

DATE : May 2005	QUALIFICATION REPORT	PAGE : 1/2
	In accordance with PGQ 15 : GENERAL PRINCIPLES OF QUALIFICATION	

<i>Product :</i>	TS86101G2B - 10 Bit 1.2 Gsps MUXDAC
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<i>Qualification status :</i>	<input checked="" type="checkbox"/> Accepted	<input type="checkbox"/> Pending	<input type="checkbox"/> Rejected
<i>This product has met all ATMEL Grenoble qualification requirements.</i>			

<i>Qualified products :</i>	Package	Temperature range	Screening level
TS86101G2BCGL	CBGA255	“C” Grade : 0°C < Tc ; Tj < 90°C	Standard
TS86101G2BVGL	CBGA255	“V” Grade : -40°C < Tc ; Tj < 110°C	Standard
TS86101G2BMGS	CI-CGA255	“M” Grade : -55°C < Tc ; Tj < 125°C	Standard

<i>Directive 2002/95/EC compliance status :</i>	<input type="checkbox"/> Pb free compliant	<input type="checkbox"/> RoHS compliant	<input type="checkbox"/> Fully Green compliant
	<input checked="" type="checkbox"/> Not compliant		

<i>Die information :</i>		
Die size : 7.86 x 7.86 mm (61.78 mm²)	P. dissipated in Watt : 3.6 W	Mask : VL26A
Wafer fab. : INFINEON (Ger)	Process : B6HF	Technology : Bipolar 0.8 μm

<i>Package information :</i>		
Outline : 21 x 21 x 2.88 mm	Pitch : 1.27 mm	Solder ball composition : Sn/Pb 63/37
Assy plant : ATMEL St Egrève	Moisture sensitivity level : n/a	Max. peak reflow : 245°C

<i>Approbation list :</i>			
Project Eng.	Product Eng.	BDC Quality	BDC Marketing
BELLIN D.	BELLIN D.	CARMONA C.	TERRIEN JC.

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<i>Qualification batch information :</i>			
Mask : VL26A	Diffusion lot : PF417918	Lot ID : 3604853	Date Code : 0442

<i>Qualification tests results :</i>						
SUB-GROUP	TEST <i>Acceptable criteria</i>	METHOD <i>Condition</i>	LTPD or Qty (Acc. Nb)	Sample	Acc. Numb.	Fail
-	ESD <i>Electrical measurements</i>	MIL-STD 883 / 3015 1600V HBM	3 (0)	3	0	0
-	Latch-Up <i>Electrical measurements</i>	JEDEC 78 <i>Class 2</i>	3 (0)	3	0	0
C1	Steady-state life test <i>Electrical measurements</i>	MIL-STD 883 / 1005 <i>Tj 125 °C / 1000H</i>	36 (0)	36	0	0
D1	Physical dimension <i>Ball diameter Ball height Co planarity Outline dim Thickness tip to tip Ceramic thickness</i>	MIL-STD 883 / 2016 <i>CBGA 255 specification</i>	4 (0)	4	0	0

Observations : CBGA 255 package qualification is pronounced by association with an additional package qualification. (see subgroup D1)