



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 *	2019-04-29
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
STPS41H100CR	HTI7*Z15P02V	A	3068	2019-04-29
	Amount	UoM	Unit type	ST ECOPACK Grade
	1500.00	mg	Each	ECOPACK2
	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		 life.augmented
NA	NA	NA		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NA	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SIP	4.5-10.2-10.55	2	Through-hole	
Comment	I2PAK			

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 23rd November 2018			
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	0.27	Die - Leadframe	180
Lead	14.19	Soft solder	9458

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	14.19	Soft solder	9458
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	14.19	Soft solder	955032

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	HT17*Z15P02V				6000000.0	999998.0
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	17.082	mg	supplier	die	Silicon (Si)	7440-21-3		16.067	mg	940581	10711
				supplier	metallization	Aluminium (Al)	7429-90-5		0.665	mg	38930	443
				supplier	metallization	Nickel (Ni)	7440-02-0		0.072	mg	4215	48
				supplier	metallization	Titanium (Ti)	7440-32-6		0.015	mg	878	10
				supplier	metallization	Tungsten (W)	7440-33-7		0.024	mg	1405	16
				supplier	Passivation	Silicon Oxide	7631-86-9		0.098	mg	5737	65
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.008	mg	468	5
				supplier	back side metallization	Gold (Au)	7440-57-5		0.023	mg	1346	15
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.110	mg	6440	73
				Leadframe	M-004 Copper and its alloys	839.702	mg	supplier	alloy	Copper (Cu)	7440-50-8	
supplier	alloy	Iron (Fe)	7439-89-6						0.840	mg	1000	560
supplier	alloy	Iron Phosphide (FeP)	26508-33-8						0.252	mg	301	168
supplier	metallization	Nickel (Ni)	7440-02-0						0.088	mg	105	59
supplier	metallization	Phosphorus (P)	7723-14-0						0.007	mg	8	5
Soft solder	Solder	14.855	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high met	14.187	mg	955032	9458
				supplier	solder	Silver (Ag)	7440-22-4		0.371	mg	24975	247
				supplier	solder	Tin (Sn)	7440-31-5		0.297	mg	19993	198
Bonding wires	M-011 Other inorganic materials	2.769	mg	supplier	wire	Aluminium (Al)	7429-90-5		2.769	mg	1000000	1846
Encapsulation	M-011 Other inorganic materials	621.687	mg	supplier	mold compound	Silica, vitreous	60676-86-0		540.868	mg	870000	360579
				supplier	mold compound	Epoxy resin	25068-38-6		62.169	mg	100000	41446
				supplier	mold compound	Phenol resin	29690-82-2		15.542	mg	25000	10361
				supplier	mold compound	Carbon Black	1333-86-4		3.108	mg	5000	2072
Connections coating	Solder	3.905	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		3.905	mg	1000000	2603