



## Materials Declaration Form

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

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2015-07-31
<b>Contact Name *</b>	Refer to "Supplier Comment" section	<b>Contact Title</b>	Refer to "Supplier Comment" section
<b>Contact Phone *</b>	Refer to "Supplier Comment" section	<b>Contact Email *</b>	Refer to "Supplier Comment" section
<b>Authorized Representative *</b>	Giovanni Giacobello	<b>Representative Title</b>	IPD Materials Declaration Champion
<b>Representative Phone *</b>	Refer to "Supplier Comment" section	<b>Representative Email *</b>	Refer to "Supplier Comment" section
<b>Supplier Comment</b>	Online Technical Support - STMicroelectronics : <a href="http://www.st.com/web/en/support/online_tech_support.html">http://www.st.com/web/en/support/online_tech_support.html</a>		

**Uncertainty Statement**


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Legal Statement			
<b>Supplier Acceptance *</b>	true	<b>Legal Declaration *</b>	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
	TSIK*MQ6QB6F	A	Z8GA	2015-07-31
Amount	UoM	Unit type	ST ECOPACK Grade	
310.00	mg	Each	ECOPACK® 2	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
NAC	NAC	NAC		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable ; if coating is used	Tin (Sn), matte, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DIP	6.1 - 6.5 - 2.3	3	Through-hole	
Comment	Package: IPAK TO-251; MDF valid for STU5N60M2			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
Product(s) meets EU RoHS requirement without any exemptions	false
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
Product(s) meets EU RoHS requirements by application of the selected exemption(s)	true
Product(s) does not meet EU RoHS requirements and is not under exemptions	false
Product(s) is obsolete, no information is available	false
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-15th June 2015				
Query				Response
The product 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		TSIK*MQ6Q86F					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)	
die (s)	Other inorganic materials	2.842	mg	supplier	die	Silicon (Si)	7440-21-3		2.729	mg	960239	8803	
die (s)				supplier	metallization	Aluminum (Al)	7429-90-5		0.054	mg	19001	174	
die (s)				supplier	Passivation	Silicon Nitride	12033-89-5		0.013	mg	4574	42	
die (s)				supplier	Passivation	Silicon Oxide	7631-86-9		0.019	mg	6685	61	
die (s)				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.001	mg	352	3	
die (s)				supplier	back side metallization	Silver(Ag)	7440-22-4		0.019	mg	6685	61	
die (s)				supplier	back side metallization	Silver (Ag)	7440-22-4		0.007	mg	2463	23	
Lead-frame	Other inorganic materials	149.067	mg	Supplier	Alloy	Copper (Cu)	7440-50-8		148.757	mg	997920	479861	
Lead-frame				Supplier	Alloy	Iron (Fe)	7439-89-6		0.149	mg	1000	481	
Lead-frame				Supplier	Alloy	Phosphorus (P)	12185-10-3		0.045	mg	302	145	
Lead-frame				Supplier	Alloy	Nickel (Ni)	7440-02-0		0.116	mg	778	374	
Soft solder	Solder	1.476	mg	supplier	solder	Tin(Sn)	7440-31-5		0.003	mg	2033	10	
Soft solder				supplier	solder	Silver(Ag)	7440-22-4		0.038	mg	25745	123	
Soft solder				supplier	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	1.435	mg	972222	4629	
Bonding wire	Other inorganic materials	0.967	mg	supplier	Bonding wire	Aluminum (Al)	7429-90-5		0.967	mg	1000000	3119	
encapsulation	Other inorganic materials	150.38	mg	supplier	Molding compound	Silica Fused	60676-86-0		120.305	mg	800007	388081	
encapsulation				supplier	Molding compound	Epoxy Resin	Proprietary		15.038	mg	100000	48510	
encapsulation				supplier	Molding compound	Phenol Resin	Proprietary		9.774	mg	64995	31529	
encapsulation				supplier	Molding compound	Carbon Black	14808-60-7		5.263	mg	34998	16977	
connections coating	Solder	5.268	mg	supplier	solder alloy	Tin(Sn)	7440-31-5		5.268	mg	1000000	16994	