



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 *	2017-01-19
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

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
STTH1R02ZFY	BA7Z*V07F8AL	A	Z6IA	2017-01-19
Amount		UoM	Unit type	ST ECOPACK Grade
12.50		mg	Each	ECOPACK® 2

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	Copper Alloy		



Package Designator	Size	Nbr of instances	Shape	
SOT	3.6 - 1.6 - 0.98	2	flat	
Comment	Package: SOD123-FLAT NEP			

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	BA7Z*V07F8AL					
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	0.439	mg	supplier	die	Silicon (Si)	7440-21-3		0.419	mg	954442	33520
				supplier	metallization	Aluminium (Al)	7429-90-5		0.004	mg	9112	320
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	2276	80
				supplier	metallization	Nickel (Ni)	7440-02-0		0.003	mg	6834	240
				supplier	metallization	Gold (Au)	7440-57-5		0.003	mg	6834	240
				supplier	Passivation	Silicon Oxide	7631-86-9		0.004	mg	9112	320
				supplier	back side metallization	Gold (Au)	7440-57-5		0.001	mg	2278	80
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.004	mg	9112	320
				Lead Frame and Clip	Copper & its alloys	6.261	mg	Supplier	alloy	Copper (Cu)	7440-50-8	
Supplier	alloy	Iron (Fe)	7439-89-6						0.006	mg	959	480
Supplier	alloy	Phosphorus (P)	12185-10-3						0.002	mg	319	160
Soft Solder	Solder	0.663	mg	Supplier	Solder	Lead (Pb)	7439-92-1	7a-Lead in high me	0.630	mg	950226	50400
				Supplier	solder	Tin (Sn)	7440-31-5		0.033	mg	49774	2640
Encapsulation	Other Organic Materials	4.969	mg	Supplier	Mold Compound	Fused, Silica	60676-86-0		3.171	mg	638157	253680
				Supplier	Mold Compound	Aluminum hydroxide	21645-51-2		0.527	mg	106058	42160
				Supplier	Mold Compound	Epoxy resin	29690-82-2		0.829	mg	166834	66320
				Supplier	Mold Compound	Phenol resin	9003-35-4		0.427	mg	85933	34160
				Supplier	Mold Compound	Carbon black	1333-86-4		0.015	mg	3018	1200
Connection coating	Solder	0.168	mg	Supplier	Solder alloy	Tin (Sn)	7440-31-5		0.168	mg	1000000	13440