



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 *	2017-01-12
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
SMM4F12A-TR	806U*TFU014C	A	ZA41	2017-01-12
Amount	UoM	Unit type	ST ECOPACK Grade	
16.00	mg	Each	ECOPACK® 2	

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	
NAC	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SOF	4.85X3.9X1.52	2	flat	
Comment	Package: DO-216AA-Flat			

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
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-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	806U*TFU014C						
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	1.025	mg	supplier	die	Silicon (Si)	7440-21-3		0.874	mg	852683	54625	
				supplier	metallization	Aluminium (Al)	7429-90-5		0.117	mg	114146	7313	
				supplier	Passivation	Silicon Oxide	7631-86-9		0.010	mg	9756	625	
				supplier	back side metallization	Aluminium (Al)	7429-90-5		0.004	mg	3902	250	
				supplier	back side metallization	Gold (Au)	7440-57-5		0.001	mg	976	63	
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.007	mg	6829	438	
Leadframe & Clip	Copper and its alloy	6.134	mg	supplier	polymer die coating	Prohimide	proprietary		0.012	mg	11707	750	
				supplier	alloy	Copper (Cu)	7440-50-8		6.125	mg	998533	382813	
				supplier	alloy	Iron (Fe)	7439-89-6		0.006	mg	978	370	
				supplier	alloy	Phosphorus (P)	12185-10-3		0.003	mg	489	188	
Soft solder	Other organic material	0.803	mg	supplier	solder	Silver (Ag)	7440-22-4		0.020	mg	24907	1250	
				supplier	solder	Tin (Sn)	7440-31-5		0.041	mg	51059	2563	
				JIG-R	solder	Lead (Pb)	7439-92-1	7a-Lead in high met	0.742	mg	924035	46375	
Encapsulation	Other organic material	7.900	mg	Supplier	Molding Compound	Silica , amorphous,fused	60676-86-0		6.320	mg	800000	395000	
				Supplier	Molding Compound	Epoxy resin propietare,resin unknown	29690-82-2		1.027	mg	130000	64188	
				Supplier	Molding Compound	Benzophenone teracarboxylic anhydride	2421-28-5		0.079	mg	10000	4938	
				Supplier	Molding Compound	Silica, quartz	14808-60-7		0.395	mg	50000	24688	
				Supplier	Molding Compound	Carbon black	1333-86-4		0.079	mg	10000	4938	
Finishing	Other inorganic material	0.138	mg	Supplier	connection coating	Tin (Sn)	7440-31-5		0.138	mg	1000000	8625	