



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 *	2017-10-25
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		

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 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.

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
TYN612MFP	7GUI*P1G126T	A	3068	2017-10-25
	Amount	UoM	Unit type	ST ECOPACK Grade
	1900.00	mg	Each	ECOPACK2

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



Package Designator	Size	Nbr of instances	Shape	
SIP	10.2-16.15-4.5	3	Through-hole	
Comment	TO 220 ISOL FULL PACK 0.5 AB			

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)
7c-I	Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound

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	0.70	Die/Leadframe	368
Lead	3.53	Soft Solder	1859
Lead-Borate Glass	0.58	Die glass coating	307

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	7GUI*P1G126T					
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	3.635	mg	supplier	die	Silicon (Si)	7440-21-3		2.866	mg	788446	1508
				supplier	metallization	Aluminium (Al)	7429-90-5		0.100	mg	27510	53
				supplier	metallization	Gold (Au)	7440-57-5		0.011	mg	3026	6
				supplier	Passivation	Silicon Oxide	7631-86-9		0.026	mg	7153	14
				supplier	back side metallization	Aluminium (Al)	7429-90-5		0.016	mg	4402	8
				supplier	back side metallization	Gold (Au)	7440-57-5		0.006	mg	1650	3
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.026	mg	7153	14
Leadframe	Copper & its alloys	605.985	mg	JIG - R	glass coating	Lead-Borate Glass	65997-18-4	7c-I-Electrical and e	0.584	mg	160660	307
				supplier	alloy	Copper (Cu)	7440-50-8		604.469	mg	997498	318142
				supplier	alloy	Iron (Fe)	7439-89-6		0.605	mg	998	318
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.182	mg	300	96
				supplier	metallization	Nickel (Ni)	7440-02-0		0.674	mg	1112	355
Soft solder	Solder	3.700	mg	supplier	metallization	Phosphorus (P)	12185-10-3		0.055	mg	92	29
				JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	3.533	mg	954865	1859
				supplier	solder	Silver (Ag)	7440-22-4		0.093	mg	25135	49
Bonding wires	Other inorganic materials	2.941	mg	supplier	solder	Tin (Sn)	7440-31-5		0.074	mg	20000	39
				supplier	wire	Aluminium (Al)	7429-90-5		2.941	mg	1000000	1548
Encapsulation	Other Organic Materials	1277.873	mg	supplier	mold compound	Quartz	14808-60-7		894.511	mg	700000	470795
				supplier	mold compound	Silica, vitreous	60676-86-0		95.841	mg	75000	50443
				supplier	mold compound	Epoxy resin	25068-38-6		178.902	mg	140000	94159
				supplier	mold compound	phenol resin	29690-82-2		89.451	mg	70000	47079
				supplier	mold compound	metal hydroxide	21645-51-2		12.779	mg	10000	6726
Connections coating	Solder	5.866	mg	supplier	mold compound	carbon black	1333-86-4		6.389	mg	5000	3363
				supplier	solder alloy	Tin (Sn)	7440-31-5		5.866	mg	1000000	3087