



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 *	2015-08-26
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
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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
VNV35N07TRE	LBKD*VN19DYX	A	BO2A	2015-08-26
	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 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	LBKD*VN19DYX					
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	23.857	mg	supplier	die	Silicon (Si)	7440-21-3		23.342	mg	978413	21734
Die				supplier	metallization	Aluminium (Al)	7429-90-5		0.109	mg	4569	101
Die				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.067	mg	2808	62
Die				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.101	mg	4234	94
Die				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.008	mg	335	7
Die				supplier	back side metallization	Gold (Au)	7440-57-5		0.023	mg	964	21
Die				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.106	mg	4443	99
Die				supplier	glass coating	Glass: Silicon Dioxide (SiO2)	7631-86-9		0.101	mg	4234	94
Leadframe	Copper & its alloys	710.409	mg	supplier	alloy	Copper (Cu)	7440-50-8		706.670	mg	994737	657980
Leadframe				supplier	alloy	CopperPhosphorus (CuP)	12517-41-8		1.420	mg	1999	1322
Leadframe				supplier	alloy	Cobalt (Co)	7440-48-4		1.988	mg	2798	1851
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		0.173	mg	244	161
Leadframe				supplier	metallization	Silver (Ag)	7440-22-4		0.157	mg	221	146
Leadframe				supplier	metallization	Phosphorus (P)	12185-10-3		0.001	mg	1	1
Die attach		13.574	mg	JIG - R	Soft solder	Lead (Pb)	7439-92-1	7a-Lead in high me	12.964	mg	955061	12071
Die attach				supplier	Soft solder	Silver (Ag)	7440-22-4		0.339	mg	24974	316
Die attach				supplier	Soft solder	Tin (Sn)	7440-31-5		0.271	mg	19965	252
Bonding wire		0.958		supplier	wire	Gold (Au)	7440-57-5		0.048	mg	50104	45
Bonding wire				supplier	wire	Aluminium (Al)	7429-90-5		0.910	mg	949896	847
encapsulation		318.422	mg	supplier	mold compound	Silica, vitreous	60676-86-0		264.291	mg	830002	246081
encapsulation				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		27.066	mg	85000	25201
encapsulation				supplier	mold compound	Phenol resin	9003-35-4		15.921	mg	50000	14824
encapsulation				supplier	mold compound	Brominated Epoxy Resin	40039-93-8		3.821	mg	12000	3558
encapsulation				supplier	mold compound	carbon black	1333-86-4		0.955	mg	2999	889
encapsulation				supplier	mold compound	Antimony Trioxide	1309-64-4		6.368	mg	19999	5929
connections coating	Solder	6.781	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		6.781	mg	1000000	6314