



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 *	2017-09-06
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
STPS1H100A	HNSR*Z24P81V	A	ZA41	2017-09-06
Amount		UoM	Unit type	ST ECOPACK Grade
70.00		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	
SMC	4.3-2.77-2	2	J bend	
Comment	Package: SMA			

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-12th January 2017				
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	HNSR*Z24P81V					
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	0.752	mg	supplier	die	Silicon (Si)	7440-21-3		0.639	mg	849734	9129
				supplier	metallization	Aluminium (Al)	7429-90-5		0.026	mg	34574	371
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	1330	14
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	1330	14
				supplier	metallization	Nickel (Ni)	7440-02-0		0.003	mg	3989	43
				supplier	Passivation	Silicon Oxide	7631-86-9		0.004	mg	5319	57
				supplier	back side metallization	Gold (Au)	7440-57-5		0.001	mg	1331	14
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.004	mg	5319	57
				supplier	polymer die coating	Durimide	proprietary		0.073	mg	97074	1043
Leadframe & Clip	Copper & its alloys	27.067	mg	supplier	alloy	Copper (Cu)	7440-50-8		27.054	mg	999520	386486
				supplier	alloy	Zinc (Zn)	7440-66-6		0.001	mg	37	14
				supplier	alloy	Iron (Fe)	7439-89-6		0.003	mg	110	43
				supplier	alloy	Iron Phosphide (Fe2P)	1310-43-6		0.009	mg	333	128
Soft solder	Other organic materials	2.871	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	2.655	mg	924765	37929
				supplier	solder	Tin (Sn)	7440-31-5		0.144	mg	50157	2057
				supplier	solder	Silver (Ag)	7440-22-4		0.072	mg	25078	1029
encapsulation	Other organic materials	38.664	mg	supplier	mold compound	Amorphous silica	7631-86-9		26.554	mg	686789	379343
				supplier	mold compound	Quartz	14808-60-7		9.673	mg	250181	138186
				supplier	mold compound	Phenol resin	9003-35-4		2.321	mg	60030	33157
				supplier	mold compound	carbon black	1333-86-4		0.116	mg	3000	1657
connections coating	Solder	0.646	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.646	mg	1000000	9229