

Materials Declaration Form

IPC	1752	Version	2
Form Type *	Distribute		_
Sectionals *	Material Info	Subsectionals *	A-D
	Manufacturing Info		* : Required Field
Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2022-10-27
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 *	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.htr	nl	
disclaims all warranties, express or imp	lied related to this document and its contents, in	ncluding but not limited to implied	nts are provided on a strict 'as is' and 'as available' basis. STMicroelectronics warranties of completeness, truth, accuracy, merchantability, fitness for a f any kind which could arise, directly or indirectly, from the use or inability to
Legal Statement			
Supplier Acceptance *	true	Legal Declaratio	n * Standard
Legal Statement	that Supplier completes this form. Supplier ackr acknowledges that Supplier may have relied on verified such information. However, in situatio minimum, its suppliers have provided certificatio certification in this paragraph. If the Compan	nowledges that Company will rely or information provided by others in ns where Supplier has not indepe ons regarding their contributions to y and the Supplier enter into a v arranty rights and/or remedies provi	In is true and correct to the best of its knowledge and belief, as of the date In this certification in determining the compliance of its products. Company completing this form, and that Supplier may not have independently endently verified information provided by others, Supplier agrees that, at a the part(s), and those certifications are at least as comprehensive as the written agreement with respect to the identified part(s), the terms and ded as part of that agreement, will be the sole and exclusive source of the tion the Supplier provides in this form.

Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STPS3L60U	3NZJ*Z67Q81U	А	9941	2022-10-27
	Amount	UoM	Unit type	ST ECOPACK Grade
	98	mg	Each	ECOPACK [®] 2
Comment ECOPACK® 2 is STMicroelectronics trade name for ROHS compliant device without Brominated and Chlorinated compound (900ppm) and w Antimony oxide flame retardant (in each organic material)				

J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		
1	260	3		
Bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	life.augmented
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy	DM00660260	moradginomoa

Package Designator	Package Size	Nbr of instances	Shape	
SOJ	4.54x3.68x2.10	2	J bend	
Comment	SMB CLIP (SOD 6 NEW)			

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 v	- Product(s) meets EU RoHS requirement without any exemptions false				
2 - Product(s) meets EU RoHS requirements	- 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 requir	ements and is not under exemptions	false			
Exemption Id.	tion Id. Description				
7a	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 w	ithout 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	Substance amount in product (mg) Application			
Nickel	0.017	die	173	
Lead	8061			

QueryList : Chinese RoHS , references : SJT 11364 – 2014 and GBT 26572 – 2014				
	Response			
1 - Product(s) requires marking for the p for Administration of the control of poll	true			
- 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
х	0	0	0	0
Soft solder				
Homogeneous Material(s) containing Lead				

QueryList : REACH-17 Jan 2022				
	Response			
1 - Product(s) does not contain REACH Subst	tances Of Very High Concern above the limits per the de	finition within REACH		false
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product
Lead	1000 ppm	0.79	Soft solder	8061
2 - Product(s) does not contain REACH S within REACH	ubstances Of Very High Concern in any Embedded	d article nor Homogeneous Material a	bove the limits per the definition	false
CategoryLevel_Name	CategoryLevel_Threshold	Amount in Embedded Article / Homogeneous Material (mg)	Application - Article / Homogeneous Material	ppm in Article /Homogeneous Material
Lead	1000 ppm	0.79	Soft solder	920746

ueryList : 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 .		

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			false	

hina GB 33372-2020 Limit standard for volatile organic compounds content in adhesives - 4 March 2020 pplication 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	3NZJ*Z67Q81U					
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	1.522	mg	supplier	die	Silicon(Si)	7440-21-3		1.448	mg	951380	14775
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.009	mg	5913	92
				supplier	metallisation	Gold(Au)	7440-57-5		0.008	mg	5256	82
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.017	mg	11170	173
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.002	mg	1314	20
				supplier	metallisation	Tungsten(W)	7440-33-7		0.002	mg	1314	20
				supplier	passivation	Silicon oxide	7631-86-9		0.009	mg	5913	92
				supplier	polymer coating	Durimide	proprietary		0.027	mg	17740	276
leadframe & clip	M-004 Copper and its alloys	39.118	mg	supplier	alloy	Copper(Cu)	7440-50-8		39.098	mg	999489	398959
				supplier	alloy	Iron(Fe)	7439-89-6		0.004	mg	102	41
				supplier	alloy	Phosphorus metal	7723-14-0		0.014	mg	358	143
				supplier	alloy	Zinc(Zn)	7440-66-6		0.002	mg	51	20
Soft solder	Solder	0.858	mg	SVHC	solder	Lead(Pb)	7439-92-1	7a-Lead in high melting temper	0.790	mg	920745	8061
				supplier	solder	Tin(Sn)	7440-31-5		0.043	mg	50117	439
				supplier	solder	Silver(Ag)	7440-22-4		0.021	mg	24476	214
				supplier	solder	dry flux residue	proprietary		0.004	mg	4662	41
Encapsulation	M-011 Other inorganic materials	54.769	mg	supplier	mold compound	Amorphous silica	60676-86-0		40.802	mg	744982	416347
				supplier	mold compound	quartz	14808-60-7		0.548	mg	10006	5592
				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		8.215	mg	149994	83827
				supplier	mold compound	Phenol resin	9003-35-4		4.382	mg	80009	44714
				supplier	mold compound	metal hydroxide	proprietary		0.548	mg	10006	5592
				supplier	mold compound	phosphorus compound	un-defined		0.055	mg	1004	561
				supplier	mold compound	Carbon black	1333-86-4		0.219	mg	3999	2235
Connections coating	Solder	1.733	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.733	mg	1000000	17684