



## 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
<i>* : Required Field</i>			

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2017-04-11
<b>Contact Name *</b>	Refer to Supplier Comment section		Refer to Supplier Comment section
<b>Authorized Representative *</b>	Rossana Bonaccorso	<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

**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
	B91A*FL60CCQ	A	1054	2017-04-11
Amount	UoM	Unit type	ST ECOPACK Grade	
1315.00	mg	Each	ECOPACK2	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		
3	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NA	Tin (Sn), matte	Copper Alloy		



Package Designator	Size	Nbr of instances	Shape	
QFP	20-20-1.4	144	gull wing	
Comment	Package: LQFP 144 20X20X1.4 2. MDF valid for CPs: SPC564L60L5CCFQY - SPC564L60L5CCFQR - SPC564L60L5BCOQY - SPC564L60L5BCOQR			

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			FALSE
2 - The product is containing below substance(s) from California Prop 65 List, no exposure to consumers is foreseen			TRUE
Substance	amount in product (mg)	Application	ppm in product
Cobalt	0.001	die metallization	1

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	B91A*FL60CCQ					
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	33.701	mg	supplier	die	Silicon (Si)	7440-21-3		32.447	mg	962790	24675
				supplier	metallization	Aluminium (Al)	7429-90-5		0.060	mg	1780	46
				supplier	metallization	Copper (Cu)	7440-50-8		0.532	mg	15786	405
				supplier	metallization	Cobalt (Co)	7440-48-4		0.001	mg	30	1
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.172	mg	5104	131
				supplier	metallization	Titanium (Ti)	7440-32-6		0.006	mg	178	5
				supplier	metallization	Tungsten (W)	7440-33-7		0.004	mg	119	3
				supplier	Passivation	Silicon Nitride	12033-89-5		0.135	mg	4006	103
				supplier	Passivation	Silicon Oxide	7631-86-9		0.344	mg	10207	262
				Leadframe	Copper & its alloys	315.420	mg	supplier	alloy	Copper (Cu)	7440-50-8	
supplier	alloy	CopperPhosphorous (CuP)	12517-41-8						0.313	mg	992	238
supplier	metallization	Silver (Ag)	7440-22-4						2.078	mg	6588	1580
Die attach	Other Organic Materials	8.005	mg	supplier	glue	Silver (Ag)	7440-22-4		6.325	mg	790132	4810
				supplier	glue	Urethane acrylate oligomer	Proprietary		0.560	mg	69956	426
				supplier	glue	Isobornyl Methacrylate	7534-94-3		0.560	mg	69956	426
				supplier	glue	Acrylate	Proprietary		0.560	mg	69956	426
Bonding wires	Other inorganic materials	1.205	mg	supplier	wire	Copper (Cu)	7440-50-8		1.181	mg	980083	894
				supplier	wire	Palladium (Pd)	7440-05-3		0.022	mg	18257	17
				supplier	wire	Silver (Ag)	7440-22-4		0.002	mg	1660	2
Encapsulation	Other Organic Materials	948.647	mg	supplier	mold compound	Silica, vitreous	60676-86-0		819.631	mg	864000	623294
				supplier	mold compound	Epoxy Resin	25068-38-6		71.149	mg	75000	54106
				supplier	mold compound	Phenol Resin	29690-82-2		47.432	mg	50000	36070
				supplier	mold compound	3-Mercaptopropyl trimethoxysilane	4420-74-0		4.743	mg	5000	3607
				supplier	mold compound	Quartz	14808-60-7		2.846	mg	3000	2164
				supplier	mold compound	Carbon black	1333-86-4		2.846	mg	3000	2164
Connections coating	Solder	8.022	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		8.022	mg	1000000	6100