

# FLASH MEMORY

MT28F008S2

SMARTVOLTAGE (SVT-II)

## FEATURES

- Sixteen 64KB erase blocks
- Programmable sector protect
- Deep Power-Down Mode: 10µA MAX
- Second Generation SmartVoltage Technology (SVT-II):  
3.3V ±0.3V or 5V ±10% Vcc  
3.3V ±0.3V or 5V ±10% Vpp
- Address access times:  
70ns, 90ns, 120ns at 5V Vcc  
80ns, 100ns, 150ns at 3.3V Vcc
- Automated write and erase algorithm
- Two-cycle WRITE/ERASE sequence

## OPTIONS

- Timing (5V Vcc/3.3V Vcc)
 

70ns/80ns access	-7
90ns/100ns access	-9
120ns/150ns access	-12
- Packages
 

Plastic 40-lead TSOP Type 1 (10mm x 20mm)	VG
Plastic SOP (600 mil)	SG
- Part Number Example: MT28F008S2VG-7

## MARKING

## GENERAL DESCRIPTION

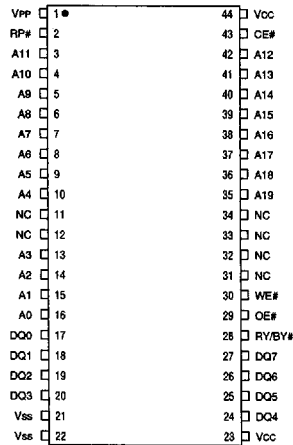
The MT28F008S2 is a nonvolatile, electrically block-erasable (Flash), programmable, read-only memory containing 8,388,608 bits. Second Generation SmartVoltage Technology (SVT-II) provides industry-standard, multi- or single-voltage, dual-supply operation. Writing or erasing the device is done with either a 3.3V or 5V Vpp voltage, while all operations are performed with a 3.3V or 5V Vcc (Vpp ≥ Vcc). It is fabricated with Micron's advanced CMOS floating-gate process.

The MT28F008S2 is organized into 16 separately erasable blocks. To ensure that critical data is protected from accidental erasure or overwrite, each of these blocks is independently hardware-protectable. Writing or erasing a protected block requires driving RP# to a super-voltage in addition to executing the normal WRITE or ERASE sequences. Any unprotected block is written and erased with no additional security measures.

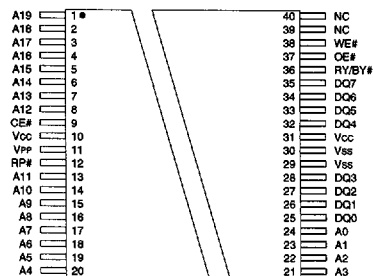
Please refer to Micron's web site ([www.micron.com/flash/htmls/datasheets.html](http://www.micron.com/flash/htmls/datasheets.html)) for the latest data sheet revisions.

## PIN ASSIGNMENT (Top View)

### 44-Pin SOP (FA-1)



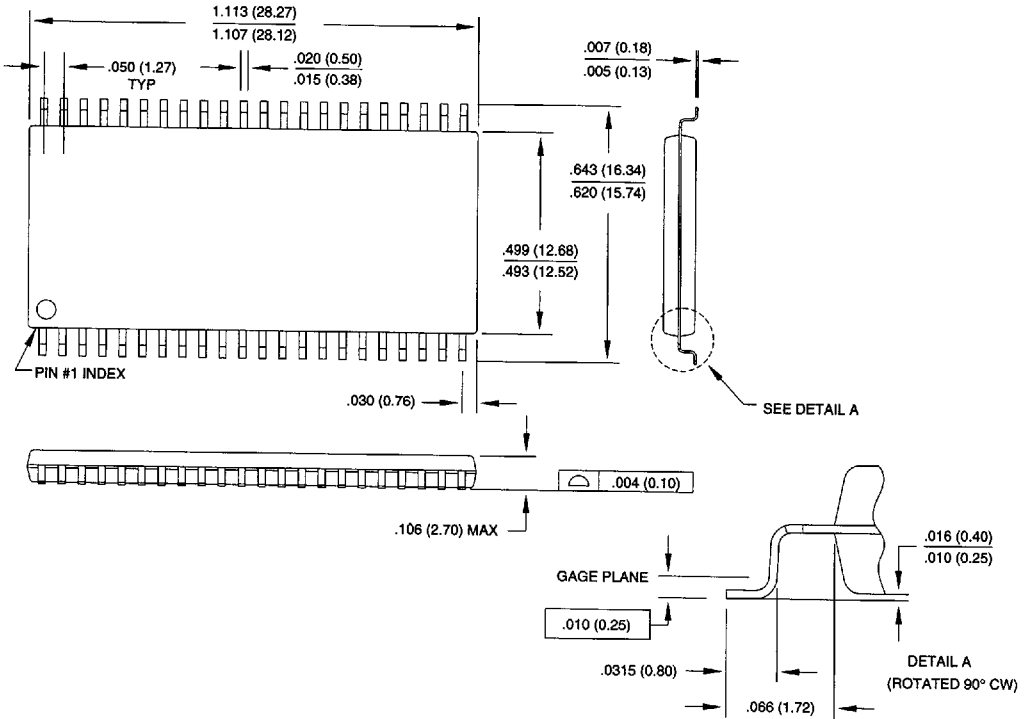
### 40-Pin TSOP Type I (FB-1)



