



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 *	2022-11-04
Company Unique ID	NL 008751171B01		
Contact Name *	Refer to Supplier Comment section	Contact Email *	Refer to Supplier Comment section
Contact Phone *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	giovanni giacopello	Representative Title	ADG Material Declaration 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
TN4050HP-12L2Y	VPCH*P1B40CB	A	999V	2022-11-04
	Amount	UoM	Unit type	ST ECOPACK Grade
	2320	mg	Each	ECOPACK* 1
Comment	ECOPACK® or ECOPACK® 1 is STMicroelectronics trade name for ROHS compliant devices			

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, annealed	Copper Alloy	DM00740661	

Package Designator	Package Size	Nbr of instances	Shape	
DIP	14.00x11.80x3.50	9	Gull wing	
Comment	HU3PAK			

QueryList : RoHS Directive 2011/65/EU- 8 June 2011 – Annex II amended by Delegated Directive 2015/863 - 31 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
8(e)	8(e) - Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead)

QueryList : California Prop65 list, dated 17th Dec 2021			
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	13.019	die - leadframe	5612
Lead	9.942	soft solder	4285
Antimony trioxide	8.879	encapsulation	3827

QueryList : Chinese RoHS , references : SJT 11364 – 2014 and GBT 26572 – 2014				
Query				Response
1- Product(s) requires marking for the presence of restricted substances and must be marked with an Environmental Protection Use Period under China's Measures for Administration of the control of pollution by Electronic Information Products				true
2- Product(s) is eligible for marking with the e code under China's Measures for Administration of the control of pollution by Electronic Information Products				false
Hasardous substance				
Lead (Pb)	Cadmium (Cd)	Mercury (Hg)	Hexavalent Chromium (Cr VI)	PBB & PBDE
X	O	O	O	O
Soft solder				
Homogeneous Material(s) containing Lead				

QueryList : REACH-17 Jan 2022				
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	9.94	Soft solder	4285
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	9.94	Soft solder	955043

QueryList : 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 :	Tin,
This product is in the scope of the responsible metals sourcing, its compliance is covered by our company processes .	

QueryList : Korea Chemical Control Act_ 27 Dec 2017 update	
Query	Response
The Product does contain at least one of the substances listed in Chemical Control Act	true

China GB 33372-2020 Limit standard for volatile organic compounds content in adhesives - 4 March 2020 application date 1st December 2020	
Query	Response
The product contains adhesives identified under GB 33372	false

Stockholm Convention Persistent Organic Pollutants	
Query	Response
Product is compliant with Stockholm Convention Persistent Organic Pollutants Annex I	true

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	VPCH*P1840CB					
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	17.238	mg	supplier	die	Silicon(Si)	7440-21-3		16.405	mg	951677	7072
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.475	mg	27555	205
				supplier	passivation	Silicon oxide	7631-86-9		0.272	mg	15779	117
				supplier	polymer coating	Durimide	proprietary		0.086	mg	4989	37
				supplier		Copper (Cu)	7440-50-8		1515.643	mg	989517	653294
Leadframe	M-004 Copper and its alloys	1531.699	mg	supplier	alloy	Iron(Fe)	7439-89-6		2.278	mg	1487	982
				supplier	alloy	Phosphorus(P)	7723-14-0		0.759	mg	496	327
				supplier	alloy	Nickel (Ni)	7440-02-0		13.019	mg	8500	5612
				supplier	solder	Lead(Pb)	7439-92-1	7a-Lead in high melting temper	9.942	mg	955043	4285
Soft solder	Solder	10.410	mg	supplier	solder	Tin(Sn)	7440-31-5		0.208	mg	19981	90
				supplier	solder	Silver(Ag)	7440-22-4		0.260	mg	24976	112
				supplier	wire	Aluminium (Al)	7429-90-5		3.005	mg	1000000	1295
Bonding wires	M-003 Aluminum and its alloys	3.005	mg	supplier	wire	Aluminium (Al)	7429-90-5		0.235	mg	1000000	101
Bonding wires 2	M-003 Aluminum and its alloys	0.235	mg	supplier	wire	Aluminium (Al)	7429-90-5		0.235	mg	1000000	101
Encapsulation	M-011 Other inorganic materials	739.913	mg	supplier	mold compound	Silica vitreous	60676-86-0		608.948	mg	822999	262478
				supplier	mold compound	Epoxy Cresol Novolac	29690-82-2		51.794	mg	70000	22325
				supplier	mold compound	Phenol resin	9003-35-4		29.597	mg	40001	12757
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		22.197	mg	29999	9568
				supplier	mold compound	Antimony trioxide	1309-64-4		8.879	mg	12000	3827
				supplier	mold compound	Brominated Epoxy Resin	40039-93-8		14.798	mg	20000	6378
				supplier	mold compound	Carbon black	1333-86-4		3.700	mg	5001	1595
Connections coating	Solder	17.500	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		17.500	mg	1000000	7543