

PRODUCT INFORMATION NOTICE

1. TITLE MICROCIRCUIT, MEMORY, DIGITAL, CMOS, 4MEG X 32BIT(128M), RADIATION-HARDENED, DUAL VOLTAGE SRAM WITH EMBEDDED EDAC, MULTICHIP MODULE		2. DOCUMENT NUMBER SPO-2013-PIN-0001	
		3. DATE (Year, Month, Date) 2013, JAN, 22	
4. MANUFACTURER NAME AND ADDRESS CAES 4350 CENTENNIAL BOULEVARD COLORADO SPRINGS, COLORADO 80907-3486		5. MANUFACTURER POINT OF CONTACT NAME MIKE LESLIE	
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8. CAGE CODE 65342	9. BLANK	10. PRODUCT IDENTIFICATION CODE QS11 & QS12	11. BASE PART UT8ER4M32M/S
12. BLANK		13. SMD NUMBER 10204	14. DEVICE TYPE DESIGNATOR 01 - 04
		15. RHA LEVELS R	16. QML LEVEL ALL
		17. NON QML LEVEL HiRel	18. BLANK
19. DESCRIPTION (FOR NEW PRODUCTS, PROVIDE AVAILABILITY DATE AND LEAD TIME)			
<p>This notification serves to inform our customers of the reduced dynamic ambient burn-in temperature (T_A) used in the manufacturing process (reference MIL-STD-883 method 1015 test condition D) for the CAES SMD products listed above.</p> <p>The combined effects of thermal impedance from die junction to the burn-in ambient environment (Theta-JA) and the aggregate thermal power dissipation of the eight (8) dice contained in each module, require CAES to use a 115°C ambient burn-in temperature to keep the die junctions below their rated absolute maximum temperature of 150°C.</p> <p>Although CAES applies burn-in T_A at 115°C, the burn-in temperature exceeds the device's rated operating case temperature (T_C) of 105°C, ensuring significant stress margin compared to the use condition. Furthermore, CAES applies the MIL-STD-883, Method 1015 regression table to determine the appropriate burn-in duration for $T_A = 115^\circ\text{C}$. The final result is a burn-in stress condition that is well above the use conditions and a stress that is applied to each Device Under Test (DUT) for a significantly longer duration than military temperature rated devices burned-in at $T_A = 125^\circ\text{C}$ will receive.</p> <p>Also note that section 4.2.1 <u>Additional criteria for device classes Q and V</u> in the Standard Microcircuit Drawing 5962-10204 indicates the 115°C ambient burn-in temperature.</p>			
NOTE: THIS DOCUMENT IS PUBLISHED FOR INFORMATION PURPOSES AND MAY PROVIDE FORWARD LOOKING STATEMENTS THAT ARE SUBJECT TO CHANGE. THE USERS SHOULD CONTACT THEIR LOCAL CAES SALES OFFICE FOR ANY ACTIONABLE CONTENT DESCRIBED HEREIN.			
20. ADEPT REPRESENTATIVE Timothy L. Meade		21. SIGNATURE 	
		22. DATE 23 January 2013	