



August 3, 2010

CN Number: 1002

CN Change Level: Minor

Subject: IGLOO nano Datasheet Update

Dear Customer,

This notice is to inform you that the IGLOO® nano Datasheet Revision 11 has been published. The updated datasheet can be downloaded from the Actel website:

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

The following key changes have been made to this datasheet:

Change # 1: The versioning system for datasheets has been changed.

Datasheets are assigned a revision number that increments each time the datasheet is revised.

Change # 2: The status of the AGLN060 device has changed from Advance to Production.

Change # 3: Table 2-15 • Different Components Contributing to Dynamic Power Consumption in IGLOO nano Devices for 1.5 V Core Supply Voltage:

The values for PAC1, PAC2, PAC3, and PAC4 were updated.

Table 2-15 • Different Components Contributing to Dynamic Power Consumption in IGLOO nano Devices For IGLOO nano V2 or V5 Devices, 1.5 V Core Supply Voltage

Parameter	Definition	Device Specific Dynamic Power ($\mu\text{W}/\text{MHz}$)					
		AGLN250	AGLN125	AGLN060	AGLN020	AGLN015	AGLN010
PAC1	Clock contribution of a Global Rib	4.421	4.493	2.700	0	0	0
PAC2	Clock contribution of a Global Spine	2.704	1.976	1.982	4.002	4.002	2.633
PAC3	Clock contribution of a VersaTile row	1.496	1.504	1.511	1.346	1.346	1.340
PAC4	Clock contribution of a VersaTile used as a sequential module	0.152	0.153	0.153	0.148	0.148	0.143
PAC5	First contribution of a VersaTile used as a sequential module	0.057					
PAC6	Second contribution of a VersaTile used as a sequential module	0.207					
PAC7	Contribution of a VersaTile used as a combinatorial module	0.17					
PAC8	Average contribution of a routing net	0.7					
PAC9	Contribution of an I/O input pin (standard-dependent)	See Table 2-13 on page 2-9.					



Table 2-15 • Different Components Contributing to Dynamic Power Consumption in IGLOO nano Devices For IGLOO nano V2 or V5 Devices, 1.5 V Core Supply Voltage (continued)

Parameter	Definition	Device Specific Dynamic Power ($\mu\text{W}/\text{MHz}$)					
		AGLN250	AGLN125	AGLN060	AGLN020	AGLN015	AGLN010
PAC10	Contribution of an I/O output pin (standard-dependent)	See Table 2-14.					
PAC11	Average contribution of a RAM block during a read operation	25.00			N/A		
PAC12	Average contribution of a RAM block during a write operation	30.00			N/A		
PAC13	Dynamic contribution for PLL	2.70			N/A		

Change # 4: Table 2-17 • Different Components Contributing to Dynamic Power Consumption in IGLOO nano Devices for 1.2 V Core Supply Voltage:

The values for PAC1, PAC2, PAC3, and PAC4 were updated.

Table 2-17 • Different Components Contributing to Dynamic Power Consumption in IGLOO nano Devices For IGLOO nano V2 Devices, 1.2 V Core Supply Voltage

Parameter	Definition	Device-Specific Dynamic Power ($\mu\text{W}/\text{MHz}$)					
		AGLN250	AGLN125	AGLN060	AGLN020	AGLN015	AGLN010
PAC1	Clock contribution of a Global Rib	2.829	2.875	1.728	0	0	0
PAC2	Clock contribution of a Global Spine	1.731	1.265	1.268	2.562	2.562	1.685
PAC3	Clock contribution of a VersaTile row	0.957	0.963	0.967	0.862	0.862	0.858
PAC4	Clock contribution of a VersaTile used as a sequential module	0.098	0.098	0.098	0.094	0.094	0.091
PAC5	First contribution of a VersaTile used as a sequential module	0.045					
PAC6	Second contribution of a VersaTile used as a sequential module	0.186					
PAC7	Contribution of a VersaTile used as a combinatorial module	0.11					
PAC8	Average contribution of a routing net	0.45					
PAC9	Contribution of an I/O input pin (standard-dependent)	See Table 2-13 on page 2-9					
PAC10	Contribution of an I/O output pin (standard-dependent)	See Table 2-14 on page 2-9					
PAC11	Average contribution of a RAM block during a read operation	25.00			N/A		
PAC12	Average contribution of a RAM block during a write operation	30.00			N/A		
PAC13	Dynamic contribution for PLL	2.10			N/A		



The following is a list of affected devices.

