



Materials Declaration Form

IPC	1752	Version	2
Form Type *	Distribute		
Sectionals *	Material Info Manufacturing Info	Subsectionals *	A-D

** : Required Field*

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2020-04-28
Company Unique ID	NL 008751171B01		
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 *	Giovanni Giacopello	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
STPS160U	HNZJ*Z25M81V	A	9941	2020-04-28
	Amount	UoM	Unit type	ST ECOPACK Grade
	107	mg	Each	ECOPACK® 2
Comment	ECOPACK® 2 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		
1	260	3		
Bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy		



Package Designator	Size	Nbr of instances	Shape	
SOJ	4.50X2.16X3.68	2	J bend	
Comment	Package: SMB CLIP (SOD 6 NEW)			

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 3rd January 2020			
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	0.01	die	112
Lead	2.33	Soft solder	21785

QueryList : REACH-16th January 2020				
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	2.33	Soft solder	21785
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	2.33	Soft solder	924633

Material Composition Declaration :						Mfr Item Name	HNZJ*Z25M81V					
note : Substance present with less 0.001mg will not be declared in this document												
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	1.144	mg	supplier	die	Silicon (Si)	7440-21-3		1.086	mg	949301	10150
				supplier	metallization	Aluminium (Al)	7429-90-5		0.007	mg	6118	65
				supplier	metallization	Gold (Au)	7440-57-5		0.005	mg	4371	47
				supplier	passivation	Nickel (Ni)	7440-02-0		0.005	mg	4371	47
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	874	9
				supplier	metallization	Tungsten (W)	7440-33-7		0.002	mg	1748	19
				supplier	Passivation	Silicon Oxide	7631-86-9		0.007	mg	6119	65
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.001	mg	874	9
				supplier	back side metallization	Gold (Au)	7440-57-5		0.002	mg	1748	19
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.007	mg	6119	65
Leadframe & Clip	M-004 Copper and its alloys	44.345	mg	supplier	alloy	Durimide	Proprietary		0.021	mg	18357	196
				supplier	alloy	Copper (Cu)	7440-50-8		44.324	mg	999526	414243
				supplier	alloy	Iron (Fe)	7439-89-6		0.004	mg	90	37
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.015	mg	338	140
Soft solder	Solder	2.521	mg	SVHC	solder	Zinc (Zn)	7440-66-6		0.002	mg	46	20
				supplier	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	2.331	mg	924633	21785
				supplier	solder	Silver (Ag)	7440-22-4		0.063	mg	24990	589
Encapsulation	M-011 Other inorganic materials	57.971	mg	supplier	solder	Tin (Sn)	7440-31-5		0.127	mg	50377	1187
				supplier	mold compound	silica fused	7631-86-9		42.896	mg	739956	400897
				supplier	mold compound	silica quartz	14808-60-7		11.594	mg	199997	108355
				supplier	mold compound	phenolic resin	9003-35-4		2.900	mg	50025	27103
Connections coating	Solder	1.019	mg	supplier	mold compound	carbon black	1333-86-4		0.581	mg	10022	5430
				supplier	solder alloy	Tin (Sn)	7440-31-5		1.019	mg	1000000	9523