



July 6, 2011

PCN Number: 1110

PCN Change Level: Major

Subject: Release of Updated *Military ProASIC3/EL Low Power Flash FPGAs* Datasheet

Dear Customer,

This notice is to inform of changes and updates made to the *Military* (–55°C to 125°C) *ProASIC® 3/EL Low Power Flash FPGAs* datasheet. The following two key changes are included in this datasheet revision:

**Change 1:** The 2.5 V GTL and 3.3 V GTL I/O drive strength for Military Temperature Grade ProASIC3EL devices was changed from 25 mA to 20 mA based on recent characterization at high temperature (125°C). As a result, the following tables have been updated in the datasheet:

- Table 2-24
- Table 2-30, 2-31
- Table 2-35, 2-39
- Table 2-119, 2-123

Products affected: Military Temperature A3PE600L and A3PE3000L only (see the appendix on page 2 for details).

*All customers using this GTL I/O standard may need to assess the load and current needs of their boards.*

**Change 2:** Silicon-based timing and power characterization for this family are now complete. Timing numbers and power models have been updated to accurately represent the silicon and will be available in the upcoming Libero® Integrated Design Environment (IDE) v9.1SP2 software release. Release notes can be found on the website:  
<http://www.actel.com/download/software/libero/default.aspx>.

*Microsemi recommends that customers rerun timing and power analysis of their designs using the aforementioned version of software.*

Products affected: Military Temperature A3P1000, A3PE600L, A3PE3000L (see the appendix on page 2 for details)



In addition, the *Military ProASIC/3EL Low Power Flash FPGAs* datasheet has been updated with the most recent information, including addition of the A3P250-VQ100M package in the small density range. Please refer to the List of Changes (page 5-1) for exact details: [http://www.actel.com/documents/Mil\\_PA3\\_EL\\_DS.pdf](http://www.actel.com/documents/Mil_PA3_EL_DS.pdf).

For questions, please contact Microsemi's Technical Support hotline at [soc\\_tech@microsemi.com](mailto:soc_tech@microsemi.com).

Regards,

Microsemi SoC Products Group (formerly Actel)

## Appendix

Table 1 lists the affected part numbers.

**Table 1 • Affected Part Numbers**

<b>A3P1000</b>		
A3P1000	A3P1000-FGG144M	M1A3P1000-1PQG208M
A3P1000-PQG208M	A3P1000-1FG144M	M1A3P1000-FG144M
A3P1000-PQG208M	A3P1000-1FGG144M	M1A3P1000-FGG144M
A3P1000-1PQG208M	M1A3P1000-PQG208M	M1A3P1000-1FG144M
A3P1000-1PQG208M	M1A3P1000-PQG208M	M1A3P1000-1FGG144M
A3P1000-FG144M	M1A3P1000-1PQG208M	
<b>A3PE600L</b>		
A3PE600L	A3PE600L-FGG484M	A3PE600L-1FGG484M
A3PE600L-FG484M	A3PE600L-1FG484M	
<b>A3P3000L</b>		
A3PE3000L	A3PE3000L-FGG896M	M1A3PE3000L-1FGG484M
A3PE3000L-FG484M	A3PE3000L-1FG896M	M1A3PE3000L-FG896M
A3PE3000L-FGG484M	A3PE3000L-1FGG896M	M1A3PE3000L-FGG896M
A3PE3000L-1FG484M	M1A3PE3000L-FG484M	M1A3PE3000L-1FG896M
A3PE3000L-1FGG484M	M1A3PE3000L-FGG484M	M1A3PE3000L-1FGG896M
A3PE3000L-FG896M	M1A3PE3000L-1FG484M	