



Advanced MPF+

38 Series

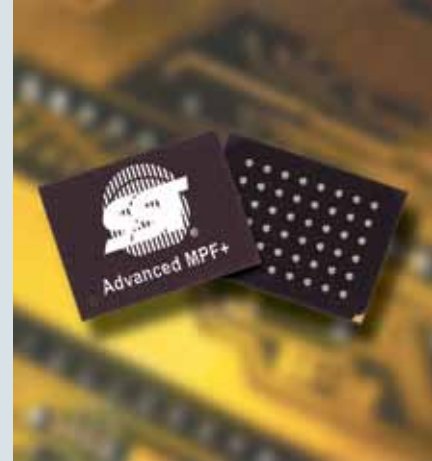
Product Brief

February 2010

Product Description

Advanced MPF+ is a family of high-performance, parallel flash memories that feature data protection capabilities as well as fast program, erase and read times. These high-speed operations enable quick boot times and field updates, resulting in better end-user experiences. These capabilities also provide higher throughput in manufacturing lines that use in-system programming of the flash. The data protection features of the Advanced MPF+ family prevent unauthorized data changes, ensuring that content stored on the flash memory is secure.

The 38 Series Advanced MPF+ products are ideal for applications that need high performance or require integrity of data and services. Available in standard packages with compatible pinouts, this family of devices also offers all the benefits of SuperFlash® technology: high-performance, low power and reliability.



Key Features

Page Read

- 25 ns/word (max) page read access time
- 4-Word page read buffer

Write-Buffer Programming

- 2.5 µs/word (max) programming time (full buffer)
- 16-Word write buffer

Bypass Mode

- Reduce overhead of program and erase commands

Protection/Security

- 128-bit unique ID
- 256-Word user programmable SEC ID area
- Individual block protection
- Irreversible block lock
- Boot-block options

SuperFlash Technology

- Endurance, 100,000 cycles (minimum)
- Greater than 100 years data retention
- Fast Sector-Erase and Block-Erase time: 25 ms (maximum)
- Low power



Applications

- Set-top Boxes
- Digital TVs
- DSL/Cable Modems
- Digital Camcorders
- Multi-function Printers
- Digital Cameras
- WiFi/WiMAX
- Digital Video Recorders
- Servers
- Industrial

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Advanced MPF+ Benefits

Page Read – Short boot-up times and fast execute-in-place

Write-Buffer Programming – Fast field updates and in-system programming

Bypass Mode – Reduces overhead on program and erase commands

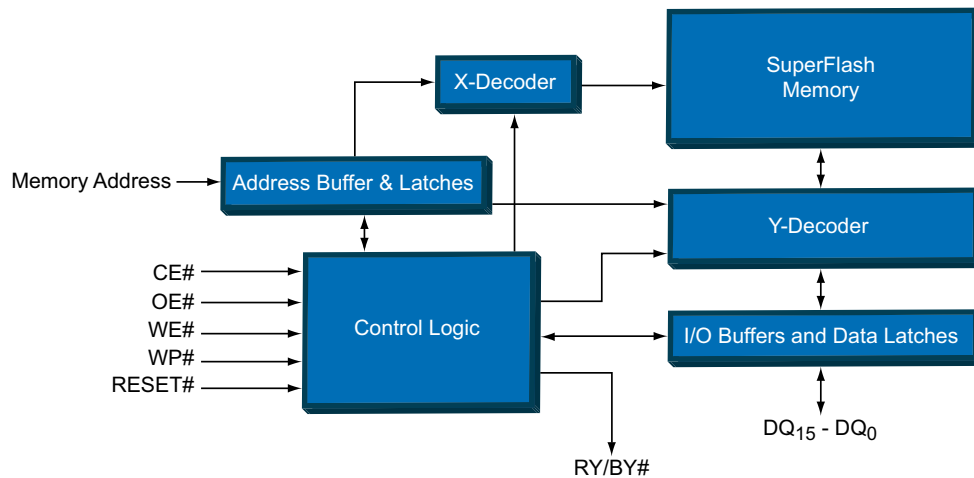
Protection/Security – Prevents unauthorized and accidental changes to data

SuperFlash Technology – High performance, superior reliability and low power

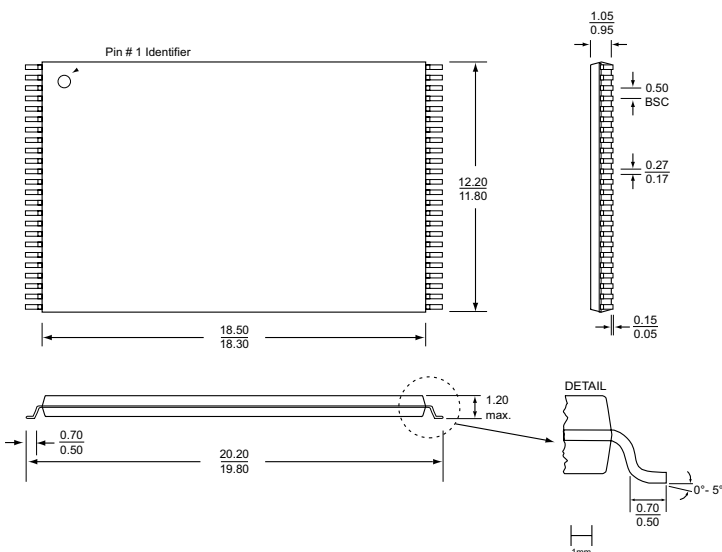
38 Series: Advanced MPF+

Device	Product Density	Voltage	Access Speed (ns)	Temperature	Hardware Block Protection	Packages
SST38VF6401	64 Mbit	2.7-3.6V	90	C/I	Bottom boot-block uniform (32 KWord)	TSOP-48, TFBGA-48
SST38VF6402	64 Mbit	2.7-3.6V	90	C/I	Top boot-block uniform (32 KWord)	TSOP-48, TFBGA-48
SST38VF6403	64 Mbit	2.7-3.6V	90	C/I	Bottom boot-block non-uniform (8 KWord)	TSOP-48, TFBGA-48
SST38VF6404	64 Mbit	2.7-3.6V	90	C/I	Top boot-block non-uniform (8 KWord)	TSOP-48, TFBGA-48

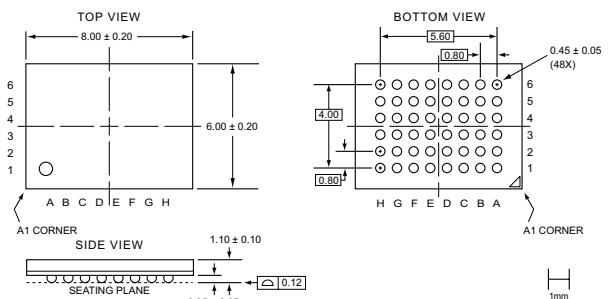
Functional Block Diagram



TSOP-48 (EK) Package Diagram



TFBGA-48 (B3K) Package Diagram



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