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<b>DATE :</b> October 2009	<b>QUALIFICATION REPORT</b>	<b>PAGE :</b> 1/2
	In accordance with PGQ 15 : <b>GENERAL PRINCIPLES OF QUALIFICATION</b>	

Products:

**AT84AD001CxEPW - DUAL 8Bit 1GspS**

Qualification status :  **Accepted**                       **Pending**                       **Rejected**

*This product has met all e2v Grenoble qualification requirements.*

Qualified products :	Package	Temperature range	Screening level
AT84AD001CCEPW	LQFP-EP 144L	“C” Grade : 0°C < Ta < 70°C	Standard
AT84AD001CVEPW	LQFP-EP 144L	“V” Grade : -40°C < Ta < 85°C	Standard

Directive 2002/95/EC compliance status :  **Pb free compliant**                       **RoHS compliant**                       **Fully Green compliant**  
 **Not compliant**

Die information :

Die size : <b>5.05 x 5.05 mm (25.45 mm<sup>2</sup>)</b>	P. dissipated in Watt : <b>0.120 to 2.23W</b>	Mask : <b>VN12A</b>
Wafer fab. : <b>Freescale</b>	Process : <b>CDR1</b>	Technology : <b>BiCMOS 0.4 μm</b>

Package information :

Outline : <b>20 x 20 x 1.4 mm</b>	Pitch : <b>0.5mm</b>	Solder ball composition : <b>Pure Sn</b>
Assy plant : <b>StatsChippac China</b>	Moisture sensitivity level : <b>MSL 3</b>	Max. peak reflow : <b>260°C</b>

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<i>Products:</i>	<b>AT84AD001CxEPW - DUAL 8Bit 1GspS</b>
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<i>Qualification batch information :</i>			
Mask : <b>VN12A</b>	Diffusion lot : <b>ER52603</b>	Assy lot ID : <b>ER52603.001</b>	Date Code : <b>0938</b>

<i>Qualification tests results :</i>						
SUB-GROUP	TEST <i>Acceptable criteria</i>	METHOD <i>Condition</i>	Qty (Acc. Nb)	Sample	Acc. Nb	Fail
-	<b>Construction analysis</b> <i>Freescale CDR1 spec.</i>	MIL STD-883 TM-2018	-	6 dice	0	0
C1	<b>Steady-state life test</b> <i>Electrical measurements</i>	MIL-STD 883 / 1005 <i>Tj 125 °C / 1000H</i>	15 (0) 45 (0)	15 45	0 0	0 In progress
-	<b>ESD</b> <i>Electrical measurements</i>	JESD22-A114-E 1000V HBM <i>Ambient T°</i>	3 (0)	3	0	0
-	<b>Latch-Up</b> <i>Electrical measurements</i>	JEDEC 78-B <i>Class I &amp; Class II</i>	(0) (0)	6 6	0 0	0 0
-	<b>THERMAL PRE-COND. L3</b> <i>Pre-acousting microscopy</i> <i>Post-acousting microscopy</i> <i>Electrical measurements</i> <i>Visual inspection</i>	J-STD-020-D (peak 260 °C) <i>J-STD-035</i> <i>Ambient T°</i> <i>MIL STD-883 TM 2009</i>	90 (0)	90	0	0
D3	<b>TEMPERATURE CYCLING *</b> <i>Electrical measurements</i> <i>Visual inspection</i>	MIL STD-883 TM 1010 -55 °C to 125 °C / 1000 cy. <i>Ambient T°</i> <i>MIL STD-883 TM 2009</i>	45 (0)	45	0	0
-	<b>PRESSURE COOKER *</b> <i>Electrical measurements</i> <i>Visual inspection</i>	JESD22-A102-B 121 °C/100% RH/2atm/96H <i>Ambient T°</i> <i>MIL STD-883 TM 2009</i>	45 (0)	45	0	0

\* Devices issued from thermal pre-conditioning level 3