

FORESEE®

SPI NAND Flash



SPI NAND Product Functions

More advanced NAND Flash process

2K byte cache

High reliability: extensive and rigorous testing

Internal ECC support

20K-byte OTP area

WSN package allows for small size

108MHz high-speed clock frequency

Unique ID function

Application Scope



PON



Router



AI speaker



IPC



Smart hardware



DVB



Smart access control

SPI NAND Product Functions

One Time Programmable (OTP)

- With a 20K-byte One Time Programmable (OTP) area where data is not erasable, software encryption can be achieved thanks to the unique ID of chips. In addition, the 20K byte OTP areas, which are larger than common 16K byte ones, provide more room for securely storing information.

Compact size: WSON package

- It adopts the mainstream WSON package (8x6mm) with only 8 chip pins, giving it a compact size which is 80% smaller than the conventional TSOP package (20x12mm). As a result, the number of PCB layers and PCB size are reduced, resulting in lower design costs.



8mm*6mm



20mm*12mm

SPI NAND Line-up

	512Mb	1Gb	2Gb	4Gb
Package	8*6*0.8mm	8*6*0.8mm	8*6*0.8mm	8*6*0.8mm
Interface	Standard-Dual-Quad	Standard-Dual-Quad	Standard-Dual-Quad	Standard-Dual-Quad
Page Size	(2K+64) Bytes	(2K+64) Bytes	(2K+64) Bytes	(2K+64) Bytes
Frequency	104MHz/133MHz	104MHz/108MHz	83MHz/104MHz/108MHz	108MHz
Operating Temp (Tc)	-40°C~+85°C	-40°C~+85°C	-40°C~+85°C	-40°C~+85°C
Storage Temp(Ta)	-65°C~+150°C	-65°C~+150°C	-65°C~+150°C	-65°C~+150°C
Operating voltage	3.3V/1.8V	3.3V/1.8V	3.3V/1.8V	3.3V
Endurance	Up to 100,000 P/E	Up to 100,000 P/E	Up to 100,000 P/E	Up to 100,000 P/E
Data Retention ^①	10 years	10 years	10 years	10 years

^①Test Condition: with 4bit/528Bytes ECC