	●	●	104	86	86	86	104		●	●		8	4	0.3	0.5	0.52
		MX25L6473EBBI	●	●	●	104	86	86	86	104		●	●		8	4	0.3	0.5	0.52
	1.65V-3.6V	MX25R6435FBDI	●	●	●	80	80	80	80	80		●	●	●	8	14	0.21		0.52
	1.65V-2.0V	MX25U6435FBBI	●	●	●	104	104	84	104	104	104	●		●	8	4	0.3	0.5	0.52
128Mb	1.65V-2.0V	MX25U12835FBBI	●	●	●	104	104	84	104	104	104	●		●	8	15	0.3	0.5	0.52
256Mb	1.65V-2.0V	MX25U25635FBBI	●	●	●	108	108	108	108	108	108	●		●	8	23	0.3	0.5	0.52

Note: Please contact local Macronix sales representatives for detailed information.

1. While RESET# and HOLD# are both marked, the ordering part number depends on Options 2 as shown in MX25R Series Serial NOR Flash Example below.

Product family extension is based on market demand.

MACRONIX INTERNATIONAL CO., LTD. reserves the right to change product and specifications without notice.

Serial NOR Flash Example

MX 25L 256 35 F BB I - 10 G

DEVICE :
- 25L : 3V, Serial NOR Flash
- 25U : 1.8V, Serial NOR Flash
- 25V : 2.5V, Serial NOR Flash

DENSITY :
- 512 : 512Kb
- 10 : 1Mb
- 20 : 2Mb
- 40 : 4Mb
- 80 : 8Mb
- 16 : 16Mb
- 32 : 32Mb
- 64 : 64Mb
- 128 : 128Mb
- 256 : 256Mb
- 512 : 512Mb

MODE :
- 06 : Single-in, Dual-out
- 08 : Unique ID
- 26 : Default lock protection
- 33/35/39 : MXSMIO®-Multi-in, Multi-out
- 36 : MXSMIO®-Single-in, Multi-out
- 45 : MXSMIO® Duplex(DTR)-Multi-in, Multi-out
- 50 : MXSMIO®-Security RPMC type
- 55 : MXSMIO®-Security type
- 73 : MXSMIO® Multi I/O, Quad I/O Permanent Enable

GENERATION

PACKAGE TYPE :
- BA/BB/BC/BD : WLCSP

TEMPERATURE RANGE :
- E : Industrial (-55°C to 125°C)
- I : Industrial (-40°C to 85°C)
- J : Industrial (-40°C to 105°C)
- K : Industrial (-40°C to 125°C)
- S : Automotive Grade 3 (-40°C to 85°C)
- R : Automotive Grade 2 (-40°C to 105°C)
- Q : Automotive Grade 1 (-40°C to 125°C)

SPEED :
- 05 : 200MHz
- 08 : 133MHz
- 10 : 104MHz/108MHz
- 12 : 80MHz/86MHz
- 13 : 75MHz
- 15 : 66MHz
- 20 : 45MHz

OPTION :
- G : RoHS Compliant

PACKAGE TYPE

PACKAGE TYPE	Ball Size (mm)	Ball Pitch (mm)	Package Height (mm)
BA	0.25	0.5	0.45 / 0.48
BB	0.3	0.5	0.52
BC	0.22	0.5	0.33
BD	0.21		0.52

MX25R Series Serial NOR Flash Example

MX 25R 64 35 F BD I L 0

DEVICE :
- 25R: 1.65V-3.6V, Serial NOR Flash (Ultra Low Power/Wide Range Vcc)

DENSITY :
- 512 : 512Kb
- 10 : 1Mb
- 20 : 2Mb
- 40 : 4Mb
- 80 : 8Mb
- 16 : 16Mb
- 32 : 32Mb
- 64 : 64Mb

MODE :
- 35 : MXSMIO®-Multi-in, Multi-out

GENERATION

PACKAGE TYPE :
- BD/BF : WLCSP

TEMPERATURE RANGE :
- I : Industrial (-40°C to 85°C)

OPTION 1:
- L : Ultra Low Power Mode (Default)
- H : High Performance Mode (Default)

OPTION 2:
- 0 : RESET#
- 1 : HOLD#

PACKAGE TYPE

深圳市满度科技有限公司
Web:www.manduic.com
Tel:150-1290-5940
Email:sales@manduic.com
微信扫码咨询客服