



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 *	2017-02-24
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Giovanni Giacobello	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
STS5N15F4	C107*UMAFB6F	A	998G	2017-02-24
Amount	UoM	Unit type	ST ECOPACK Grade	
80.00	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	
D50	4.9-6-1.75	8	GULL WING	
Comment	SO 08 .15 JEDEC			

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

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	0.05	Die	563

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	C107*UMAFB6F		80.0000							
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	4.962	mg	supplier	die	Silicon (Si)	7440-21-3		4.688	mg	944780	58600				
				supplier	metallization	Aluminium (Al)	7429-90-5		0.028	mg	5643	350				
				supplier	metallization	Titanium (Ti)	7440-32-6		0.008	mg	1612	100				
				supplier	Passivation	Silicon Nitride	12033-89-5		0.014	mg	2821	175				
				supplier	Passivation	Silicon Oxide	7631-86-9		0.160	mg	32245	2000				
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.003	mg	605	38				
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.045	mg	9069	563				
				supplier	back side metallization	Silver (Ag)	7440-22-4		0.016	mg	3225	200				
				Leadframe	Copper & its alloys	29.748	mg	supplier	alloy	Copper (Cu)	7440-50-8		29.718	mg	998992	371475
								supplier	alloy	CopperPhosphorous (CuP)	12517-41-8		0.030	mg	1008	375
Die attach	Other Organic Materials	0.481	mg	supplier	glue	Silver (Ag)	63428-83-1		0.195	mg	405405	2438				
				supplier	glue	Isobornyl Methacrylate	7534-94-3		0.195	mg	405405	2438				
				supplier	glue	Bismaleimide resin	Proprietary		0.080	mg	166320	1000				
				supplier	glue	polymer	Proprietary		0.011	mg	22870	138				
Bonding wires	Other inorganic materials	0.171	mg	supplier	wire	Copper (Cu)	7440-50-8		0.171	mg	1000000	2138				
Encapsulation	Other Organic Materials	44.638	mg	supplier	mold compound	Silica, vitreous	60676-86-0		38.656	mg	865989	483200				
				supplier	mold compound	Epoxy Resin	25068-38-6		3.348	mg	75003	41850				
				supplier	mold compound	Phenol Resin	29690-82-2		2.232	mg	50002	27900				
				supplier	mold compound	Bismuth (Bi)	7440-69-9		0.179	mg	4010	2238				
				supplier	mold compound	Carbon black	1333-86-4		0.223	mg	4996	2788				