



Materials Declaration Form


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

** : Required Field*

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2019-11-01
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 *	MDG MD CHAMPION	Representative Title	MDG 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	<p>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.</p>

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STM8S105K6T3C STM8S105K6T3CTR	S45V*766XXX	A	998Z	2019-11-01
	Amount	UoM	Unit type	ST ECOPACK Grade
	182.88	mg	Each	ECOPACK® 2
	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	
Not Applicable; if coating is used or other bulk termination	Tin (Sn), immersion	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFP	7X7X1.4	32	L Bend	
Comment	Package : 5V LQFP 32 7x7x1.4 1 0060661			

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

QueryList : REACH-27th June 2018				
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	S45V*766XXX				6000000.0	999997.2
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	3.575	mg	supplier	die	Silicon (Si)	7440-21-3		3.435	mg	960839	18783
				supplier	metallization	Aluminium (Al)	7429-90-5		0.007	mg	1958	38
				supplier	metallization	Copper (Cu)	7440-50-8		0.059	mg	16503	323
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.019	mg	5315	104
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	280	5
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	280	5
				supplier	Passivation	Silicon Nitride	12033-89-5		0.015	mg	4196	82
				supplier	Passivation	Silicon Oxide	7631-86-9		0.038	mg	10629	208
				Supplier	Metals	Silver	7440-22-4		0.388	mg	901000	2120
				Supplier	Organic Compounds	Highly cross-linked polymer	Proprietary		0.043	mg	99000	233
EMC_G631SHQ_Sumitomo	M-011 Other inorganic materials	121.383	mg	Supplier	Organic Compounds	Epoxy Resin A	Proprietary		2.549	mg	21000	13938
				Supplier	Organic Compounds	Epoxy Resin B	Proprietary		2.549	mg	21000	13938
				Supplier	Organic Compounds	Phenol Resin	Proprietary		6.797	mg	56000	37169
				Supplier	Glass	Silica(Amorphous)A	60676-86-0		94.734	mg	780450	518004
				Supplier	Glass	Silica(Amorphous)B	7631-86-9		13.998	mg	115320	76541
BondingWire_Ag_Sl_MKE	Bonding Wire	0.342	mg	Supplier	Additives	Carbon Black	1333-86-4		0.756	mg	6230	4135
				Supplier	Metals	Silver	7440-22-4		0.329	mg	960000	1797
				Supplier	Metals	Others	Proprietary		0.014	mg	40000	75
Anode Ball_Tin_Asahi	Metals	1.144	mg	Supplier	Metals	Tin	7440-31-5		1.144	mg	1000000	6254
Leadframe_C7+Ag_HDS	Metals	56.007	mg	Supplier	Metals	Nickel	7440-02-0		1.645	mg	29365	8993
				Supplier	Glass	Silicon	7440-21-3		0.364	mg	6500	1991
				Supplier	Metals	Magnesium	7439-95-4		0.088	mg	1565	479
				Supplier	Metals	Silver	7440-22-4		3.528	mg	63000	19294
				Supplier	Metals	Copper	7440-50-8		50.382	mg	899570	275490