



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 *	2019-05-14
Company Unique ID	NL 008751171801		
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Contact Phone *	Refer to Supplier Comment section	Contact Email *	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
STPS10L25G-TR	HWD2*Z46Q01Q	A	994X	2019-05-14
	Amount	UoM	Unit type	ST ECOPACK Grade
	1380.00	mg	Each	ECOPACK2
	Comment	ECOPACK2 is STMicroelectronics trade name for ROHS compliant device without Brominated and Chlorinated compound (900ppm) and without Antimony oxide flame retardant (in each organic material)		

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

Package Designator	Size	Nbr of instances	Shape	
SIP	10.2-9.15-4.5	2	gull wing	
Comment	D2PAK			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-March 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
Exemption Id.	Description
7a	Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead)

QueryList : ELV directive : 2000/53/EC amended 2017/2096 _November 2017	
Query	Response
1 - Product(s) meets EU ELV requirements without any exemptions	FALSE
2 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	TRUE
Exemption Id.	Description
8e	Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead)

QueryList : California Prop65 list, dated 8th March 2019			
Query			Response
1 - The product does not contain identified substance from California Prop 65 List, no exposure to consumers is foreseen			FALSE
2 - The product is containing below substance(s) from California Prop 65 List, no exposure to consumers is foreseen			TRUE
Substance	amount in product (mg)	Application	ppm in product
Nickel	1.02	Die - Leadframe	736
Lead	6.35	Soft solder	4604

QueryList : REACH-15th January 2019				
Query				Response
1 - Product(s) does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH				FALSE
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product
Lead	1000 ppm	6.35	Soft solder	4604
2 - Product(s) does not contain REACH Substances Of Very High Concern in any Embedded article nor Homogeneous Material above the limits per the definition within REACH				FALSE
CategoryLevel_Name	CategoryLevel_Threshold	Amount in Embedded Article / Homogeneous Material (mg)	Application - Article / Homogeneous Material	ppm in Article /Homogeneous Material
Lead	1000 ppm	6.35	Soft solder	955058

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	HWD2*Z46Q01Q					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	M-011 Other inorganic materials	7.506	mg	supplier	die	Silicon (Si)	7440-21-3		7.062	mg	940847	5117
				supplier	metallization	Aluminium (Al)	7429-90-5		0.292	mg	38902	212
				supplier	metallization	Nickel (Ni)	7440-02-0		0.032	mg	4263	23
				supplier	metallization	Titanium (Ti)	7440-32-6		0.006	mg	799	4
				supplier	metallization	Tungsten (W)	7440-33-7		0.010	mg	1332	7
				supplier	Passivation	Silicon Oxide	7631-86-9		0.043	mg	5730	33
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.003	mg	400	2
				supplier	back side metallization	Gold (Au)	7440-57-5		0.010	mg	1332	7
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.048	mg	6395	35
				Leadframe	M-004 Copper and its alloys	779.484	mg	supplier	alloy	Copper (Cu)	7440-50-8	
supplier	alloy	Iron (Fe)	7439-89-6						0.779	mg	999	564
supplier	alloy	Iron Phosphide (FeP)	26508-33-8						0.234	mg	300	170
supplier	metallization	Nickel (Ni)	7440-02-0						0.935	mg	1200	678
Soft solder	Solder	6.653	mg	SVHC	solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	6.354	mg	955058	4604
				supplier	solder	Silver (Ag)	7440-22-4		0.166	mg	24951	120
				supplier	solder	Tin (Sn)	7440-31-5		0.133	mg	19991	96
Bonding wires	M-011 Other inorganic materials	5.144	mg	supplier	wire	Aluminium (Al)	7429-90-5		5.144	mg	1000000	3728
				supplier	mol	Carbon black	1333-86-4		1.447	mg	2500	1049
Encapsulation	M-011 Other inorganic materials	578.724	mg	supplier	mold compound	Silica, vitreous	60676-86-0		519.404	mg	897499	376380
				supplier	mold compound	Epoxy resin	25068-38-6		40.511	mg	70001	29356
				supplier	mold compound	Phenol resin	29690-82-2		17.362	mg	30000	12581
				supplier	mold compound	carbon black	1333-86-4		1.447	mg	2500	1049
Connections coating	Solder	2.489	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		2.489	mg	1000000	1804