



Materials Declaration Form

IPC Form Type *	1752 Distribute	Version	2
Sectionals *	Material Info Manufacturing Info	Subsectionals *	A-D

** : Required Field*

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2016-05-23
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Rossana Bonaccorso	Representative Title	ADG MD CHAMPION
Representative Phone *	Refer to Supplier Comment section	Representative Email *	Refer to Supplier Comment section
Supplier Comment	Online Technical Support - STMicroelectronics : http://www.st.com/web/en/support/support.html		


Uncertainty Statement

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Legal Statement			
Supplier Acceptance *	true	Legal Declaration *	Standard
Legal Statement	<p>Supplier certifies that it gathered the provided information and such information is true and correct to the best of its knowledge and belief, as of the date that Supplier completes this form. Supplier acknowledges that Company will rely on this certification in determining the compliance of its products. Company acknowledges that Supplier may have relied on information provided by others in completing this form, and that Supplier may not have independently verified such information. However, in situations where Supplier has not independently verified information provided by others, Supplier agrees that, at a minimum, its suppliers have provided certifications regarding their contributions to the part(s), and those certifications are at least as comprehensive as the certification in this paragraph. If the Company and the Supplier enter into a written agreement with respect to the identified part(s), the terms and conditions of that agreement, including any warranty rights and/or remedies provided as part of that agreement, will be the sole and exclusive source of the Supplier's liability and the Company's remedies for issues that arise regarding information the Supplier provides in this form.</p>		

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
	HVSA*0135AB6	A	Z4XA	2016-05-23
Amount	UoM	Unit type	ST ECOPACK Grade	
206.00	mg	Each	ECOPACK® 2	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		
NAC	NAC	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	Tin (Sn), matte	Copper Alloy		



Package Designator	Size	Nbr of instances	Shape	
SIP	4.6X4.6X3.5	3	Through-hole	
Comment	Package: TO 92 Epoxy - MD valid for CP:LM135Z, LM235Z, LM335AZ, LM335AZT, LM335Z.			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
1 - Product(s) meets EU RoHS requirement without any exemptions	true
2 - Product(s) meets EU RoHS requirements except lead in solder and this usage may qualify under the lead in solder '7b' exemption (other selected exemptions may apply)	false
3 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	FALSE
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions	false
5 - Product(s) is obsolete, no information is available	false
6 - Product(s) is unknown, no information is available	false
Exemption Id.	Description

Query : California Prop65 list, dated 14 August 2015	
Query	Response
1 - The product does not contain identified substance from California Prop 65 List, no exposure to consumers is foreseen	TRUE
2 - The product is containing below substance(s) from California Prop 65 List, no exposure to consumers is foreseen	FALSE

QueryList : REACH-17th December 2015				
Query				Response
1 - Product(s) does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH				true
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product

Material Composition Declaration :						Mfr Item Name	HVSA*0135AB6					
note : Substance present with less 0.001mg will not be declared in this document												
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	Other inorganic materials	1.110	mg	supplier	die	Silicon (Si)	7440-21-3		1.095	mg	986486	5316
				supplier	metallization	Aluminium (Al)	7429-90-5		0.007	mg	6306	34
				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.004	mg	3604	19
				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.004	mg	3604	19
Leadframe	Copper & its alloys	92.183	mg	supplier	Alloy	Copper(Cu)	7440-50-8		92.083	mg	998915	447005
				supplier	Alloy	Iron(Fe)	7439-89-6		0.082	mg	890	398
				supplier	Alloy	Silicon(Si)	7440-21-3		0.018	mg	195	87
Die attach	Other Organic Materials	0.192	mg	supplier	Epoxy	Silver(Ag)	7440-22-4		0.160	mg	833333	777
				supplier	Epoxy	Bisphenol F type epoxy resin	9003-36-5		0.022	mg	114583	107
				supplier	Epoxy	Propylene carbonate	108-32-7		0.010	mg	52083	49
Bonding wire	Other inorganic materials	1.030	mg	supplier	Bonding wire	Gold (AU)	7440-57-5		1.030	mg	1000000	5000
Encapsulation	Other Organic Materials	109.345	mg	supplier	Molding compound	Quartz (SiO2)	14808-60-7		96.006	mg	878010	466049
				supplier	Molding compound	Epoxy resin	25068-38-6		8.200	mg	74992	39806
				supplier	Molding compound	Phenolic resin	29690-82-2		4.374	mg	40002	21233
				supplier	Molding compound	Cristobalite	14464-46-1		0.437	mg	3997	2121
				supplier	Molding compound	Carbon black	1333-86-4		0.328	mg	3000	1592
				supplier	Connection coating	Tin(Sn)	7440-31-5		2.140	mg	1000000	10388
Finishing	Other inorganic materials	2.140	mg	supplier	Connection coating	Tin(Sn)	7440-31-5		2.140	mg	1000000	10388