



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 *	2020-11-20
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 *	marianna grasso	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
STPS20S100CFP	HWUI*F57P02V	A	994X	2020-11-20
	Amount	UoM	Unit type	ST ECOPACK Grade
	1900	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		 life.augmented
Not Applicable	Not Applicable	3		
Bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy	CD00264137	

Package Designator	Size	Nbr of instances	Shape	
SIP	10.20,9.15,4.50	3	Through hole	
Comment	TO 220 ISOL FULL PACK 0.5 AB. MDF valid for CPs: STPS10H100CFP,STPS20S100CFP			

QueryList : RoHS Directive 2011/65/EU-July 2011 Annex II amended by Delegated 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 2020/363_ March 2020	
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	0.94	die - leadframe	497
Lead	3.46	soft solder	1822

QueryList : REACH-25th June 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	3.46	Soft solder	1822
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	3.461	Soft solder	954759

Responsible metals sourcing	
Query	Response
The component is containing at least one of the following metals : Cobalt , Gold , Tantalum , Tin , Tungsten.	true
The following metals are present is the component :	Gold, Tin, Tungsten,
This product is in the scope of the responsible metals sourcing, its compliance is covered by our company processes .	

Material Composition Declaration :						Mfr Item Name	HWUI*F57P02V					
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	6.624	mg	supplier	die	Silicon(Si)	7440-21-3		6.345	mg	957879	3339
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.039	mg	5888	21
				supplier	metallisation	Gold(Au)	7440-57-5		0.037	mg	5586	19
				supplier	metallisation	Nicke(Ni)	7440-02-0		0.029	mg	4378	15
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.006	mg	906	3
				supplier	metallisation	Tungsten(W)	7440-33-7		0.009	mg	1359	5
				supplier	passivation	Silicon oxide	7631-86-9		0.039	mg	5888	21
				supplier	polymer coating	Durimide	proprietary		0.120	mg	18116	63
Leadframe	M-004 Copper and its alloys	606.171	mg	supplier	alloy & coating	Copper(Cu)	7440-50-8		604.469	mg	997192	318142
				supplier	alloy & coating	Nicke(Ni)	7440-02-0		0.915	mg	1509	482
				supplier	alloy & coating	Iron(Fe)	7439-89-6		0.605	mg	999	318
				supplier	alloy & coating	Iron Phosphide(FeP)	26508-33-8		0.182	mg	300	96
Soft solder	Solder	3.625	mg	SVHC	solder	Lead(Pb)	7439-92-1	7a-Lead in high melting temper	3.461	mg	954759	1822
				supplier	solder	Silver(Ag)	7440-22-4		0.091	mg	25103	48
				supplier	solder	Tin(Sn)	7440-31-5		0.073	mg	20138	38
Bonding wires	M-003 Aluminum and its alloys	5.472	mg	supplier	wire	Aluminium (Al)	7429-90-5		5.472	mg	1000000	2880
Encapsulation	M-011 Other inorganic materials	1272.242	mg	supplier	mold compound	Quartz	14808-60-7		1087.767	mg	855000	572509
				supplier	mold compound	Epoxy Cresol Novolac	29690-82-2		114.502	mg	90000	60264
				supplier	mold compound	Phenol resin	9003-35-4		63.612	mg	50000	33480
				supplier	mold compound	Carbon black	1333-86-4		6.361	mg	5000	3348
connections coating	Solder	5.866	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		5.866	mg	1000000	3087