



Materials Declaration Form

IPC Form Type *	1752 Distribute	Version	2
Sectionals *	Material Info Manufacturing Info	Subsectionals *	A-D <i>* : Required Field</i>

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2015-04-09
Contact Name *	Refer to "Supplier Comment" section	Contact Title	Refer to "Supplier Comment" section
Contact Phone *	Refer to "Supplier Comment" section	Contact Email *	Refer to "Supplier Comment" section
Authorized Representative *	Emilio Castelli	Representative Title	APG 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/online_tech_support.html		


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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
VNL5090S5TR-E	RSKU*VNY9BAC	A	SH1A	2015-04-09
Amount		UoM	Unit type	ST ECOPACK Grade
80.00		mg	Each	ECOPACK® 2

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles	 life.augmented	
3	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	Nicke/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
CHP	4.9x3.9x1.52	8	flat	
Comment				

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
Product(s) meets EU RoHS requirement without any exemptions	true
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
Product(s) meets EU RoHS requirements by application of the selected exemption(s)	false
Product(s) does not meet EU RoHS requirements and is not under exemptions	false
Product(s) is obsolete, no information is available	false
Product(s) is unknown, no information is available	false
Exemption Id.	Description

QueryList : REACH-16th June 2014				
Query				Response
The product 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	RSKU*VNY9BAC					
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	1.852	mg	supplier	die	Silicon (Si)	7440-21-3		1.739	mg	938985	21738
Die				supplier	metallization	Titanium (Ti)	7440-32-6		0.045	mg	24298	563
Die				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.008	mg	4320	100
Die				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.022	mg	11879	275
Die				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.001	mg	540	13
Die				supplier	back side metallization	Gold (Au)	7440-57-5		0.003	mg	1620	38
Die				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.012	mg	6479	150
Die				supplier	glass coating	Glass: Silicon Dioxide (SiO2)	7631-86-9		0.022	mg	11879	275
Leadframe	Copper & its alloys	16.754	mg	supplier	alloy	Copper (Cu)	7440-50-8		16.317	mg	973917	203963
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.384	mg	22920	4800
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.023	mg	1373	288
Leadframe				supplier	alloy	Zinc (Zn)	7440-66-6		0.020	mg	1194	250
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		0.010	mg	597	125
Die attach		0.655	mg	supplier	glue or tape	isobornyl Methacrylate	7534-94-3		0.036	mg	54962	450
Die attach				#N/A	glue or tape	Bismaleimide resin	Proprietary		0.026	mg	39695	325
Die attach				supplier	glue or tape	Silver (Ag)	7440-22-4		0.593	mg	905344	7413
Bonding wire				supplier	wire	Copper (Cu)	7440-50-8		0.213	mg	1000000	2663
encapsulation		60.496	mg	#N/A	mold compound	Epoxy Resin	Proprietary		4.427	mg	73178	55338
encapsulation				#N/A	mold compound	Phenol Resin	Proprietary		4.427	mg	73178	55338
encapsulation				supplier	mold compound	Silica, vitreous	60676-86-0		51.111	mg	844866	638888
encapsulation				supplier	mold compound	Carbon black	1333-86-4		0.295	mg	4876	3688
encapsulation				supplier	mold compound	Bismuth (Bi)	7440-69-9		0.236	mg	3901	2950