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 ***	2017-03-29
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Giovanni Giacopello	**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 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.

Signature Not
Verified

Digitally signed by
giovanni giacopello
Date: 2017.03.29
15:20:59 +02:00

Product

Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STPS120M	HNRO*Z71S83Q	A	ZA41	2017-03-29
	Amount	**UoM**	**Unit type**	**ST ECOPACK Grade**
	15.50	mg	Each	ECOPACK® 2

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**
NAC	Tin (Sn), matte	Copper Alloy	

Package Designator	Size	Nbr of instances	Shape	
DSO	1.9 - 1.9 - 1	2	gull wing	
Comment	Package: DO-216AA			

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
5 - Product(s) is obsolete, no information is available	false
6 - Product(s) is unknown, no information is available	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	0.01	die backside metal-leadframe metal	645
Lead	0.73	soft solder	47161

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						**Mfr Item Name**	**HNRO*Z71S83Q**					
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	0.852	mg	supplier	die	Silicon (Si)	7440-21-3		0.805	mg	944836	51935
				supplier	metallization	Aluminium (Al)	7429-90-5		0.006	mg	7042	387
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	1174	65
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	1174	65
				supplier	metallization	Nickel (Ni)	7440-02-0		0.004	mg	4695	258
				supplier	metallization	Gold (Au)	7440-57-5		0.004	mg	4695	258
				supplier	Passivation	Silicon Oxide	7631-86-9		0.006	mg	7042	387
				supplier	back side metallization	Gold (Au)	7440-57-5		0.001	mg	1174	65
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.006	mg	7042	387
				supplier	polymer die coating	Durimide	proprietary		0.018	mg	21126	1161
Leadframe	Copper & its alloys	6.108	mg	supplier	alloy	Copper (Cu)	7440-50-8		6.105	mg	999509	393871
				supplier	alloy	Iron (Fe)	7439-89-6		0.001	mg	164	65
				supplier	alloy	Phosphorus (P)	12185-10-3		0.002	mg	327	128
Soft solder	Solder	0.790	mg	JIG - R	solder	Lead (Pb)	7439-92-1		0.731	mg	925316	47161
				supplier	Soft solder	Silver (Ag)	7440-22-4	7a-Lead in high mel	0.020	mg	25317	1290
				supplier	Soft solder	Tin (Sn)	7440-31-5		0.039	mg	49367	2516
Clip	Other inorganic materials	1.006	mg	supplier	clip	Copper (Cu)	7440-50-8		1.006	mg	1000000	64903
Encapsulation	Other inorganic materials	6.586	mg	supplier	mold compound	Silica , amorphous,fused	60678-86-0		5.460	mg	829031	352258
				supplier	mold compound	Epoxy resin propietare,resin unknown	29690-82-2		0.889	mg	134983	57355
				supplier	mold compound	Benzophenone teracarboxylic anhydride	2421-28-2		0.036	mg	5466	2323
				supplier	mold compound	Silica, quartz	14808-60-7		0.165	mg	25054	10645
				supplier	mold compound	Carbon black	1333-86-4		0.036	mg	5466	2323
Connections coating	Solder	0.158	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.158	mg	1000000	10194