

August 20, 2007



Dear Customer,

Aeroflex Colorado Springs (Aeroflex) appreciates your interest and use of our products, specifically our family of RadHard MSI components. The purpose of this letter is to inform you that the UT54ACS193 Synchronous 4-Bit Up-Down Dual Clock Counter has been migrated from a legacy 1.2 $\mu$ m radiation-hardened CMOS process to Aeroflex's commercial radiation-hardened 0.6 $\mu$ m CMOS process at AMI Semiconductor. The migration process on the RadHard MSI family began in 2003. For background information, you may reference the January 2003 migration letter on the Aeroflex website at:

<http://ams.aeroflex.com/ProductFiles/CustNotes/MSIletter1-03.pdf>

To date, Aeroflex has successfully migrated sixteen (16) legacy RadHard MSI products to AMI Semiconductor's 0.6 $\mu$ m CMOS technology. The UT54ACS193 is one-of-seven additional RadHard MSI products currently under migration as part of Aeroflex's continued commitment to RadHard logic solutions.

Aeroflex will offer these seven (7) migrated RadHard MSI products to meet demand as RadHard MSI inventories deplete. The UT54ACS193 is one of the devices whose inventory is depleted. Beginning September 1, 2007 (work week 35), Aeroflex will begin fulfilling orders for the UT54ACS193 using the migrated version of the product. Please reference Table 1 to identify the generic part number, product identification codes number (PIC#), Standard Microcircuit Drawing number (SMD#), and planned SMD release date for the UT54ACS193.

**Table 1. Affected RadHard MSI Product Identification and Release Date**

<b>Aeroflex Base Part #:</b>	<b>Old PIC#:</b>	<b>New PIC#:</b>	<b>SMD#:</b>	<b>Release Updated SMD (Device Type 01):</b>
<b>UT54ACS193</b>	<b>C193A</b>	<b>CA193A</b>	<b>96566</b>	<b>September 2007</b>

It is important to note that the migrated device is form, fit, and functionally compatible to the 1.2 $\mu$ m legacy version of the product, however, there are subtle differences which you should note.

- The 1Mrads(Si) Total Ionizing Dose (TID) tolerance (tested per MIL-STD-883 Method 1019 Condition A) will no longer be offered under Device Type 01. Instead, the maximum TID tolerance for the migrated RadHard MSI is 500 krads(Si) as tested per MIL-STD-883 Method 1019 Condition A.
- Until it is characterized as a result of the procuring activities request, dose rate performance for the migrated RadHard MSI will no longer be specified in the Standard Microcircuit Drawing (SMD).
- For die sales, the backside bias changes from VDD to VSS.
- Due to lack of demand, Aeroflex will no longer offer DIP packaging for the device, but, the Defense Supply Center Columbus (DSCC) will not remove the DIP package description from the Case Outlines section (1.2.4) of the SMD. However, DSCC will note in the SMD Bulletin located at the end of the SMD that the DIP version of the corresponding device is no longer available from an approved source of supply.

If you have questions regarding any of the migrated RadHard MSI components, please contact your Aeroflex regional sales manager. If you have any additional questions, please contact me at (719) 594-8048, or email me at [tim.meade@aeroflex.com](mailto:tim.meade@aeroflex.com).

Regards,

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