



## Materials Declaration Form

<b>IPC Form Type *</b>	1752 Distribute	<b>Version</b>	2
<b>Sectionals *</b>	Material Info Manufacturing Info	<b>Subsectionals *</b>	A-D  * : Required Field

<b>Supplier Information</b>			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2017-07-07
<b>Contact Name *</b>	Refer to Supplier Comment section		Refer to Supplier Comment section
<b>Authorized Representative *</b>	Giovanni Giacopello	<b>Representative Title</b>	ADG MD Champion
<b>Representative Phone *</b>	Refer to Supplier Comment section	<b>Representative Email *</b>	Refer to Supplier Comment section
<b>Supplier Comment</b>	Online Technical Support - STMicroelectronics : <a href="http://www.st.com/web/en/support/support.html">http://www.st.com/web/en/support/support.html</a>		

**Uncertainty Statement**

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**Legal Statement**

<b>Supplier Acceptance *</b>	true	<b>Legal Declaration *</b>	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
SPC574K72E5BC6AR	S9X6*FE72BEQ	A	1054	2017-07-07
Amount	UoM	Unit type	ST ECOPACK Grade	
1120.00	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	20-20-1	144	gull wing	
Comment	TQFP 144 20x20x1.0 1.0 ExpadDown			

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

Query : California Prop65 list, dated 27th January 2017			
Query			Response
1 - The product does not contain identified substance from California Prop 65 List, no exposure to consumers is foreseen			TRUE
2 - The product is containing below substance(s) from California Prop 65 List, no exposure to consumers is foreseen			FALSE
Substance	amount in product (mg)	Application	ppm in product
Nickel	1.68	Die - Leadframe	1497

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	S9X6*FE72BEQ									
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	59.860	mg	supplier	die	Silicon (Si)	7440-21-3		58.940	mg	984631	52625				
				supplier	metallization	Aluminium (Al)	7429-90-5		0.064	mg	1069	57				
				supplier	metallization	Copper (Cu)	7440-50-8		0.386	mg	6448	345				
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.063	mg	1052	56				
				supplier	metallization	Titanium (Ti)	7440-32-6		0.017	mg	284	15				
				supplier	metallization	Tungsten (W)	7440-33-7		0.003	mg	51	3				
				supplier	Passivation	Silicon Nitride	12033-89-5		0.088	mg	1470	79				
				supplier	Passivation	Silicon Oxide	7631-86-9		0.299	mg	4995	267				
				Leadframe	Copper & its alloys	359.326	mg	supplier	alloy	Copper (Cu)	7440-50-8		348.377	mg	969520	311051
								supplier	alloy	Iron (Fe)	7439-89-6		8.194	mg	22804	7316
supplier	alloy	Iron Phosphide (FeP)	26508-33-8						0.493	mg	1372	440				
supplier	alloy	Zinc (Zn)	7440-66-6						0.429	mg	1194	383				
supplier	metallization	Nickel (Ni)	7440-02-0						1.677	mg	4667	1497				
supplier	metallization	Palladium (Pd)	7440-05-3						0.054	mg	150	48				
supplier	metallization	Gold (Au)	7440-57-5						0.051	mg	142	46				
supplier	metallization	Silver (Ag)	7440-22-4						0.051	mg	142	46				
Die attach	Other Organic Materials	7.717	mg	supplier	glue or tape (choose)	Silver (Ag)	7440-22-4		6.906	mg	894907	6166				
				supplier	glue or tape	Isobornyl Methacrylate	7534-94-3		0.579	mg	75030	517				
				supplier	glue or tape	Bismaleimide resin	Proprietary		0.232	mg	30063	207				
Bonding wires	Other inorganic materials	2.191	mg	supplier	wire	Copper (Cu)	7440-50-8		2.191	mg	1000000	1956				
Encapsulation	Other Organic Materials	690.906	mg	supplier	mold compound	Silica, vitreous	60676-86-0		596.942	mg	863999	532984				
				supplier	mold compound	Epoxy Resin	25068-38-6		51.818	mg	75000	46266				
				supplier	mold compound	Phenol Resin	29690-82-2		34.545	mg	50000	30844				
				supplier	mold compound	3-Mercaptopropyl trimethoxysilane	4420-74-0		3.455	mg	5001	3085				
				supplier	mold compound	Quartz	14808-60-7		2.073	mg	3000	1851				
				supplier	mold compound	Carbon black	1333-86-4		2.073	mg	3000	1851				