



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 *	02/12/2015
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 *	Giuseppe Vitali Palma	Representative Title	AMS & IPD Materials Declaration 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/internet/com/support/online_tech_support.jsp		

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
	DDD2*KV63962	A	SH1A	02/12/2015
Amount	UoM	Unit type	ST ECOPACK Grade	
1380.00	mg	Each	ECOPACK® 2	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles	 life.augmented	
1	245	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	10.2X9.15X4.5	3	gull wing	
Comment	Package: D2PAK; MD valid for STGB10NC60KDT4; STGB8NC60KDT4			

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 '7b' exemption (other selected exemptions may apply)	false
Product(s) meets EU RoHS requirements by application of the selected exemption(s)	true
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
7a	Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead)

QueryList : REACH-17th December 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	DDD2*KV63962					
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	7.405	mg	supplier	die	Silicon (Si)	7440-21-3		7.252	mg	979338	5255
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.09	mg	12154	65
die (s)				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.021	mg	2836	15
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.031	mg	4186	22
die (s)				supplier	back side metallization	Silver (Ag)	7440-22-4		0.002	mg	270	1
die (s)				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.008	mg	1080	6
die (s)				supplier	back side metallization	Gold (Au)	7440-57-5		0.001	mg	135	1
Leadframe	Copper & its alloys	782.574	mg	supplier	alloy	Copper (Cu)	7440-50-8		781.458	mg	998574	566274
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.782	mg	999	567
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.235	mg	300	170
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		0.092	mg	118	67
Leadframe				supplier	metallization	Phosphorus (P)	12185-10-3		0.007	mg	9	5
Soft solder	Other Organic Materials	4.796	mg	JIG R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	4.58	mg	954962	3319
Soft solder				supplier	solder	Silver (Ag)	7440-22-4		0.12	mg	25021	87
Soft solder				supplier	solder	Tin (Sn)	7440-31-5		0.096	mg	20017	70
Bonding wire	Other inorganic materials	0.421	mg	supplier	wire	Aluminium (Al)	7429-90-5		0.42	mg	997625	304
Bonding wire				supplier	wire	Magnesium (Mg)	7439-95-4		0.001	mg	2375	1
encapsulation	Other Organic Materials	583.759	mg	supplier	mold compound	Epoxy Resin	Proprietary		17.513	mg	30000	12691
encapsulation				supplier	mold compound	2,2'-((3,3',5,5'-tetramethyl-(1,1'-biphenyl)-4,4'	EC 413-900-7		23.35	mg	39999	16920
encapsulation				supplier	mold compound	phenol resin	Proprietary		29.188	mg	50000	21151
encapsulation				supplier	mold compound	Silica, vitreous	60676-86-0		510.789	mg	875000	370137
encapsulation				supplier	mold compound	Carbon black	1333-86-4		2.919	mg	5000	2115
connections coating	Solder	1.045	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.045	mg	1000000	757