



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 *	2017-03-01
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
SPC56EC74L8C9E0X	SDUH*FB74CAQ	A	ZR1A	2017-03-01
	Amount	UoM	Unit type	ST ECOPACK Grade
	2240.00	mg	Each	ECOPACK® 2

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	
NAC	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFP	28x28x1.4	208	No lead	
Comment	Package: LQFP 208 28x28x1.4 1.0			

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
5 - Product(s) is obsolete, no information is available	false
6 - Product(s) is unknown, no information is available	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						Mfr Item Name	SDUH*FB74CAQ									
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	37.283	mg	supplier	die	Silicon (Si)	7440-21-3		28.565	mg	766167	12752				
				supplier	metallization	Aluminium (Al)	7429-90-5		0.142	mg	3809	63				
				supplier	metallization	Copper (Cu)	7440-50-8		0.922	mg	24730	412				
				supplier	metallization	Tantalum (Ta)	7440-25-7		6.817	mg	182845	3043				
				supplier	metallization	Cobalt (Co)	7440-48-4		0.003	mg	80	1				
				supplier	metallization	Tungsten (W)	7440-33-7		0.414	mg	11104	185				
				supplier	Passivation	Silicon Nitride	12033-89-5		0.108	mg	2897	48				
				supplier	Passivation	Silicon Oxide	7631-86-9		0.312	mg	8368	139				
				Leadframe	Other organic materials	896.465	mg	supplier	alloy	Copper (Cu)	65997-17-3		845.367	mg	943000	377396
								supplier	alloy	Nickel (Ni)	7328-97-4		28.687	mg	32000	12807
supplier	alloy	Silicon (Si)	7440-21-3						6.499	mg	7250	2901				
supplier	alloy	Magnesium (Mg)	7439-95-4						1.569	mg	1750	700				
supplier	alloy	Silver (Ag)	7440-22-4						14.343	mg	16000	6403				
Die attach	Other organic materials	7.672	mg					supplier	glue	Silver (Ag)	7440-22-4		5.927	mg	772550	2646
				supplier	glue	Bisphenol F type epoxy resin	9003-36-5		0.959	mg	125000	428				
				supplier	glue	t-Butyl phenyl glycidyl ether	3101-60-8		0.499	mg	65042	223				
				supplier	glue	Phenolic resin	9003-35-4		0.249	mg	32456	111				
				supplier	glue	Cyanoguanidine	461-58-5		0.038	mg	4952	17				
				Bonding wire	Other inorganic materials	3.287	mg	supplier	wire	Gold (Au)	7440-57-5		3.257	mg	990873	1454
supplier	wire	Palladium(Pd)	7440-05-3						0.030	mg	9127	14				
Encapsulation	Other organic materials	1267.005	mg	supplier	mold compound	Silica, vitreous	60676-86-0		924.913	mg	729999	412908				
				supplier	mold compound	Silica Amorphous	7631-86-9		101.360	mg	80000	45250				
				supplier	mold compound	Epoxy Resin	25068-38-6		107.697	mg	85001	48079				
				supplier	mold compound	Phenol Resin	29690-82-2		88.690	mg	70000	39594				
				supplier	mold compound	Metal hydroxide	21645-51-2		38.010	mg	30000	16969				
				supplier	mold compound	Carbon Black	1333-86-4		6.335	mg	5000	2828				
Connection coating	Other inorganic materials	28.288	mg	supplier	Tin (Sn)	Tin (Sn)	7440-31-5		28.288	mg	1000000	12629				