



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 *	2019-05-15
Company Unique ID	NL 008751171B01		
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Contact Phone *	Refer to Supplier Comment section	Contact Email *	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

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
SPC564B74L7B8E0X	E91T*FB74CAQ	A	1054	2019-05-15
	Amount	UoM	Unit type	ST ECOPACK Grade
	1922.00	mg	Each	ECOPACK2
	Comment	ECOPACK® 2 is STMicroelectronics trade name for ROHS compliant device without Brominated and Chlorinated compound (900ppm) and without Antimony oxide flame retardant (in each organic material)		

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-March 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

QueryList : ELV directive : 2000/53/EC amended 2017/2096 _November 2017	
Query	Response
1 - Product(s) meets EU ELV requirements without any exemptions	TRUE
2 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	FALSE
Exemption Id.	Description

QueryList : California Prop65 list, dated 23rd November 2018			
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	6665
Cobalt	0.002	Die	1

QueryList : REACH-15th January 2019				
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
2 - Product(s) does not contain REACH Substances Of Very High Concern in any Embedded article nor Homogeneous Material above the limits per the definition within REACH				TRUE
CategoryLevel_Name	CategoryLevel_Threshold	Amount in Embedded Article / Homogeneous Material (mg)	Application - Article / Homogeneous Material	ppm in Article /Homogeneous Material

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	E91T*F874CAQ					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	M-011 Other inorganic materials	39.738	mg	supplier	die	Silicon (Si)	7440-21-3		38.257	mg	962731	19905
				supplier	metallization	Aluminium (Al)	7429-90-5		0.071	mg	1787	37
				supplier	metallization	Copper (Cu)	7440-50-8		0.628	mg	15804	327
				supplier	metallization	Cobalt (Co)	7440-48-4		0.002	mg	50	1
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.203	mg	5108	106
				supplier	metallization	Titanium (Ti)	7440-32-6		0.007	mg	176	4
				supplier	metallization	Tungsten (W)	7440-33-7		0.005	mg	126	3
				supplier	Passivation	Silicon Nitride	12033-89-5		0.159	mg	4001	83
				supplier	Passivation	Silicon Oxide	7631-86-9		0.406	mg	10217	211
				Leadframe	M-004 Copper and its alloys	440.256	mg	supplier	alloy	Copper (Cu)	7440-50-8	
supplier	alloy	Nickel (Ni)	7440-02-0						12.810	mg	29097	6665
supplier	alloy	Magnesium (Mg)	7439-95-4						0.641	mg	1456	334
supplier	alloy	Silicon (Si)	7440-21-3						2.776	mg	6305	1444
supplier	tape	poly(4,4'-oxydiphenylene-pyromellitimide)	25036-53-7						9.338	mg	21210	4858
supplier	tape	bismaleimide	35325-39-4						0.095	mg	216	49
supplier	tape	Zinc hydroxide	20427-58-1						0.095	mg	216	49
supplier	metallization	Silver (Ag)	7440-22-4						3.728	mg	8468	1940
supplier	glue	Silver (Ag)	7440-22-4						7.415	mg	790006	3858
supplier	glue	Urethane acrylate oligomer	Proprietary						0.657	mg	69998	342
Die attach		9.386	mg	supplier	glue	Isobornyl Methacrylate	7534-94-3		0.657	mg	69998	342
				supplier	glue	Acrylate	Proprietary		0.657	mg	69998	342
				supplier	wire	Copper (Cu)	7440-50-8		0.700	mg	980392	364
				supplier	wire	Palladium (Pd)	7440-05-3		0.013	mg	18207	7
Bonding wires	M-004 Copper and its alloys	0.714	mg	supplier	wire	Silver (Ag)	7440-22-4		0.001	mg	1401	1
				supplier	mold compound	Silica, vitreous	60676-86-0		1228.427	mg	864000	639140
				supplier	mold compound	Epoxy Resin	25068-38-6		106.634	mg	75000	55481
				supplier	mold compound	Phenol Resin	29690-82-2		71.090	mg	50000	36988
				supplier	mold compound	3-Mercaptopropyl trimethoxysilane	4420-74-0		7.109	mg	5000	3699
Encapsulation	M-011 Other inorganic materials	1421.790	mg	supplier	mold compound	Quartz	14808-60-7		4.265	mg	3000	2219
				supplier	mold compound	Carbon black	1333-86-4		4.265	mg	3000	2219
				supplier	solder alloy	Tin (Sn)	7440-31-5		10.116	mg	1000000	5263
connections coating	Solder	10.116	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		10.116	mg	1000000	5263