



Materials Declaration Form

IPC	1752	Version	2
Form Type *	Distribute		
Sectionals *	Material Info Manufacturing Info	Subsectionals *	A-D
<i>* : Required Field</i>			

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2018-01-26
Contact Name *	Refer to Supplier Comment section	Contact Email *	Refer to Supplier Comment section
Contact Phone *	Refer to Supplier Comment section	Authorized Representative *	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
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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
STPSC5H12B-TR1	78TJ*HC051T7	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	225	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	1.49	Die / Leadframe	3858
Lead	2.90	Soft solder	7510
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*HC0517					
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	2.447	mg	supplier	die	Silicium carbide	409-21-2		2.316	mg	946465	6000
				supplier	metallization	Aluminium (Al)	7429-90-5		0.026	mg	10625	67
				supplier	metallization	Gold (Au)	7440-57-5		0.004	mg	1635	10
				supplier	passivation	Nickel (Ni)	7440-02-0		0.021	mg	8582	54
				supplier	metallization	Silver (Ag)	7440-22-4		0.044	mg	17981	114
				supplier	metallization	Titanium (Ti)	7440-32-6		0.002	mg	817	5
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.001	mg	409	3
				supplier	back side metallization	Gold (Au)	7440-57-5		0.004	mg	1635	10
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.018	mg	7356	47
				supplier	polymer die coating	PIXL Gamma-butyrolactone	96-48-0		0.011	mg	4495	28
				supplier	alloy	Copper (Cu)	7440-50-8		200.121	mg	991483	518448
				supplier	alloy	Iron (Fe)	7439-89-6		0.201	mg	996	521
Leadframe	Copper & its alloys	201.840	mg	supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.060	mg	297	155
				supplier	metallization	Nickel (Ni)	7440-02-0		1.450	mg	7184	3756
				supplier	metallization	Phosphorus (P)	12185-10-3		0.008	mg	40	21
				supplier	alloy	Lead (Pb)	7439-92-1	7a-Lead in high mel	2.899	mg	955189	7510
Soft solder	Solder	3.035	mg	JIG R	solder	Silver (Ag)	7440-22-4		0.076	mg	25042	197
				supplier	solder	Tin (Sn)	7440-31-5		0.060	mg	19769	159
				supplier	wire	Aluminium (Al)	7429-90-5		0.971	mg	1000000	2516
Bonding wire	Other inorganic materials	0.971	mg	supplier	silica, vitreous	Silica, vitreous	60676-86-0		141.156	mg	800005	365689
				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		12.351	mg	70000	31997
				supplier	mold compound	Phenol resin	9003-35-4		7.058	mg	40001	18285
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		10.587	mg	60002	27427
				supplier	mold compound	Antimony Trioxide	1309-64-4		2.117	mg	11998	5484
				JIG I	mold compound	Brominated Epoxy Resin	40039-93-8		2.646	mg	14996	6855
Encapsulation	Other Organic Materials	176.444	mg	supplier	mold compound	Carbon black	1333-86-4		0.529	mg	2998	1370
				supplier	solder alloy	Tin (Sn)	7440-31-5		1.263	mg	1000000	3272
Connections coating	Solder	1.263	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.263	mg	1000000	3272