



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 *	2016-06-09
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	<p>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.</p>		

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
PD84001	TF39*H4100Y4	A	Z8GA	2016-06-09
Amount		UoM	Unit type	ST ECOPACK Grade
59.00		mg	Each	ECOPACK® 2

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles	 life.augmented	
3	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy		
NAC	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape
SOT	4.5X2.45X1.5	4	gull wing
Comment	Package: SOT 89		

QueryList : ROHS directive 2011/65/EU _ July 2011	
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)

QueryList : REACH-17th December 2015				
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	TF39*H4100Y4					
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	0.868	mg	supplier	die	Silicon (Si)	7440-21-3		0.736	mg	847926	12475
				supplier	metallization	Aluminium (Al)	7429-90-5		0.108	mg	124424	1831
				supplier	Passivation	Silicon Nitride	12033-89-5		0.006	mg	6912	102
				supplier	Passivation	Silicon Oxide	7631-86-9		0.009	mg	10369	153
				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.001	mg	1153	17
				supplier	back side metallization	Gold (Au)	7440-57-5		0.002	mg	2304	34
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.006	mg	6912	102
Leadframe	Copper and its alloy	31.810	mg	supplier	Alloy	Copper(CU)	7440-50-8		31.578	mg	992707	535220
				supplier	Alloy	Iron(Fe)	7439-89-6		0.032	mg	1006	542
				supplier	Alloy	Phosphorus(P)	7723-14-0		0.010	mg	314	169
				supplier	metallization	Silver(Ag)	7440-22-4		0.190	mg	5973	3220
Soft Solder	Other organic materials	0.200	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	0.191	mg	955000	3237
				supplier	solder	Silver(Ag)	7440-22-4		0.005	mg	25000	85
				supplier	solder	Tin(Sn)	7440-31-5		0.004	mg	20000	66
Bonding wire	Precious metals	0.048		supplier	Bonding wire	Gold(Au)	7440-57-5		0.048	mg	1000000	814
				supplier	Molding compound	Silica Fused	60676-86-0		21.968	mg	882001	372339
Encapsulation	Other organic materials	24.907	mg	supplier	Molding compound	Epoxy,Cresol Novolac	29690-82-2		0.374	mg	15016	6339
				supplier	Molding compound	Phenol Resin	proprietary		1.245	mg	49986	21102
				supplier	Molding compound	Epoxy Resin	25068-38-6		1.245	mg	49986	21102
				supplier	Molding compound	Carbon Black	1333-86-4		0.075	mg	3011	1271
Finishing	Other inorganic materials	1.167	mg	supplier	Connections coating	Tin(Sn)	7440-31-5		1.167	mg	1000000	19780