



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 *	2016-06-29
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Floriana San Biagio	Representative Title	AMG 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
	EU6S*UF64JC4	A	Z8GA	2016-06-29
Amount	UoM	Unit type	ST ECOPACK Grade	
54.50	mg	Each	ECOPACK® 3	
	Comment	ECOPACK® 3 is STMicroelectronics trade name for ROHS compliant device without use of any ROHS exemption and without Halogen nor Antimony		

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, annealed	Copper Alloy		



Package Designator	Size	Nbr of instances	Shape	
DSO	5.0X4.4X0.9	16	gull wing	
Comment	Package: 6S TSSOP 16 BODY 4.4 PITCH 0.65; MDF valid for ST3232EBTR			

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

QueryList : REACH-20th June 2016				
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	EU65*UF64JC4					
note : Substance present with less 0.001mg will not be declared in this document												
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	4.037	mg	supplier	die	Silicon (Si)	7440-21-3		3.894	mg	964578	71450
				supplier	metallization	Aluminium (Al)	7429-90-5		0.032	mg	7927	587
				supplier	metallization	Copper (Cu)	7440-50-8		0.001	mg	248	18
				supplier	Passivation	Silicon Nitride	12033-89-5		0.012	mg	2973	220
				supplier	Passivation	Silicon Oxide	7631-86-9		0.055	mg	13624	1009
				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.043	mg	10651	789
Leadframe	Copper & its alloys	18.722	mg	supplier	alloy	Copper (Cu)	7440-50-8		17.680	mg	944344	324404
				supplier	alloy	Nickel (Ni)	7440-02-0		0.590	mg	31514	10826
				supplier	alloy	Magnesium (Mg)	7439-95-4		0.030	mg	1602	550
				supplier	alloy	Silicon (Si)	7440-21-3		0.130	mg	6944	2385
				supplier	metallization	Silver (Ag)	7440-22-4		0.292	mg	15597	5358
Die attach	Other Organic Materials	0.489	mg	supplier	glue	Silver(Ag)	7440-22-4		0.381	mg	779141	6991
				supplier	glue	Acrylate resins	Proprietary		0.088	mg	179959	1615
				supplier	glue	Heterocyclic organic compound	Proprietary		0.010	mg	20450	183
				supplier	glue	Treated silica	Proprietary		0.010	mg	20450	183
Bonding wires	Precious metals	0.206	mg	supplier	wire	Gold (Au)	7440-57-5		0.206	mg	1000000	3780
Encapsulation	Other Organic Materials	29.041	mg	supplier	mold compound	Silica	60676-86-0		26.270	mg	904583	482018
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		0.920	mg	31679	16881
				supplier	mold compound	Epoxy resin	Proprietary		0.555	mg	19111	10183
				supplier	mold compound	Phenol Resin	Proprietary		1.234	mg	42492	22642
				supplier	mold compound	Carbon Black	1333-86-4		0.062	mg	2135	1138
connections coating	Solder	2.005	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		2.005	mg	1000000	36789