



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 *	2017-02-03
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Rossana Bonaccorso	Representative Title	ADG 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/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
L9945	A991*UR53BAP	A	0959	2017-02-03
	Amount	UoM	Unit type	ST ECOPACK Grade
	260.00	mg	Each	ECOPACK2

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	
NA	NiPdAuAg	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFP	10-10-1	64	gull wing	
Comment	TQFP 64 10x10x1.0 1.0 ExPad Down			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-April 2015	
Query	Response
1 - Product(s) meets EU RoHS requirement without any exemptions	TRUE
2 - 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
3 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	FALSE
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions	FALSE
Exemption Id.	Description

QueryList : REACH-12th January 2017				
Query				Response
1 - Product(s) 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 : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	A991*URS3BAP									
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	11.516	mg	supplier	die	Silicon (Si)	7440-21-3		10.456	mg	907954	40215				
				supplier	metallization	Aluminium (Al)	7429-90-5		0.025	mg	2171	96				
				supplier	metallization	Copper (Cu)	7440-50-8		0.643	mg	55835	2473				
				supplier	metallization	Cobalt (Co)	7440-48-4		0.001	mg	86	4				
				supplier	metallization	Platinum (Pt)	7440-06-4		0.045	mg	3908	173				
				supplier	metallization	Titanium (Ti)	7440-32-6		0.007	mg	608	27				
				supplier	metallization	Tungsten (W)	7440-33-7		0.037	mg	3213	142				
				supplier	Passivation	Silicon Nitride	12033-89-5		0.021	mg	1824	81				
				supplier	Passivation	Silicon Oxide	7631-86-9		0.161	mg	13981	619				
				supplier	polymer die coating	Polyimide AH 1200	Proprietary		0.120	mg	10420	462				
				Leadframe	Copper & its alloys	85.117	mg	supplier	alloy	Copper (Cu)	7440-50-8		82.414	mg	968244	316977
								supplier	alloy	Iron (Fe)	7439-89-6		1.938	mg	22769	7454
								supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.117	mg	1375	450
supplier	alloy	Zinc (Zn)	7440-66-6						0.102	mg	1198	392				
supplier	metallization	Nickel (Ni)	7440-02-0						0.500	mg	5874	1923				
supplier	metallization	Palladium (Pd)	7440-05-3						0.016	mg	188	62				
supplier	metallization	Gold (Au)	7440-57-5						0.015	mg	176	58				
supplier	metallization	Silver (Ag)	7440-22-4						0.015	mg	176	58				
Die attach	Other Organic Materials	2.791	mg					supplier	glue	Silver (Ag)	7440-22-4		2.498	mg	895020	9608
								supplier	glue	Isobornyl Methacrylate	7534-94-3		0.209	mg	74884	804
				supplier	glue	Bismaleimide resin	35325-39-4		0.084	mg	30096	323				
Bonding wires	Other inorganic materials	1.076	mg	supplier	wire	Copper (Cu)	7440-50-8		1.076	mg	1000000	4138				
Encapsulation	Other Organic Materials	159.500	mg	supplier	mold compound	Silica, vitreous	60676-86-0		137.807	mg	863994	530027				
				supplier	mold compound	Epoxy Resin	25068-38-6		11.962	mg	74997	46008				
				supplier	mold compound	Phenol Resin	29690-82-2		7.975	mg	50000	30673				
				supplier	mold compound	3-Mercaptopropyl trimethoxysilane	4420-74-0		0.798	mg	5003	3069				
				supplier	mold compound	Quartz	14808-60-7		0.479	mg	3003	1842				
				supplier	mold compound	Carbon black	1333-86-4		0.479	mg	3003	1842				