



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 *	2017-03-31
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
	B91A*FB50BFQ	A	1054	2017-03-31
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: SPC560B40L5C6E0X - SPC560B40L5B6E0Y - SPC560B40L5B6E0X - SPC560B40L5B4ET			

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*FB508FQ					
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	16.267	mg	supplier	die	Silicon (Si)	7440-21-3		15.661	mg	962747	11910
				supplier	metallization	Aluminium (Al)	7429-90-5		0.029	mg	1783	22
				supplier	metallization	Copper (Cu)	7440-50-8		0.257	mg	15799	195
				supplier	metallization	Cobalt (Co)	7440-48-4		0.001	mg	61	1
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.083	mg	5102	63
				supplier	metallization	Titanium (Ti)	7440-32-6		0.003	mg	184	2
				supplier	metallization	Tungsten (W)	7440-33-7		0.002	mg	123	2
				supplier	Passivation	Silicon Nitride	12033-89-5		0.065	mg	3996	49
				supplier	Passivation	Silicon Oxide	7631-86-9		0.166	mg	10205	126
				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	3.987	mg	supplier	glue	Silver (Ag)	7440-22-4		3.150	mg	790069	2395
				supplier	glue	Urethane acrylate oligomer	Proprietary		0.279	mg	69977	212
				supplier	glue	Isobornyl Methacrylate	7534-94-3		0.279	mg	69977	212
				supplier	glue	Acrylate	Proprietary		0.279	mg	69977	212
Bonding wires	Other inorganic materials	1.198	mg	supplier	wire	Copper (Cu)	7440-50-8		1.174	mg	979967	893
				supplier	wire	Palladium (Pd)	7440-05-3		0.022	mg	18364	18
				supplier	wire	Silver (Ag)	7440-22-4		0.002	mg	1669	2
Encapsulation	Other Organic Materials	970.106	mg	supplier	mold compound	Silica, vitreous	60676-86-0		838.172	mg	864000	637393
				supplier	mold compound	Epoxy Resin	25068-38-6		72.758	mg	75000	55329
				supplier	mold compound	Phenol Resin	29690-82-2		48.505	mg	50000	36886
				supplier	mold compound	3-Mercaptopropyl trimethoxysilane	4420-74-0		4.851	mg	5000	3689
				supplier	mold compound	Quartz	14808-60-7		2.910	mg	3000	2213
				supplier	mold compound	Carbon black	1333-86-4		2.910	mg	3000	2213
Connections coating	Solder	8.022	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		8.022	mg	1000000	6100