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 *	2017-02-27
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Rossana Bonaccorso	Representative Title	ADG 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		

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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**
STD105N10F7AG	TXDP*OD0FQ52	A	3068	2017-02-27
	Amount	**UoM**	**Unit type**	**ST ECOPACK Grade**
	330.00	mg	Each	ECOPACK1

Manufacturing information				
J-STD-020 MSL Rating	**Classification Temp**	**Nbr of Reflow Cycles**		
1	260	3		
bulk Solder Termination	**Terminal Plating**	**Terminal Base Alloy**	**Comment**	
NA	Tin (Sn), matte	Copper Alloy		

Package Designator	**Size**	**Nbr of instances**	**Shape**	
SIP	6.5-6.1-2.3	3	GULL WING	
Comment	TO 252 DPAK			

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	FALSE
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)	**TRUE**
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions	FALSE

Exemption Id.	Description
7a	Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead)

Query : California Prop65 list, dated 27th January 2017			
Query			**Response**
1 - The product does not contain identified substance from California Prop 65 List, no exposure to consumers is foreseen			**FALSE**
2 - The product is containing below substance(s) from California Prop 65 List, no exposure to consumers is foreseen			**TRUE**
Substance	amount in product (mg)	Application	ppm in product
Nickel	0.13	die backside metal- leadframe metal	400
Lead	6.13	soft solder	18576
Antimony trioxide	1.82	mold compound	5515

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**	**TXDP*OD0FQ52**					
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	5.112	mg	supplier	die	Silicon (Si)	7440-21-3		4.882	mg	955008	14794
				supplier	metallization	Aluminium (Al)	7429-90-5		0.064	mg	12520	194
				supplier	metallization	Titanium (Ti)	7440-32-6		0.012	mg	2347	36
				supplier	Passivation	Silicon Nitride	12033-89-5		0.018	mg	3521	55
				supplier	Passivation	Silicon Oxide	7631-86-9		0.073	mg	14280	221
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.003	mg	586	9
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.040	mg	7825	121
				supplier	back side metallization	Vanadium (V)	7440-62-2		0.003	mg	587	9
				supplier	back side metallization	Silver (Ag)	7440-22-4		0.017	mg	3326	52
Leadframe	Copper & its alloys	165.042	mg	supplier	alloy	Copper (Cu)	7440-50-8		164.778	mg	998400	499327
				supplier	alloy	CopperPosphorous (CuP)	12517-41-8		0.165	mg	1000	500
				supplier	metallization	Nickel (Ni)	7440-02-0		0.092	mg	557	279
				supplier	metallization	Phosphorus (P)	12185-10-3		0.007	mg	43	21
Soft solder	Solder	6.419	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	6.130	mg	954977	18576
				supplier	solder	Silver (Ag)	7440-22-4		0.161	mg	25082	488
				supplier	solder	Tin (Sn)	7440-31-5		0.128	mg	19941	389
Bonding wires	Other inorganic materials	1.009	mg	supplier	wire	Aluminium (Al)	7429-90-5		1.005	mg	996036	3045
				supplier	wire	Magnesium (Mg)	7439-95-4		0.004	mg	3964	12
Encapsulation	Other Organic Materials	151.373	mg	supplier	mold compound	Silica, vitreous	60676-86-0		122.006	mg	805996	369715
				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		10.596	mg	69999	32109
				supplier	mold compound	Phenol resin	9003-35-4		6.055	mg	40001	18348
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		9.082	mg	59997	27521
				supplier	mold compound	Antimony Trioxide	1309-64-4		1.817	mg	12003	5506
				supplier	mold compound	Brominated Epoxy Resin	40039-93-8		1.060	mg	7003	3212
				supplier	mold compound	Carbon black	1333-86-4		0.757	mg	5001	2294
Connections coating	Solder	1.045	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.045	mg	1000000	3167