



Materials Declaration Form

IPC	1752	Version	2
Form Type *	Distribute		
Sectionals *	Material Info	Subsectionals *	A-D
	Manufacturing Info		* : Required Field

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2021-01-09
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 *	Material Declaration champion	Representative Title	Material Declaration 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 omprehensive 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
STM32G491MCT6	709X*479XXXZ	A	998Z	2021-01-09
Amount		UoM	Unit type	ST ECOPACK Grade
521.24		mg	Each	ECOPACK® 2

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	
Not Applicable ; if coating is used or other bulk termination : add in comments	Tin (Sn), immersion	Copper Alloy		



Package Designator	Size	Nbr of instances	Shape	
QFP	12x12x1.4	80	L bend	
Comment	Package : 9X LQFP 80 12X12X1.4 - 1.0 7400088			

QueryList : RoHS directive 2011/65/EU- 8 June 2011 – Annex II amended by Delegated Directive 2015/863 - 31 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
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 - 19th January 2021				
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	709X*479XXXZ				5999998.0	999994.0
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die_ or dies	M-011 Other inorganic materials	11.086	mg	supplier	die	Silicon (Si)	7440-21-3		10.655	mg	961122	20442
				supplier	metallization	Aluminium (Al)	7429-90-5		0.021	mg	1894	40
				supplier	metallization	Copper (Cu)	7440-50-8		0.182	mg	16417	349
				supplier	metallization	Cobalt (Co)	7440-48-4		0.001	mg	90	2
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.059	mg	5322	113
				supplier	metallization	Titanium (Ti)	7440-32-6		0.002	mg	180	4
				supplier	metallization	Tungsten (W)	7440-33-7		0.002	mg	180	4
				supplier	Passivation	Silicon Nitride	12033-89-5		0.046	mg	4149	88
Glue epoxy_3230_henkel	M-011 Other inorganic materials	1.509	mg	Supplier	Metals	Silver	7440-22-4		0.118	mg	10644	226
				Supplier	Plastics/polymers	2,2'-(Methylenebis(phenyleneoxymethylene))	39817-09-9		1.230	mg	815000	2359
				Supplier	Organic Compounds	Dihydro-3-(tetrapropenyl)furan-2,5-dione	26544-38-7		0.045	mg	30000	87
				Supplier	Organic Compounds	Epoxy resin	Proprietary		0.045	mg	30000	87
				Supplier	Organic Compounds	Dodecyloxirane	3234-28-4		0.045	mg	30000	87
				Supplier	Organic Compounds	Hexahydromethylphthalic anhydride	25550-51-0		0.045	mg	30000	87
				Supplier	Organic Compounds	Epoxy resin modifier	Proprietary		0.045	mg	30000	87
				Supplier	Metallic compounds	Copper oxide	1317-38-0		0.008	mg	5000	14
Encapsulation_eme-g631shq_sumitomo	M-011 Other inorganic materials	356.153	mg	Supplier	Plastics/polymers	Epoxy Resin A	Trade Secret		7.479	mg	21000	14349
				Supplier	Plastics/polymers	Epoxy Resin B	Trade Secret		7.479	mg	21000	14349
				Supplier	Plastics/polymers	Phenol Resin	Trade Secret		19.945	mg	56000	38264
				Supplier	Glass	Silica(Amorphous)A	60676-86-0		277.960	mg	780450	533264
				Supplier	Glass	Silica(Amorphous)B	7631-86-9		41.072	mg	115320	78796
				Supplier	Non-metals	Carbon Black	1333-86-4		2.219	mg	6230	4257
Wire_Auha3_Heraeus	Bonding Wire	1.104	mg	Supplier	Metals	Gold	7440-57-5		1.104	mg	1000000	2118
Plating Anode_Pure Tin_Asahi	M-011 Other inorganic materials	1.797	mg	Supplier	Metals	Tin	7440-31-5		1.797	mg	1000000	3448
Leadframe_C194+Ag_Mitsui	Copper & its alloys	149.590	mg	Supplier	Metals	Copper	7440-50-8		145.431	mg	972200	279009
				Supplier	Metals	Iron	7439-89-6		3.426	mg	22900	6572
				Supplier	Metals	Zinc	7440-66-6		0.224	mg	1500	430
				Supplier	Non-Metals	Phosphorus	7723-14-0		0.045	mg	300	86
				Supplier	Metals	Silver	7440-22-4		0.464	mg	3100	890