



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 *	2014-04-18
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
VND600SPTR-E	LBK3*VN60ACC	A	B02A	2014-04-18
Amount	UoM	Unit type	ST ECOPACK Grade	
1074.00	mg	Each	ECOPACK® 1	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
3	250	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	Tin (Sn), matte, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
CHP	9.4x7.5x3.5	10	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	LBK3*VN60ACC					
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	13.055	mg	supplier	die	Silicon (Si)	7440-21-3		12.765	mg	977786	11885
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.090	mg	6894	84
die (s)				supplier	passivation	Indium Tin oxide (In2O3.SnO2)	50926-11-9		0.088	mg	6741	82
die (s)				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.006	mg	460	6
die (s)				supplier	back side metallization	Gold (Au)	7440-57-5		0.019	mg	1455	18
die (s)				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.087	mg	6664	81
Leadframe	Copper & its alloys	221.705	mg	supplier	alloy	Copper (Cu)	7440-50-8		221.036	mg	996983	205806
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.102	mg	460	95
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.186	mg	839	173
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		0.180	mg	814	168
Leadframe				supplier	metallization	Silver (Ag)	7440-22-4		0.199	mg	898	185
Leadframe				supplier	metallization	Phosphorus (P)	12185-10-3		0.002	mg	7	1
Die attach		8.984	mg	JIG R	glue or tape	Lead (Pb)	7439-92-1	7a-Lead in high met	8.579	mg	954920	7988
Die attach				supplier	glue or tape	Silver (Ag)	7440-22-4		0.225	mg	25045	209
Die attach				supplier	glue or tape	Tin (Sn)	7440-31-5		0.180	mg	20036	168
Bonding wire		1.864		supplier	wire	Gold (Au)	7440-57-5		0.212	mg	113734	197
Bonding wire				supplier	wire	Aluminium (Al)	7429-90-5		1.652	mg	886266	1538
encapsulation		825.109	mg	supplier	mold compound	Silica, vitreous	60676-86-0		655.962	mg	795000	610765
encapsulation				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		69.309	mg	84000	64534
encapsulation				supplier	mold compound	Phenol resin	9003-35-4		41.255	mg	49999	38412
encapsulation				JIG I	mold compound	Brominated Epoxy Resin	40039-93-8		9.901	mg	12000	9219
encapsulation				supplier	mold compound	Brominated Epoxy Resin	68541-56-0		12.377	mg	15000	11524
encapsulation				supplier	mold compound	Bismuth Trioxide	1304-76-3		8.251	mg	10000	7682
encapsulation				supplier	mold compound	Bismuth nitrate	10361-44-1		8.251	mg	10000	7682
encapsulation				supplier	mold compound	carbon black	1333-86-4		3.301	mg	4001	3074
encapsulation				supplier	mold compound	Antimony Trioxide	1309-64-4		16.502	mg	20000	15365
connections coating	Solder	3.284	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		3.284	mg	1000000	3058