



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 *	2016-05-18
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	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/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
L9958SBTR	G9FG*UQ41AB1	A	MU1A	2016-05-18
Amount	UoM	Unit type	ST ECOPACK Grade	
1130.50	mg	Each	ECOPACK® 2	

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	7.5X9.3X3.3	16	pin	
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-17th Dec 2015				
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	G9FG*UQ41AB1					
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	6.131	mg	supplier	die	Silicon (Si)	7440-21-3		5.795	mg	945197	5126
Die				supplier	metallization	Aluminium (Al)	7429-90-5		0.060	mg	9786	53
Die				supplier	metallization	Tungsten (W)	7440-33-7		0.047	mg	7666	42
Die				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.012	mg	1957	11
Die				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.102	mg	16637	90
Die				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.004	mg	652	4
Die				supplier	back side metallization	Gold (Au)	7440-57-5		0.012	mg	1957	11
Die				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.034	mg	5546	30
Die				supplier	back side metallization	Vanadium (V)	7440-62-2		0.003	mg	489	3
Die				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.062	mg	10113	55
Leadframe	Copper & its alloys	99.385	mg	supplier	alloy	Copper (Cu)	7440-50-8		96.369	mg	969653	85245
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.096	mg	966	85
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.029	mg	292	26
Leadframe				supplier	metallization	Silver (Ag)	7440-22-4		2.891	mg	29089	2557
Die attach		4.621	mg	JIG - R	Soft Solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	4.506	mg	975114	3986
Die attach				supplier	Soft Solder	Silver (Ag)	7440-22-4		0.069	mg	14932	61
Die attach				supplier	Soft Solder	Tin (Sn)	7440-31-5		0.046	mg	9955	41
Bonding wire		1.178		supplier	wire	Gold (Au)	7440-57-5		0.593	mg	503396	525
Bonding wire				supplier	wire	Copper (Cu)	7440-50-8		0.582	mg	494058	515
Bonding wire				supplier	wire	Palladium (Pd)	7440-05-3		0.002	mg	1698	2
Bonding wire				supplier	wire	Platinum (Pt)	7440-06-4		0.001	mg	849	1
encapsulation		1014.211	mg	supplier	mold compound	Epoxy Resin	Proprietary		74.210	mg	73170	65644
encapsulation				supplier	mold compound	Phenol Resin	Proprietary		74.210	mg	73170	65644
encapsulation				supplier	mold compound	Silica, vitreous	60676-86-0		854.905	mg	842926	756218
encapsulation				supplier	mold compound	Quartz	14808-60-7		2.969	mg	2927	2626
encapsulation				supplier	mold compound	3-Mercaptopropyl trimethoxysilane	4420-74-0		4.948	mg	4879	4377
encapsulation				supplier	mold compound	Carbon black	1333-86-4		2.969	mg	2927	2626
connections coating	Solder	4.397	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		4.397	mg	1000000	3889