Table 1 • Affected Devices

AGLN010V2-DIELOT	AGLN030V2-ZQNG68I	AGLN060V5-CSG81I	AGLN125V5-ZCSG81
AGLN010V2-QNG48	AGLN030V2-ZUCG81	AGLN060V5-DIELOT	AGLN125V5-ZCSG81I
AGLN010V2-QNG48I	AGLN030V2-ZUCG81I	AGLN060V5-VQ100	AGLN125V5-ZVQ100
AGLN010V2-UCG36	AGLN030V2-ZVQ100	AGLN060V5-VQ100I	AGLN125V5-ZVQ100I
AGLN010V2-UCG36I	AGLN030V2-ZVQ100I	AGLN060V5-VQG100	AGLN125V5-ZVQG100
AGLN010V5-DIELOT	AGLN030V2-ZVQG100	AGLN060V5-VQG100I	AGLN125V5-ZVQG100I
AGLN010V5-QNG48	AGLN030V2-ZVQG100I	AGLN060V5-ZCSG81	AGLN250V2-CSG81
AGLN010V5-QNG48I	AGLN030V5-ZCSG81	AGLN060V5-ZCSG81I	AGLN250V2-CSG81I
AGLN010V5-UCG36	AGLN030V5-ZCSG81I	AGLN060V5-ZVQ100	AGLN250V2-DIELOT
AGLN010V5-UCG36I	AGLN030V5-ZQNG48	AGLN060V5-ZVQ100I	AGLN250V2-VQ100
AGLN015V2-QNG68	AGLN030V5-ZQNG48I	AGLN060V5-ZVQG100	AGLN250V2-VQ100I
AGLN015V2-QNG68I	AGLN030V5-ZQNG68	AGLN060V5-ZVQG100I	AGLN250V2-VQG100
AGLN015V5-QNG68	AGLN030V5-ZQNG68I	AGLN125V2-CSG81	AGLN250V2-VQG100I
AGLN015V5-QNG68I	AGLN030V5-ZUCG81	AGLN125V2-CSG81I	AGLN250V2-ZCSG81
AGLN020V2-CSG81	AGLN030V5-ZUCG81I	AGLN125V2-DIELOT	AGLN250V2-ZCSG81I
AGLN020V2-CSG81I	AGLN030V5-ZVQ100	AGLN125V2-VQ100	AGLN250V2-ZVQ100
AGLN020V2-DIELOT	AGLN030V5-ZVQ100I	AGLN125V2-VQ100I	AGLN250V2-ZVQ100I
AGLN020V2-QNG68	AGLN030V5-ZVQG100	AGLN125V2-VQG100	AGLN250V2-ZVQG100
AGLN020V2-QNG68I	AGLN030V5-ZVQG100I	AGLN125V2-VQG100I	AGLN250V2-ZVQG100I
AGLN020V2-UCG81	AGLN060V2-CSG81	AGLN125V2-ZCSG81	AGLN250V5-CSG81
AGLN020V2-UCG81I	AGLN060V2-CSG81I	AGLN125V2-ZCSG81I	AGLN250V5-CSG81I
AGLN020V5-CSG81	AGLN060V2-DIELOT	AGLN125V2-ZVQ100	AGLN250V5-DIELOT
AGLN020V5-CSG81I	AGLN060V2-VQ100	AGLN125V2-ZVQ100I	AGLN250V5-VQ100
AGLN020V5-DIELOT	AGLN060V2-VQ100I	AGLN125V2-ZVQG100	AGLN250V5-VQ100I
AGLN020V5-QNG68	AGLN060V2-VQG100	AGLN125V2-ZVQG100I	AGLN250V5-VQG100
AGLN020V5-QNG68I	AGLN060V2-VQG100I	AGLN125V5-CSG81	AGLN250V5-VQG100I
AGLN020V5-UCG81	AGLN060V2-ZCSG81	AGLN125V5-CSG81I	AGLN250V5-ZCSG81
AGLN020V5-UCG81I	AGLN060V2-ZCSG81I	AGLN125V5-DIELOT	AGLN250V5-ZCSG81I
AGLN030V2-ZCSG81	AGLN060V2-ZVQ100	AGLN125V5-VQ100	AGLN250V5-ZVQ100
AGLN030V2-ZCSG81I	AGLN060V2-ZVQ100I	AGLN125V5-VQ100I	AGLN250V5-ZVQ100I
AGLN030V2-ZQNG48	AGLN060V2-ZVQG100	AGLN125V5-VQG100	AGLN250V5-ZVQG100
AGLN030V2-ZQNG48I	AGLN060V2-ZVQG100I	AGLN125V5-VQG100I	AGLN250V5-ZVQG100I
AGLN030V2-ZQNG68	AGLN060V5-CSG81		

For questions, please contact the Actel Technical Support hotline at tech@actel.com.

Regards,

Actel

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