



Long-Term Support
World Class Quality

IS37SML/SMW
Serial NAND Flash

IS38SML/SMW
Automotive Serial
NAND Flash

ISSI is pleased to announce the Serial NAND family to its expanding lineup of flash devices. The Serial NAND series enhances ISSI's comprehensive flash portfolio by offering high-density SPI-compatible solutions with x1, x2, and x4 support. These devices are available in capacities up to 4Gb, with options for 1.8V or 3.3V operation, and include AEC-Q100 qualified versions. Temperature ranges extend up to 105°C, meeting the needs of demanding applications.

ISSI's Serial NAND utilizes SLC NAND Flash technology, making it ideal for performance-driven applications requiring high reliability. Serial NAND offers faster program and erase times over Serial NOR to greatly improve system performance. With its compact packaging, smaller than traditional ONFI NAND flash, Serial NAND is the ideal choice for densities of 1Gbit and higher, offering a superior alternative to NOR-based solutions.

The IS37SML/SMW family is recommended for Consumer/Industrial applications while the IS38SML/SMW is AEC-Q100 and for applications requiring Automotive support.

Serial NAND Features

- Supply Voltage
 - IS37/38 SML-Series: Vcc = 2.7V to 3.6V
 - IS37/38 SMW-Series: Vcc = 1.7V to 1.95V
- Single-level cell (SLC) technology
- Read from Cache x1, x2, and x4 supported
- Page Size: 2176 bytes [2048 + 128] bytes
- Block Size: 64 pages [128K + 8K] bytes
- Up to 100K Program/Erase Cycles
- Fast Erase option available

Temperature Grades

- Industrial Temp Grade [-40 to +85°C]
- Automotive Grade A2 [-40 to +105°C]

Industry Standard Packages

- J = 8-contact WSON 8x6mm
- H = 24-ball TFBGA 6x8x1.2 mm



Applications

- Automotive infotainment
- Instrument Clusters
- ADAS
- Industrial meters
- Industrial sensors
- M2M
- POS Terminals
- Smart Metering
- Game Consoles
- Printers
- Digital Camera
- Digital TVs
- Set-top Boxes

SPI NAND Flash

Den	Part Number	Type	Vcc	Frequency	Temp.Range	Package Type	Status
1G	IS37SML01G1	x1, x2, x4	3.3V	104Mhz	-40 to 105°C	16-SOIC, 8-WSON	Prod
	IS37SML01G8B	x1, x2, x4	3.3V	104Mhz	-40 to 105°C	8-WSON, TFBGA	Prod
	IS37SMW01G8B	x1, x2, x4	1.8V	104Mhz	-40 to 105°C	8-WSON, TFBGA	Prod
2G	IS37SML02G8B	x1, x2, x4	3.3V	104Mhz	-40 to 105°C	8-WSON, TFBGA	Prod
	IS37SMW02G8B	x1, x2, x4	1.8V	104Mhz	-40 to 105°C	8-WSON, TFBGA	Prod
4G	IS37SML04G8B	x1, x2, x4	3.3V	104Mhz	-40 to 105°C	8-WSON, TFBGA	S=NOW
	IS37SMW04G8B	x1, x2, x4	1.8V	104Mhz	-40 to 105°C	8-WSON, TFBGA	Prod

Automotive SPI NAND Flash

Den	Part Number	Type	Vcc	Frequency	Temp.Range	Package Type	Status
1G	IS38SML01G1	x1, x2, x4	3.3V	104Mhz	-40 to 105°C	16-SOIC, 8-WSON	Prod
	IS38SML01G8B	x1, x2, x4	3.3V	104Mhz	-40 to 105°C	8-WSON, TFBGA	Prod
	IS38SMW01G8B	x1, x2, x4	1.8V	104Mhz	-40 to 105°C	8-WSON, TFBGA	Prod
2G	IS38SML02G8B	x1, x2, x4	3.3V	104Mhz	-40 to 105°C	8-WSON, TFBGA	Prod
	IS38SMW02G8B	x1, x2, x4	1.8V	104Mhz	-40 to 105°C	8-WSON, TFBGA	Prod
4G	IS38SML04G8B	x1, x2, x4	3.3V	104Mhz	-40 to 105°C	8-WSON, TFBGA	S=NOW
	IS38SMW04G8B	x1, x2, x4	1.8V	104Mhz	-40 to 105°C	8-WSON, TFBGA	Prod

*Note: IS38SML/SMW family of Serial NAND is AEC-Q100 qualified