PRODUCT CHANGE NOTIFICATION
EPM7192E AND EPM7256E DEVICES

Overview

The EPM7192E and EPM7256E devices are being transitioned to a 0.65-micron process. The new die will be pin-, function-, timing-, and programming-file compatible with existing die revisions. This notification addresses Altera's intent to substitute 0.65-micron die into the EPM7192E and EPM7256E devices that currently use larger critical-dimension die.

Implementation

Altera will begin die substitution for all EPM7192E ordering codes on January 1, 1997. After this date, Altera may use either existing die or 0.65-micron die for all EPM7192E ordering codes.

In all cases of die substitution, the 0.65-micron process may be distinguished by the fourth and/or fifth digit characters of the Altera lot number, which is marked on the backside of the device. The 0.65-micron process is identified by a 9 or a 21.

Altera will transition the EPM7256E to the 0.65-micron process by March 1, 1997.

Reliability results for the 0.65-micron process are provided with this PCN. Reliability test results will be available, upon request, for each product not directly covered by this reliability report.

0.65-Micron EPM7192E Reliability Results

Package	Stress	Duration	Sample Size	# Fail
160-pin PQFP	Lifetest 130 C, 6.0V	1000 hrs	69	0
160-pin PQFP	Autoclave 121 C	168 hrs	22	0
160-pin PQFP	Temperature Cycle Cond. B	1000 Cycles	22	0
160-pin PQFP	HAST 85 C/85% RH	1000 hrs	22	0
160-pin PQFP	Retention Bake 150 C	1000 hrs	22	0

0.8-Micron EPM7192E Schedule

Last Time Order Date:	December 31, 1996
Last Time Ship Date:	March 31, 1997

An Altera advisory will be published with the final procurement schedule for the 0.8-micron EPM7256E.

If you have any questions on final procurement requirements for the 0.8-micron EPM7192E material or need additional information regarding the changes described herein, please contact your local Altera sales representative.