



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 *	2018-10-24
Company Unique ID	NL 008751171B01		
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Contact Phone *	Refer to Supplier Comment section	Contact Email *	Refer to Supplier Comment section
Authorized Representative *	Floriana SAN BIAGIO	Representative Title	AMS 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
	9K07*MV8CAAA	A	SH1A	2018-10-24
Amount	UoM	Unit type	ST ECOPACK Grade	
80	mg	Each	ECOPACK® 2	
	Comment	ECOPACK® 2 is STMicroelectronics trade name for ROHS compliant device without Brominated and Chlorinated compound (900ppm) and without Antimony oxide flame retardant (in each organic material)		

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	
Not Applicable	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	4.85x3.9x1.52	8	gull wing	
Comment	07 SO 08 .15 JEDEC; MDF is valid for STGAP2SMTR			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-March 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-27th June 2018				
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
-	-			0
2 - Product(s) does not contain REACH Substances Of Very High Concern in any Embedded article nor Homogeneous Material above the limits per the definition within REACH				TRUE
CategoryLevel_Name	CategoryLevel_Threshold	Amount in Embedded Article / Homogeneous Material (mg)	Application - Article / Homogeneous Material	ppm in Article /Homogeneous Material
-	-	0.00		

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	9K07*MV8CAA				4999999.0	1000019.0
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Dies	M-011 Other inorganic materials	1.984	mg	supplier	die	Silicon (Si)	7440-21-3		1.879	mg	947077	23488
				supplier	metallization	Aluminium (Al)	7429-90-5		0.019	mg	9577	238
				supplier	metallization	Tungsten (W)	7440-33-7		0.015	mg	7560	188
				supplier	Passivation	Silicon Nitride	12033-89-5		0.004	mg	2016	50
				supplier	Passivation	Silicon Oxide	7631-86-9		0.033	mg	16633	413
				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.001	mg	504	13
				supplier	back side metallization	Gold (Au)	7440-57-5		0.004	mg	2016	50
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.009	mg	4536	113
				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.020	mg	10081	250
				supplier	alloy	Copper (Cu)	7440-50-8		29.754	mg	967075	371925
Leadframe	M-004 Copper and its alloys	30.767	mg	supplier	alloy	Iron (Fe)	7439-89-6		0.700	mg	22752	8750
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.042	mg	1365	525
				supplier	alloy	Zinc (Zn)	7440-66-6		0.037	mg	1203	463
				supplier	metallization	Nickel (Ni)	7440-02-0		0.214	mg	6956	2675
				supplier	metallization	Palladium (Pd)	7440-05-3		0.014	mg	455	175
				supplier	metallization	Gold (Au)	7440-57-5		0.006	mg	195	75
				supplier	glue	Silver (Ag)	7440-22-4		0.687	mg	877395	8588
				supplier	glue	Isobornyl Methacrylate	7534-94-3		0.039	mg	49808	488
				supplier	glue	Urethane Methacrylate Resin	5888-33-5		0.039	mg	49808	488
				supplier	glue	Acrylate polymer	87320-05-6		0.016	mg	20434	200
Die attach	M-015 Other organic materials	0.783	mg	supplier	glue	Epoxy(2-cyclohexylethyl)trimethoxysilane	3388-04-3		0.001	mg	1277	13
				supplier	glue	tert-Butyl peroxy(2-ethyl)-hexanoate	3006-82-4		0.001	mg	1277	13
				supplier	wire	Copper (Cu)	7440-50-8		0.071	mg	1000000	888
				supplier	mold compound	Silica, vitreous	60676-86-0		40.178	mg	865980	502225
Encapsulation	M-011 Other inorganic materials	46.396	mg	supplier	mold compound	Epoxy Resin	85954-11-6		3.480	mg	75006	43500
				supplier	mold compound	Phenol Resin	26834-02-6		2.320	mg	50004	29000
				supplier	mold compound	Carbon black	1333-86-4		0.232	mg	5000	2900
				supplier	mold compound	Bismuth compound	7440-69-9		0.186	mg	4009	2325