



May 1, 2008

Dear Customer:

The purpose of this letter is to update customers on the die inventory of Aeroflex's 3.3V 4M Quantified Commercial-Off-The Shelf (QCOTS™) used in our UT8Q512K8 and UT8Q512K32 products. In August 2007, Aeroflex announced the finite supply of the commercial die. Aeroflex now projects that die source will exhaust in 3 to 6 months.

Aeroflex's replacement devices for the UT8Q512 and UT8Q512K32 devices are the new RadTolerant UT8Q512E and UT8Q512K32E based on Aeroflex's twelve transistor (12T) memory technology. The new designs are a functional replacement offered via SMD (Standard Microcircuit Drawing) and available for order. The devices are QML Q qualified with QML V qualification pending.

Products affected by the die inventory

Product	Existing Part Number	Replacement Part Number	Standard Microcircuit Drawing	Package
3.3V 4M SRAM	UT8Q512	UT8Q512E	5962-99607	36-lead CFP
3.3V 16M SRAM MCM	UT8Q512K32	UT8Q512K32E	5962-01533	68-lead CQFP
3.3V 8M SRAM	UT8Q1024K8	Reached EOL	5962-01532	44-lead CFP

The following AC and DC Electrical Characteristic differences have been identified between the 3.3V QCOTS and the new 3.3V RadTolerant devices.

AC and DC Electrical Characteristic Differences (4M SRAM)

Specification	UT8Q512 3V QCOTS	UT8Q512E 3V RadTolerant
V _{OL1} Low-level output voltage	I _{OL} = 8mA	I _{OL} = 6mA
I _{DD} (OP) supply current @ 1MHz	125mA	50mA
I _{DD} (OP) supply current @ 40MHz	180mA	75mA
I _{DD} (SB) @ 0MHz (-55°C & 25°C)	6mA	10mA
I _{DD} (SB) @ 0MHz (125°C)	40mA	45mA
t _{AVQV} Read Access time	25ns	20ns
t _{ETQV} E-controlled access time	25ns	20ns
t _{WHQX} Data hold time	5ns (min)	4ns (min)
t _{GLQX} G-controlled output enable time	0ns (min)	3ns (min)
t _{WHAX} Address hold time for write	2ns (min)	0ns (min)

Note:

1. At maximum operating speed the RadTolerant replacement 4M device uses 60% less current (75mA vs. 180mA)

AC and DC Electrical Characteristic Differences (16M SRAM)

Specification	UT8Q512 3V QCOTS	UT8Q512E 3V RadTolerant
Operating Temperature	-40°C to +125°C	-40°C to +105°C
V _{OL} Low-level output voltage	I _{OL} = 8mA	I _{OL} = 6mA
I _{DD} (OP) supply current @ 1MHz	125mA	40mA
I _{DD} (OP) supply current @ 40MHz	180mA	70mA
I _{DD} (SB) @ 0MHz (-55°C & 25°C)	6mA	9mA
I _{DD} (SB) @ 0MHz (125°C)	40mA	24mA
t _{WHQX} Data hold time	5ns (min)	4ns (min)
t _{AVET} Address setup time for write	1ns (min)	0ns (min)

Note:

1. At maximum operating speed the RadTolerant replacement 16M device uses 60% less current (75mA vs. 180mA per byte)

Aeroflex packaging engineers have identified the following fit and form differences between the 3.3V QCOTS and the new 3.3V RadTolerant device packages. A comparison of the package differences is shown below.

Fit and Form Differences 4M

4M Package Dimension Differences

	UT8Q512 3V QCOTs	UT8Q512E 3V RadTolerant
Length	.920 + .010	.920 + .010
Width	.480 + .005	.580 + .005
Height	.124 + .013	.117 + .013

16M Package Dimension Differences

	UT8Q512K32 3V QCOTs	UT8Q512K32E 3V RadTolerant
Length (ceramic)	.880 + .009	.980 + .009
Width (ceramic)	.880 + .009	.980 + .009
Height (includes lids)	.205 + .016	.209 + .020

For application questions regarding fit, form, and function of the 3V QCOTS or the new 3V RadTolerant memory devices, please contact Mike Leslie at (719) 594-8148 or e-mail leslie@aeroflex.com

Aeroflex provides this product information to allow customers to plan in advance of this product modification. If you have any questions please contact me at (719) 594-8252 or e-mail Jordan@aeroflex.com. Aeroflex looks forward to continued business with your company.

Regards,

Anthony Jordan
Director of Standard Products
Aeroflex Colorado Springs