



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 *	2014-06-10
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		

Uncertainty Statement


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Legal Statement			
Supplier Acceptance *	true	Legal Declaration *	Standard

Legal Statement

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.

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
VND1NV04-1-E	ASIK*VN73X3B	A	SH1A	2014-06-10
Amount	UoM	Unit type	ST ECOPACK Grade	
301.00	mg	Each	ECOPACK® 1	

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

Package Designator	Size	Nbr of instances	Shape	
SMD	6.5x6.1x2.3	3	flat	
Comment				

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
Product(s) meets EU RoHS requirement without any exemptions	false
Product(s) meets EU RoHS requirements except lead in solder and this usage may qualify under the lead in solder '7a' exemption (other selected exemptions may apply)	true
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 December 2013				
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	ASIK*VN73X3B					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
die (s)	Other inorganic materials	1.735	mg	supplier	die	Silicon (Si)	7440-21-3		1.696	mg	977522	5635
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.012	mg	6916	40
die (s)				supplier	passivation	Indium Tin oxide (In2O3.SnO2)	50926-11-9		0.012	mg	6916	40
die (s)				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.001	mg	576	3
die (s)				supplier	back side metallization	Gold (Au)	7440-57-5		0.002	mg	1153	7
die (s)				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.012	mg	6916	40
Leadframe	Copper & its alloys	193.081	mg	supplier	alloy	Copper (Cu)	7440-50-8		190.265	mg	985416	632110
Leadframe				supplier	alloy	CopperPhosphorus (CuP)	12517-41-8		0.382	mg	1978	1269
Leadframe				supplier	alloy	Cobalt (Co)	7440-48-4		0.535	mg	2771	1777
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		0.596	mg	3086	1980
Leadframe				supplier	metallization	Silver (Ag)	7440-22-4		1.303	mg	6748	4329
Die attach		1.734	mg	JIG Table A	glue or tape	Lead (Pb)	7439-92-1	7a-Lead in high mel	1.656	mg	955017	5502
Die attach				supplier	glue or tape	Silver (Ag)	7440-22-4		0.043	mg	24798	143
Die attach				supplier	glue or tape	Tin (Sn)	7440-31-5		0.035	mg	20185	116
Bonding wire		0.332		supplier	wire	Gold (Au)	7440-57-5		0.332	mg	1000000	1103
encapsulation		99.106	mg	supplier	mold compound	Silica, vitreous	60676-86-0		79.286	mg	800012	263409
encapsulation				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		6.938	mg	70006	23050
encapsulation				supplier	mold compound	Phenol resin	9003-35-4		3.964	mg	39998	13169
encapsulation				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		5.946	mg	59996	19754
encapsulation				supplier	mold compound	Antimony Trioxide	1309-64-4		1.189	mg	11997	3950
encapsulation				JIG I	mold compound	Brominated Epoxy Resin	40039-93-8		1.486	mg	14994	4937
encapsulation				supplier	mold compound	Carbon black	1333-86-4		0.297	mg	2997	987
connections coating	Solder	5.011	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		5.011	mg	1000000	16648