



September 20, 2010

PCN Number: 1016

PCN Change Level: Major

Subject: SmartFusion (A2F200) Datasheet update

Dear Customer,

This notice is to inform you that the SmartFusion datasheet has been updated. The updated datasheet (Revision 4) can be downloaded from the Actel website:

http://www.actel.com/documents/SmartFusion_DS.pdf

The following key changes have been made to this datasheet:

Change #1: The recommended operating range was changed from 3.3 V \pm 10% to 3.3 V \pm 5%. The range “2.97 V to 3.63 V” was changed to “3.15 V to 3.45 V” for the following voltages, on p. 2-3:

VCC33A
VCC33ADCx
VCC33AP
VCCRCOSC
VCC33SDDx
VCCMAINXTAL
VCCLPXTAL

Change #2: The power supply sequencing requirement was added when an external 1.5 V supply is used, on p. 2-4.

Power Supply Sequencing Requirement

SmartFusion devices have an on-chip 1.5 V regulator, but usage of an external 1.5 V supply is also allowed while the on-chip regulator is disabled. In that case, the 3.3 V supplies (VCC33A, etc.) should be powered before 1.5 V (VCC, etc.) supplies. The 1.5 V supplies should be enabled only after 3.3 V supplies reach a value higher than 2.7 V.

This change **does not impact** designs that use an on-chip 1.5 V regulator.

Change #3: The definitions for the Power-Down and Sleep modes were updated and the previous specifications for these modes were removed on p. 2-10.

Power-Down mode and Sleep mode are consuming higher current than expected in the current version of silicon. These specifications will be updated when a new version of the silicon is available. VCCRCOSC is now required to be OFF (0 V) to enter into Power-Down and Sleep modes (Table 2-8).

This change **does not impact** designs where Power-Down and Sleep modes are not being utilized.



Several other minor updates have also been made to the SmartFusion datasheet. Please refer to the List of Changes (page 6-1) for those updates. For questions, please contact the Actel Technical Support hotline at tech@actel.com.

Table 1 lists the affected part numbers.

Table 1. Affected Part Numbers

A2F200M3F-1FGG256	A2F200M3F-FGG484I	A2F200M3F-FG256
A2F200M3F-1FGG484	A2F200M3F-FGG256I	A2F200M3F-1FG256I
A2F200M3F-FGG484	A2F200M3F-1FG256	A2F200M3F-1FG484I
A2F200M3F-FGG256	A2F200M3F-1FG484	A2F200M3F-FG484I
A2F200M3F-1FGG256I	A2F200M3F-FG484	A2F200M3F-FG256I
A2F200M3F-1FGG484I		

Regards,

Actel Corporation