



## Materials Declaration Form

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

\*: Required Field

Supplier Information			
<b>Company Name *</b>	<b>STMicroelectronics</b>	<b>Response Date *</b>	<b>2018-01-26</b>
<b>Contact Name *</b>	Refer to Supplier Comment section	<b>Contact Email *</b>	Refer to Supplier Comment section
<b>Contact Phone *</b>	Refer to Supplier Comment section	<b>Authorized Representative *</b>	Refer to Supplier Comment section
<b>Authorized Representative *</b>	<b>Rossana Bonaccorso</b>	<b>Representative Title</b>	<b>ADG MD CHAMPION</b>
<b>Representative Phone *</b>	Refer to Supplier Comment section	<b>Representative Email *</b>	Refer to Supplier Comment section
<b>Supplier Comment</b>	Online Technical Support - STMicroelectronics : <a href="http://www.st.com/web/en/support/support.html">http://www.st.com/web/en/support/support.html</a>		

**Uncertainty Statement**


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Legal Statement	
<b>Supplier Acceptance *</b>	<b>Legal Declaration *</b>
<b>true</b>	<b>Standard</b>

**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
STPSC2H12B-TR1	78TJ*HC041T7	A	Z45A	2018-01-26
	Amount	UoM	Unit type	ST ECOPACK Grade
	386	mg	Each	ECOPACK® 1

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
1	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SIP	6.5 - 6.1 - 2.3	3	gull wing	
Comment	Package: DPAK HV 2 LEADS			

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
Exemption Id.	Description
7a	Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead)

QueryList : California Prop65 list, dated 15th December 2017			
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	1.47	Die / Leadframe	3819
Lead	2.91	Soft solder	7534
Antimony trioxide	2.12	Mold compound	5492

QueryList : REACH-15th January 2018				
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
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				true
CategoryLevel_Name	CategoryLevel_Threshold	Amount in Embedded Article / Homogeneous Material (mg)	Application - Article / Homogeneous Material	ppm in Article /Homogeneous Material

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	78TJ*HC0417					
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	1.247	mg	supplier	die	Silicium carbide	409-21-2		1.179	mg	945469	3054
				supplier	metallization	Aluminium (Al)	7429-90-5		0.013	mg	10425	34
				supplier	metallization	Gold (Au)	7440-57-5		0.002	mg	1604	5
				supplier	passivation	Nickel (Ni)	7440-02-0		0.011	mg	8821	28
				supplier	metallization	Silver (Ag)	7440-22-4		0.023	mg	18444	60
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	802	3
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.001	mg	802	3
				supplier	back side metallization	Gold (Au)	7440-57-5		0.002	mg	1604	5
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.009	mg	7217	23
				supplier	polymer die coating	PIXL Gamma-butyrolactone	96-48-0		0.006	mg	4812	16
Leadframe	Copper & its alloys	202.470	mg	supplier	alloy	Copper (Cu)	7440-50-8		200.747	mg	991490	520070
				supplier	alloy	Iron (Fe)	7439-89-6		0.201	mg	993	521
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.060	mg	296	155
				supplier	metallization	Nickel (Ni)	7440-02-0		1.454	mg	7181	3767
				supplier	metallization	Phosphorus (P)	12185-10-3		0.008	mg	40	21
Soft solder	Solder	3.044	mg	JIG R	solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	2.908	mg	955322	7534
				supplier	solder	Silver (Ag)	7440-22-4		0.076	mg	24967	197
				supplier	solder	Tin (Sn)	7440-31-5		0.060	mg	19711	155
				supplier	wire	Aluminium (Al)	7429-90-5		0.975	mg	1000000	2526
Encapsulation	Other Organic Materials	176.997	mg	supplier	mold compound	Silica, vitreous	60676-86-0		141.599	mg	800008	366837
				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		12.390	mg	70000	32097
				supplier	mold compound	Phenol resin	9003-35-4		7.080	mg	40001	18342
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		10.620	mg	60001	27513
				supplier	mold compound	Antimony Trioxide	1309-64-4		2.123	mg	11995	5500
				JIG I	mold compound	Brominated Epoxy Resin	40039-93-8		2.654	mg	14995	6876
				supplier	mold compound	Carbon black	1333-86-4		0.531	mg	3000	1376
Connections coating	Solder	1.267	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.267	mg	1000000	3282