



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 *	2016-11-03
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Patrick Crudo	Representative Title	MMS MD CHAMPION
Representative Phone *	(+33) 442 688 339	Representative Email *	patrick.crudo@st.com
Supplier Comment	Online Technical Support - STMicroelectronics : http://www.st.com/web/en/support/support.html		

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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
STM8S103F3M6TR	U027*767XXXY	A	959	2016-11-03
	Amount	UoM	Unit type	ST ECOPACK Grade
	500.00	mg	Each	ECOPACK® 1
	Comment	ECOPACK® or ECOPACK® 1 is STMicroelectronics trade name for ROHS compliant devices		

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	
NAC	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SON	NAC	20	L bend	
Comment	SO 20 .30 JEDEC			

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-20th June 2016				
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	U027*767XXXY					
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	2.005	mg	supplier	die	Silicon (Si)	7440-21-3		1.923	mg	959102	3846
				supplier	metallization	Aluminium (Al)	7429-90-5		0.007	mg	3491	14
				supplier	metallization	Copper (Cu)	7440-50-8		0.024	mg	11970	48
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.003	mg	1496	6
				supplier	metallization	Titanium (Ti)	7440-32-6		0.004	mg	1995	8
				supplier	Passivation	Silicon Nitride	12033-89-5		0.006	mg	2993	12
				supplier	Passivation	Silicon Oxide	7631-86-9		0.038	mg	18953	76
Lead-frame	Other inorganic materials	144.686	mg	supplier	alloy	Copper (Cu)	7440-50-8		140.997	mg	974500	281994
				supplier	alloy	Iron (Fe)	7439-89-6		3.394	mg	23460	6789
				supplier	alloy	Zinc (Zn)	7440-66-6		0.174	mg	1200	347
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.122	mg	840	243
				supplier	coating	Nickel (Ni)	7440-02-0		0.718	mg	916800	1437
Lead-frame Coating	Other inorganic materials	0.784	mg	supplier	coating	Palladium (Pd)	7440-05-3		0.046	mg	58700	92
				supplier	coating	Gold (Au)	7440-57-5		0.019	mg	24500	38
Die Attach	Other inorganic materials	2.170	mg	supplier	glue or soft solder	Silver (Ag)	7440-22-4		1.671	mg	770000	3342
				supplier	glue or soft solder	Epoxy Cresol Novolak	29690-82-2		0.495	mg	228000	990
				supplier	glue or soft solder	1-isopropyl-2,2-dimethyltrimethylene diisobut	6846-50-0		0.004	mg	2000	9
Wires	Other inorganic materials	0.573	mg	supplier	Bonding wire	Gold (Au)	7440-57-5		0.573	mg	1000000	1147
Encapsulation	Other inorganic materials	349.777	mg	supplier	Moulding Compound	Silica, vitreous	60676-86-0		298.740	mg	854088	597480
				supplier	Moulding Compound	Epoxy Cresol Novolak	29690-82-2		27.220	mg	77820	54439
				supplier	Moulding Compound	Phenol resin	9003-35-4		13.610	mg	38910	27220
				supplier	Moulding Compound	Carbon Black	1333-86-4		1.021	mg	2918	2041
				supplier	Antimony/Antimony Compounds	Antimony trioxide	1309-64-4		4.083	mg	11673	8166
Finishing	Other inorganic materials	0.005	mg	supplier	Brominated Flame Retardants (other than	Other Brominated Flame Retardants	proprietary		5.104	mg	14591	10207
				supplier	connections coating	Nickel (Ni)	7440-02-0		0.004	mg	916800	8
				supplier	connections coating	Palladium (Pd)	7440-05-3		0.000	mg	58700	1
				supplier	connections coating	Gold (Au)	7440-57-5		0.000	mg	24500	0