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	In accordance with PGQ 15 : GENERAL PRINCIPLES OF QUALIFICATION	

Product :	EV12AS200AxZPY 12bit 1.5Gsps ADC
X = C (commercial Grade) or V (Industrial grade)	


Qualification status :	<input checked="" type="checkbox"/> Accepted	<input type="checkbox"/> Pending	<input type="checkbox"/> Rejected
<i>This product has met all e2v Grenoble qualification requirements.</i>			

Qualified products :	Package	Temperature range	Screening level
EV12AS200ACZPY	FpBGA 196	« C » grade: 0°C < Tc ; Tj < 90°C	Standard
EV12AS200AVZPY	FpBGA 196	« V » grade: -40°C < Tc ; Tj < 110°C	Standard

Directive 2011/65/CE compliance status :	<input type="checkbox"/> Pb free compliant	<input checked="" type="checkbox"/> RoHS compliant	<input type="checkbox"/> Fully Green compliant
	<input type="checkbox"/> Not compliant		

Die information :		
Die size : 4.82 mm x 4.82 mm (23.23mm²)	P. dissipated in Watt : 3.2 W typ.	Mask : VN45A
Wafer fab. : INFINEON	Process : B7HF200	Technology : 200Ghz SiGe Bipolar

Package information :		
Outline : 15*15*1.2 mm	Pitch : 1.00 mm	Solder ball composition : Sn96.5/Ag3/Cu0.5
Assy plant : Unisem Batam (Indonesia)	Moisture sensitivity level : MSL3	Max. peak reflow : 260°C

Authorized Signature::	
Christian CARMONA <i>HRS Quality Inspector & DLA point of contact</i>	June 3rd, 2014
	

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Qualification batch information :			
Mask : VN45A	Assy lot ID (Unisem): 2551472	Test lot ID (e2v): 990000342	Date Code : 1332

Dice qualification tests results					
	TEST <i>Acceptable criteria</i>	METHOD <i>Condition</i>	Sample	Fail	Status
VN45A	Construction analysis <i>(Qualify by similarity) Infineon B7HF200 specifications</i>	MIL-STD-883 TM2018 ESA /SCC Basic Specification N°21400	6 dices	0	Pass
	Operating Life test <i>ATE program</i>	JESD22-A108 <i>500Hrs / Tj 165°C (eq.145000Hrs / Tj 125°C)</i>	45	0	Pass
	ESD HBM <i>ATE program</i>	JESD22-A114E <i>Class 1A : 250V</i>	3	0	Pass
	Latch Up <i>ATE program</i>	JEDEC 78B <i>Class I (Ta 25°C) Class II (Tj 110°C)</i>	3 3	0 0	Pass Pass
Package qualification tests results issued from UNISEM Batam qualification					
FpBGA 196	Moisture sensitivity	JSTD-020D.1 <i>Level 3 /30°C 60%RH 192H peak 260°C</i>	50* 3 lots	0	Pass
	Temperature Cycles (A)	JESD22-A104 <i>500 cycles A/A -65°C to 150°C</i>	25 * 3 lots	0	Pass
	Highly Accelerated Stress Test (A)	JESD22-A110 <i>96H 130°C / 85%RH / 2atm Unbiased</i>	25 * 3 lots	0	Pass
	High Temperature Storage	JESD22-A103 <i>150°C Unbiased</i>	25 * 3 lots	0	Pass
	Ball Shear <i>Ball Shear Measurements Visual inspection</i>	JESD22-B117 <i>10 balls / unit Min acceptable = 12gmf</i>	5	0	Pass
	Wire Pull strength <i>Wire Pull Measurements Shear mode</i>	MIL-STD-883 - 2011 <i>10 wires / unit Min acceptable = 4gmf</i>	5	0	Pass
Complementary qualification tests results done by e2v on same package family					
FpBGA 196	Moisture sensitivity validation <i>ATE program Ultrasound scan & transmission</i>	JSTD-020D.1 <i>Level 3 /30°C 60%RH 192H peak 260°C</i>	11	0	Pass
	Moisture sensitivity	JSTD-020D.1 <i>Level 3 /30°C 60%RH 192H peak 260°C</i>	50	0	Pass
	Temperature Cycles (A) <i>ATE program</i>	JESD22-A104 <i>1000 cycles A/A -55°C to 125°C</i>	25	0	Pass
	Highly Accelerated Stress Test (A) <i>ATE program</i>	JESD22-A118 <i>96H 130°C / 85%RH / 2atm Unbiased</i>	25	0	Pass
	Dimensional Measurement <i>ICOS program</i>	FpBGA package outline	41	0	Pass