



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 *	2016-07-15
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

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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
STPS1045B-TR	HWDP*Z03S11Y	A	Z4XA	2016-07-15
Amount		UoM	Unit type	ST ECOPACK Grade
320.00		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	
SIP	6.5,6.1,2.3	3	gull wing	
Comment	Package: TO 252 DPAK			

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	HWDP*Z03S11Y					
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	4.025	mg	supplier	die	Silicon (Si)	7440-21-3		3.421	mg	849938	10691
				supplier	metallization	Aluminium (Al)	7429-90-5		0.142	mg	35280	444
				supplier	metallization	Titanium (Ti)	7440-32-6		0.003	mg	745	9
				supplier	metallization	Tungsten (W)	7440-33-7		0.005	mg	1242	16
				supplier	metallization	Nickel (Ni)	7440-02-0		0.015	mg	3727	47
				supplier	Passivation	Silicon Oxide	7631-86-9		0.021	mg	5217	66
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.002	mg	497	6
				supplier	back side metallization	Gold (Au)	7440-57-5		0.005	mg	1242	16
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.023	mg	5714	72
				supplier	polymer die coating	Durimide	proprietary		0.388	mg	96398	1213
				supplier	alloy	Copper(CU)	7440-50-8		179.141	mg	998222	559816
				supplier	alloy	Tin(Sn)	7440-31-5		0.215	mg	1198	672
				Soft solder	Solder	1.801	mg	supplier	alloy	Nickel	7440-02-0	
supplier	solder	Tin(Sn)	7440-31-5						0.036	mg	19989	113
supplier	solder	Silver(Ag)	7440-22-4						0.046	mg	25541	141
supplier	solder	Lead (Pb)	7439-92-1					7a-Lead in high me	1.719	mg	954470	5372
Bonding wire	Other inorganic materials	0.871	mg	supplier	wire	Aluminium(Al)	84195-93-7		0.871	mg	1000000	2722
Encapsulation	Other Organic Materials	131.088	mg	supplier	mold compound	Silica, vitreous	60676-86-0		117.651	mg	897496	367659
				supplier	mold compound	Epoxy resin	25068-38-6		9.176	mg	69999	28675
				supplier	mold compound	Phenol resin	29690-82-2		3.932	mg	29995	12288
				supplier	mold compound	carbon black	1333-86-4		0.329	mg	2510	1028
Finishing	Solder	2.755	mg	supplier	solder alloy	Tin(Sn)	7440-31-5		2.755	mg	1000000	8609