



Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2018-01-09
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Giovanni Giacopello	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
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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
SPC56EC64L7B9E0Y	H91T*FB74CAQ	A	1054	2018-01-09
Amount	UoM	Unit type	ST ECOPACK Grade	
1650.00	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	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFP	24-24-1.4	176	gull wing	
Comment	LQFP 176 24x24x1.4			

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
Nickel	12.81	Leadframe	7764
Cobalt	0.00	Die	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	H91T*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	80.546	mg	supplier	die	Silicon (Si)	7440-21-3		79.065	mg	981613	47918
				supplier	metallization	Aluminium (Al)	7429-90-5		0.071	mg	881	43
				supplier	metallization	Copper (Cu)	7440-50-8		0.628	mg	7797	381
				supplier	metallization	Cobalt (Co)	7440-48-4		0.002	mg	25	1
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.203	mg	2520	123
				supplier	metallization	Titanium (Ti)	7440-32-6		0.007	mg	87	4
				supplier	metallization	Tungsten (W)	7440-33-7		0.005	mg	62	3
				supplier	Passivation	Silicon Nitride	12033-89-5		0.159	mg	1974	96
				supplier	Passivation	Silicon Oxide	7631-86-9		0.406	mg	5041	246
				supplier	alloy	Copper (Cu)	7440-50-8		410.773	mg	933032	248953
				supplier	alloy	Nickel (Ni)	7440-02-0		12.810	mg	29097	7764
				supplier	alloy	Magnesium (Mg)	7439-95-4		0.641	mg	1456	388
				Leadframe	Copper & its alloys	440.256	mg	supplier	alloy	Silicon (Si)	7440-21-3	
supplier	tape	poly(4,4'-oxydiphenylene-pyromellitimide)	25036-53-7						9.338	mg	21210	5659
supplier	tape	bismaleimide	35325-39-4						0.095	mg	216	58
supplier	tape	Zinc hydroxide	20427-58-1						0.095	mg	216	58
supplier	metallization	Silver (Ag)	7440-22-4						3.728	mg	8468	2259
supplier	glue	Silver (Ag)	7440-22-4						7.833	mg	790015	4747
supplier	glue	Urethane acrylate oligomer	Proprietary						0.694	mg	69995	421
supplier	glue	Isobornyl Methacrylate	7534-94-3						0.694	mg	69995	421
supplier	glue	Acrylate	Proprietary						0.694	mg	69995	421
supplier	wire	Copper (Cu)	7440-50-8						1.447	mg	980352	877
Die attach	Other Organic Materials	9.915	mg	supplier	wire	Palladium (Pd)	7440-05-3		0.027	mg	18293	16
				supplier	wire	Silver (Ag)	7440-22-4		0.002	mg	1355	1
				supplier	wire	Silver (Ag)	7440-22-4		0.002	mg	1355	1
Bonding wires	Other inorganic materials	1.476	mg	supplier	wire	Copper (Cu)	7440-50-8		1.447	mg	980352	877
				supplier	wire	Palladium (Pd)	7440-05-3		0.027	mg	18293	16
				supplier	wire	Silver (Ag)	7440-22-4		0.002	mg	1355	1
				supplier	mold compound	Silica, vitreous	60676-86-0		957.044	mg	864000	580027
				supplier	mold compound	Epoxy Resin	25068-38-6		83.077	mg	75000	50350
				supplier	mold compound	Phenol Resin	29690-82-2		55.385	mg	50000	33567
				supplier	mold compound	3-Mercaptopropyl trimethoxysilane	4420-74-0		5.539	mg	5000	3357
Encapsulation	Other Organic Materials	1107.691	mg	supplier	mold compound	Quartz	14808-60-7		3.323	mg	3000	2014
				supplier	mold compound	Carbon black	1333-86-4		3.323	mg	3000	2014
				supplier	mold compound	Carbon black	1333-86-4		3.323	mg	3000	2014
Connections coating	Solder	10.116	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		10.116	mg	1000000	6131