




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 *	2018-05-11
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
STM8S903K3T3C	945V*767XXXY	A	959	2018-05-11
	Amount	UoM	Unit type	ST ECOPACK Grade
	180.00	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
2	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	Nickel/Palladium/Gold (Ni/Pd/Au)	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 :						Mfr Item Name	945V*767XXXY				7000002.0	999992.0
note : Substance present with less 0.001mg will not be declared in this document												
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	2.656	mg	supplier	die	Silicon (Si)	7440-21-3		2.574	mg	969127	14300
				supplier	metallization	Aluminium (Al)	7429-90-5		0.007	mg	2636	39
				supplier	metallization	Copper (Cu)	7440-50-8		0.024	mg	9036	133
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.003	mg	1130	17
				supplier	metallization	Titanium (Ti)	7440-32-6		0.004	mg	1506	22
				supplier	Passivation	Silicon Nitride	12033-89-5		0.006	mg	2259	33
				supplier	Passivation	Silicon Oxide	7631-86-9		0.038	mg	14307	211
Lead-frame	M-011 Other inorganic materials	69.913	mg	supplier	alloy	Copper (Cu)	7440-50-8		67.256	mg	962000	373644
				supplier	alloy	Iron (Fe)	7439-89-6		2.097	mg	30000	11652
				supplier	alloy	Zinc (Zn)	7440-66-6		0.454	mg	6500	2525
				supplier	alloy	Iron Phosphide (Fe2P)	1310-43-6		0.105	mg	1500	583
				supplier	coating	Nickel (Ni)	7440-02-0		0.369	mg	914840	2048
Lead-frame Coating	M-011 Other inorganic materials	0.403	mg	supplier	coating	Palladium (Pd)	7440-05-3		0.012	mg	29660	66
				supplier	coating	Gold (Au)	7440-57-5		0.011	mg	27750	62
				supplier	coating	Silver (Ag)	7440-22-4		0.011	mg	27750	62
Die Attach	M-011 Other inorganic materials	1.044	mg	supplier	glue or soft solder	Silver (Ag)	7440-22-4		0.804	mg	770000	4468
				supplier	glue or soft solder	Epoxy Cresol Novolak	29690-82-2		0.236	mg	226000	1311
				supplier	glue or soft solder	1-isopropyl-2,2-dimethyltrimethylene diisobut	6846-50-0		0.004	mg	4000	23
Wires	M-011 Other inorganic materials	0.645	mg	supplier	Bonding wire	Gold (Au)	7440-57-5		0.645	mg	1000000	3581
Encapsulation	M-011 Other inorganic materials	105.336	mg	supplier	Moulding Compound	Solid Epoxy Resin	Proprietary		7.253	mg	68860	40297
				supplier	Moulding Compound	Phenol Resin	Proprietary		5.181	mg	49186	28783
				supplier	Moulding Compound	Silica, vitreous	60676-86-0		92.228	mg	875560	512377
				supplier	Moulding Compound	Carbon-black	1333-86-4		0.518	mg	4919	2878
				supplier	Bismuth/Bismuth Compounds	Bismuth	7440-69-9		0.155	mg	1476	864
Finishing	M-011 Other inorganic materials	0.003	mg	supplier	connections coating	Nickel (Ni)	7440-02-0		0.002	mg	914840	13
				supplier	connections coating	Palladium (Pd)	7440-05-3		0.000	mg	29660	0
				supplier	connections coating	Gold (Au)	7440-57-5		0.000	mg	27750	0
				supplier	connections coating	Silver (Ag)	7440-22-4		0.000	mg	27750	0