



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 *	2016-11-07
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	<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
STPS8H100G-TR	HWD2*Z09P01V	A	Z4XA	2016-11-07
Amount		UoM	Unit type	ST ECOPACK Grade
1380.00		mg	Each	ECOPACK® 2

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		
1	245	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	Tin (Sn), matte	Copper Alloy		



Package Designator	Size	Nbr of instances	Shape	
SIP	10.2X9.15X4.5	2	gull wing	
Comment	Package: D2PAK			

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	HWD2*Z09P01V					
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	1.633	mg	supplier	die	Silicon (Si)	7440-21-3		1.334	mg	816901	967
				supplier	metallization	Aluminium (Al)	7429-90-5		0.221	mg	135334	160
				supplier	metallization	Titanium (Ti)	7440-32-6		0.005	mg	3062	4
				supplier	metallization	Tungsten (W)	7440-33-7		0.008	mg	4899	6
				supplier	metallization	Nickel (Ni)	7440-02-0		0.024	mg	14697	17
				supplier	Passivation	Silicon Oxide	7631-86-9		0.033	mg	20208	24
				supplier	back side metallization	Gold (Au)	7440-57-5		0.008	mg	4899	6
				supplier	alloy	Copper(Cu)	7440-50-8		785.478	mg	998204	569187
Leadframe	Copper & its alloys	786.891	mg	supplier	alloy	Iron (Fe)	7439-89-6		0.865	mg	1099	627
				supplier	alloy	Silicon(Si)	7440-21-3		0.157	mg	200	114
				supplier	metallization	Nickel (Ni)	7440-02-0		0.391	mg	497	283
				supplier	Solder	Silver(Ag)	7440-22-4		0.098	mg	24654	71
Die attach	Solder	3.975	mg	JIG R	solder	Lead(Pb)	7439-92-1	7a-Lead in high me	3.798	mg	955472	2752
				supplier	solder	Tin(Sn)	7440-31-5		0.079	mg	19874	57
Bonding wire	Other inorganic materials	1.049	mg	supplier	wire	Aluminium (Al)	7429-90-5		1.049	mg	1000000	760
Encapsulation	Other Organic Materials	579.281	mg	supplier	Mold compound	silica	60676-86-0		521.894	mg	900934	378184
				supplier	Mold compound	epoxy resin	25068-38-6		41.157	mg	71048	29824
				supplier	Mold compound	phenolic resin	29690-82-2		14.493	mg	25019	10502
				supplier	Mold compound	mixed siloxanes	Proprietary		1.158	mg	1999	839
				supplier	Mold compound	pigment	1333-86-4		0.579	mg	1000	420
Finishing	Solder	7.171	mg	supplier	Connection coating	Tin(Sn)	7440-31-5		7.171	mg	1000000	5196