



Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2017-05-30
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Giuseppe Vitali Palma	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

While STMicroelectronics has endeavored to provide information which is accurate and up to date, this document and its contents are provided on a strict 'as is' and 'as available' basis. STMicroelectronics disclaims all warranties, express or implied related to this document and its contents, including but not limited to implied warranties of completeness, truth, accuracy, merchantability, fitness for a particular purpose and non-infringement. ST shall have no responsibility and assumes no liability for any cost, loss or damage of any kind which could arise, directly or indirectly, from the use or inability to use this document and/or its contents.

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
STD15N65M5	XNDP*M5F2B5F	A	998G	2017-05-30
Amount	UoM	Unit type	ST ECOPACK Grade	
330.00	mg	Each	ECOPACK2	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles	 life.augmented	
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	1.14	Die back side metal - Leadframe metal	3464
Lead	4.70	Soft solder	14255
Cobalt	0.46	Leadframe	1394

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	XNDP*MSF285F					
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 (choose)	Other inorganic materials	5.490	mg	supplier	die	Silicon (Si)	7440-21-3		5.262	mg	958470	15945
				supplier	metallization	Aluminium (Al)	7429-90-5		0.098	mg	17851	297
				supplier	metallization	Copper (Cu)	7440-50-8		0.036	mg	6558	109
				supplier	metallization	Silver (Ag)	7440-22-4		0.013	mg	2368	39
				supplier	metallization	Titanium (Ti)	7440-32-6		0.004	mg	729	12
				supplier	Passivation	Silicon Nitride	12033-89-5		0.023	mg	4189	70
				supplier	Passivation	Silicon Oxide	7631-86-9		0.002	mg	364	6
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.003	mg	546	9
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.036	mg	6557	109
				supplier	back side metallization	Silver (Ag)	7440-22-4		0.013	mg	2368	39
Leadframe	Copper & its alloys	166.051	mg	supplier	alloy	Copper (Cu)	7440-50-8		164.152	mg	988564	497430
				supplier	alloy	CopperPhosphorus (CuP)	12517-41-8		0.330	mg	1987	1000
				supplier	alloy	Cobalt (Co)	7440-48-4		0.462	mg	2782	1400
				supplier	metallization	Nickel (Ni)	7440-02-0		1.107	mg	6667	3355
Soft solder	Solder	5.032	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high met	4.704	mg	934817	14255
				supplier	solder	Tin (Sn)	7440-31-5		0.252	mg	50080	764
				supplier	solder	Silver (Ag)	7440-22-4		0.076	mg	15103	230
Bonding wires	Other inorganic materials	0.923	mg	supplier	wire	Aluminium (Al)	7429-90-5		0.923	mg	1000000	2797
Encapsulation	Other Organic Materials	151.459	mg	supplier	mold compound	Silica, vitreous	60676-86-0		132.527	mg	875002	401597
				supplier	mold compound	Tetramethyl-biphenyl-diyl-bis oxymethylene-bi	EC 413-900-7		6.058	mg	39998	18358
				supplier	mold compound	Epoxy Resin	25068-38-6		4.544	mg	30002	13770
				supplier	mold compound	phenol resin	29690-82-2		7.573	mg	50000	22948
				supplier	mold compound	Carbon black	1333-86-4		0.757	mg	4998	2294
Connections coating	Solder	1.045	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.045	mg	1000000	3167