EVEN-SECTORED FLASH MEMORY

**44-PIN PLASTIC SOP (600 mil)**

FA-1

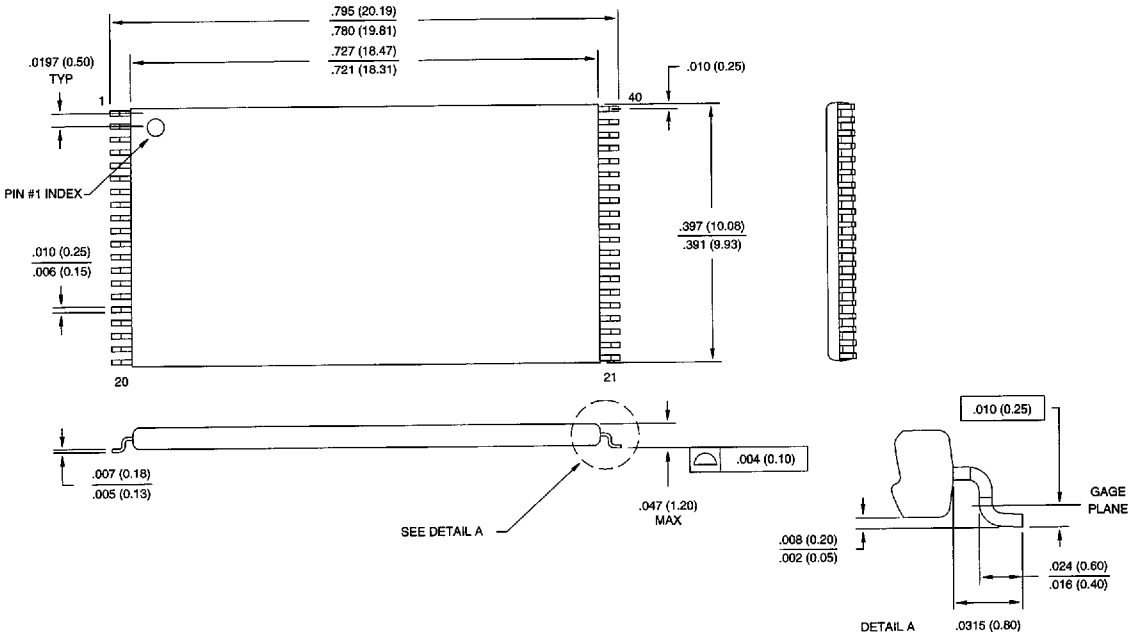


**PACKAGE INFORMATION**

- NOTE:**
1. All dimensions in inches (millimeters)  $\frac{MAX}{MIN}$  or typical where noted.
  2. Package width and length do not include mold protrusion; allowable mold protrusion is .01" per side.

