



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 *	2016-08-11
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Giovanni Giacopello	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	<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
STTH1506TPI	H8UZ*E20A014	A	Z45A	2016-08-11
	Amount	UoM	Unit type	ST ECOPACK Grade
	4480.00	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	
SIP	15.30 - 12.8 - 4.5	3	Through-hole	
Comment	Package: TOP3 ISOL			

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-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	H8U2*E20A014					
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	10.487	mg	supplier	die	Silicon (Si)	7440-21-3		10.149	mg	967770	2265
				supplier	metallization	Aluminium (Al)	7429-90-5		0.176	mg	16783	39
				supplier	Passivation	Silicon Oxide	7631-86-9		0.101	mg	9631	23
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.003	mg	470	1
				supplier	back side metallization	Gold (Au)	7440-57-5		0.010	mg	954	2
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.048	mg	4577	11
Leadframe	Copper & its alloys	705.293	mg	supplier	frame alloy	Copper (Cu)	7440-50-8		704.377	mg	998701	157227
				supplier	frame alloy	Iron(Fe)	7439-89-6		0.705	mg	1000	157
				supplier	frame coating	Phosphorus (P)	12185-10-3		0.211	mg	299	47
Heatsink	Copper & its alloys	2493.219	mg	supplier	frame alloy	Copper (Cu)	7440-50-8		2489.976	mg	998699	555798
				supplier	frame alloy	Iron(Fe)	7439-89-6		2.494	mg	1000	557
				supplier	frame coating	Phosphorus (P)	12185-10-3		0.749	mg	301	167
Ceramic	Ceramics / Glass	20.745	mg	supplier	Ceramic	Ceramic	proprietary		20.745	mg	1000000	4631
Die attach	Other Organic Materials	78.205	mg	supplier	soft solder	Lead(Pb)	7439-92-1	7a-Lead in high me	73.122	mg	935004	16322
				supplier	soft solder	Silver(Ag)	7440-22-4		1.172	mg	14986	262
				supplier	soft solder	Tin(Sn)	7440-31-5		3.911	mg	50010	873
Bonding wire	Aluminum & its alloys	22.818	mg	supplier	Bonding wire	Aluminium (Al)	7429-90-5		22.818	mg	1000000	5093
Encapsulation	Other Organic materials	1120.172	mg	supplier	Molding Compound	Silica, vitreous	60676-86-0		851.331	mg	760000	190029
				supplier	Molding Compound	Phenol resin	9003-35-4		67.211	mg	60001	15002
				supplier	Molding Compound	Carbon black	1333-86-4		8.961	mg	8000	2000
				supplier	Molding Compound	Epoxy Cresol Novolak	29690-82-2		114.256	mg	102000	25504
				supplier	Molding Compound	Metal hydroxide	Proprietary		22.404	mg	20000	5001
				supplier	Molding Compound	Others	Proprietary		56.009	mg	50000	12502
Finishing	Other inorganic materials	29.061	mg	supplier	Connection coating	Tin(Sn)	7440-31-5		29.061	mg	1000000	6487