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Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	13-12-2017
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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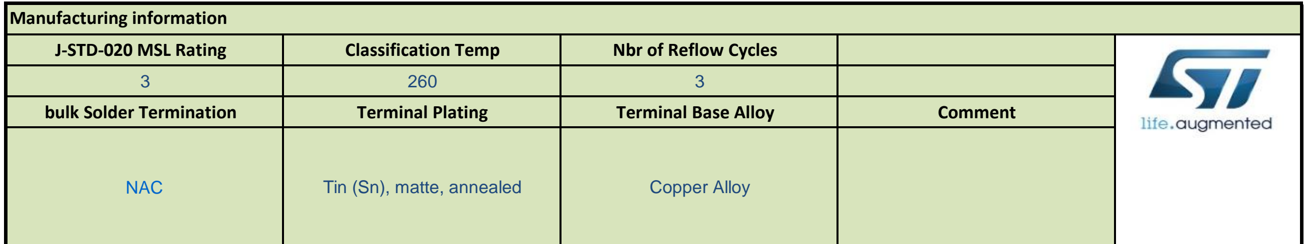
Legal Statement

Supplier Acceptance *	true	Legal Declaration *	Standard

Legal Statement

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**
ST7FLITE29F2M6TR	90Z7*837XXX3	A	959	13-12-2017
	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	Tin (Sn), matte, annealed	Copper Alloy		

Package Designator	**Size**	**Nbr of instances**	**Shape**	
SON	NAC	20	Gull Wing	
Comment	Package : Z7 SO 20 .30 TO JEDEC MS-013 0016022			

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-12th January 2017	
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	90Z7*837XXX3				5999998.0	999999.0
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	10.284	mg	supplier	die	Silicon (Si)	7440-21-3		10.010	mg	973357	20020
				supplier	metallization	Copper (Cu)	7440-50-8		0.224	mg	21781	448
				supplier	metallization	Titanium (Ti)	7440-32-6		0.009	mg	875	18
				supplier	Passivation	Silicon Nitride	12033-89-5		0.010	mg	972	20
				supplier	Passivation	Silicon Oxide	7631-86-9		0.031	mg	3014	62
Lead-frame	M-011 Other inorganic materials	151.921	mg	supplier	alloy	Copper (Cu)	7440-50-8		148.047	mg	974500	296094
				supplier	alloy	Iron (Fe)	7439-89-6		3.564	mg	23460	7128
				supplier	alloy	Zinc (Zn)	7440-66-6		0.182	mg	1200	365
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.128	mg	840	255
Die Attach	M-011 Other inorganic materials	2.170	mg	supplier	glue or soft solder	Silver (Ag)	7440-22-4		1.855	mg	855000	3711
				supplier	glue or soft solder	Dodecyl acrylate	2156-97-0		0.054	mg	25000	108
				supplier	glue or soft solder	methylene diacrylate	42594-17-2		0.174	mg	80000	347
				supplier	glue or soft solder	Diglycidylphenyl glycidyl ether	13561-08-5		0.043	mg	20000	87
				supplier	glue or soft solder	Isobornyl Methacrylate	7534-94-3		0.022	mg	10000	43
				supplier	glue or soft solder	dimethylbenzyl peroxide	80-43-3		0.022	mg	10000	43
Wires	M-011 Other inorganic materials	0.863	mg	supplier	Bonding wire	Gold (Au)	7440-57-5		0.863	mg	1000000	1726
Encapsulation	M-011 Other inorganic materials	332.149	mg	supplier	Moulding Compound	Silica, vitreous	60676-86-0		290.251	mg	873857	580502
				supplier	Moulding Compound	Epoxy resin	Proprietary		30.154	mg	90784	60308
				supplier	Antimony/Antimony Compounds	Phenol resin	Proprietary		10.067	mg	30307	20133
				supplier	Brominated Flame Retardants (other than I	Carbon black	1333-86-4		1.678	mg	5051	3356
Finishing	M-011 Other inorganic materials	2.613	mg	supplier	connections coating	Tin (Sn)	7440-31-5		2.613	mg	1000000	5225