6111549 0020680 115

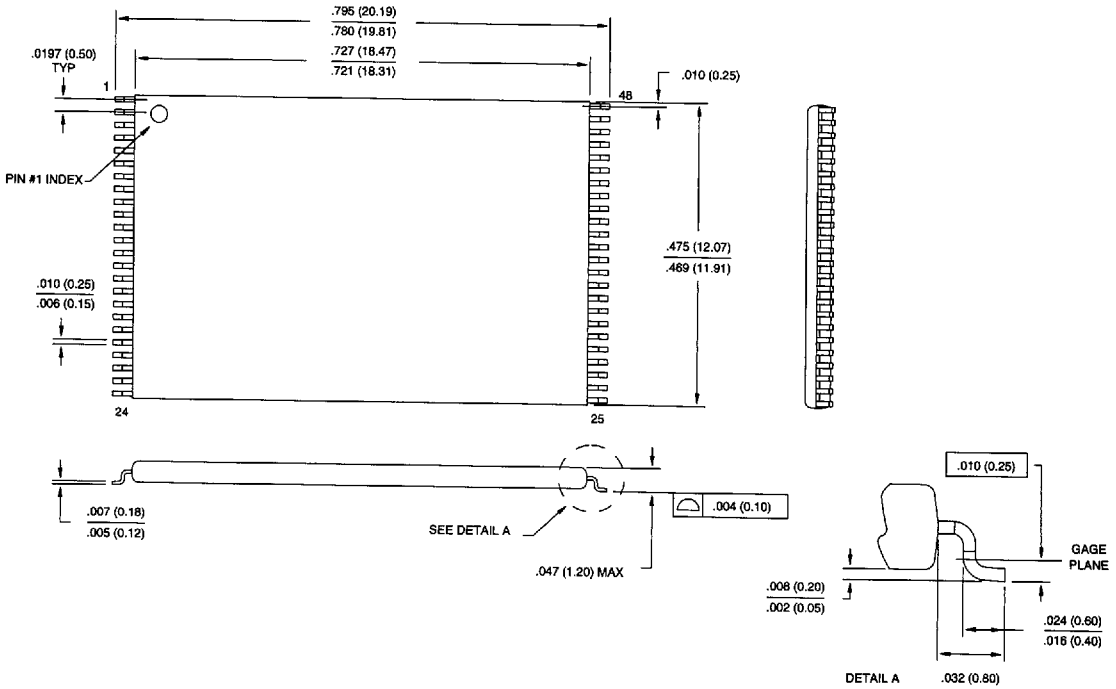
**40-PIN PLASTIC TSOP I (10mm x 20mm)  
FB-1**



**PACKAGE INFORMATION**

- NOTE:**
1. All dimensions in inches (millimeters)  $\frac{\text{MAX}}{\text{MIN}}$  or typical where noted.
  2. Package width and length do not include mold protrusion; allowable mold protrusion is  $.01''$  per side.

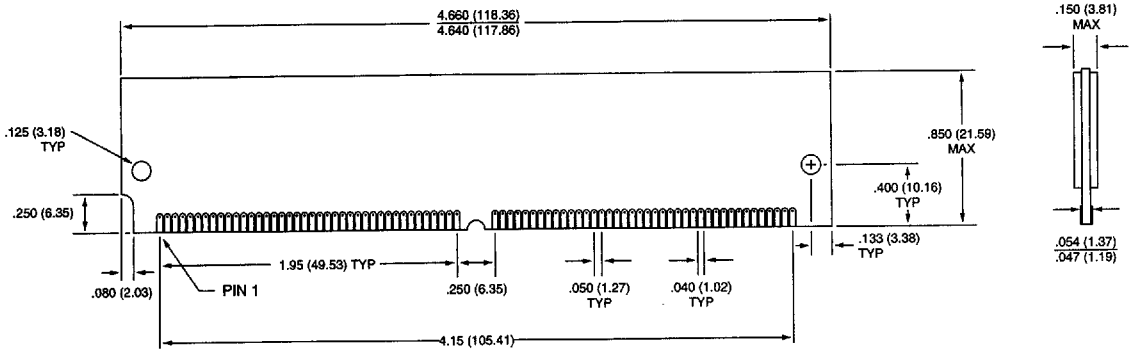
**48-PIN PLASTIC TSOP I (12mm x 20mm)  
FB-2**



**PACKAGE INFORMATION**

- NOTE:**
1. All dimensions in inches (millimeters)  $\frac{MAX}{MIN}$  or typical where noted.
  2. Package width and length do not include mold protrusion; allowable mold protrusion is .01" per side.

**80-PIN FLASH SIMM  
FD-1**



**PACKAGE INFORMATION**

**NOTE:** 1. All dimensions in inches (millimeters)  $\frac{\text{MAX}}{\text{MIN}}$  or typical where noted.