



Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2019-02-15
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 Giapello	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
STPA008-QIX	H8QI*U208AB1	A	3068	2019-02-15
	Amount	UoM	Unit type	ST ECOPACK Grade
	7300	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	Not Applicable		
Bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
ZIP	15.7 - 29.23 - 4.5	25	Through-hole	
Comment	Package: Flexiwatt 25 Lds Hrztl Bending			

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 26th October 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	9.26	Die - Leadframe	1268
Lead	11.34	Soft solder	1554

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	11.34	Soft solder	1554
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	11.34	Soft solder	974987

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	H8QI*U208AB1					
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	13.037	mg	supplier	die	Silicon (Si)	7440-21-3		12.348	mg	947150	1692
				supplier	metallization	Aluminium (Al)	7429-90-5		0.127	mg	9742	17
				supplier	metallization	Tungsten (W)	7440-33-7		0.101	mg	7747	14
				supplier	Passivation	Silicon Nitride	12033-89-5		0.027	mg	2071	4
				supplier	Passivation	Silicon Oxide	7631-86-9		0.217	mg	16645	30
				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.010	mg	767	1
				supplier	back side metallization	Gold (Au)	7440-57-5		0.025	mg	1918	3
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.047	mg	3605	6
				supplier	back side metallization	Vanadium (V)	7440-62-2		0.002	mg	153	0
				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.133	mg	10202	18
Leadframe	M-004 Copper and its alloys	5500.177	mg	supplier	alloy	Copper (Cu)	7440-50-8		5477.879	mg	995946	750394
				supplier	alloy	Iron (Fe)	7439-89-6		2.523	mg	459	346
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		4.607	mg	838	631
				supplier	metallization	Nickel (Ni)	7440-02-0		9.210	mg	1674	1262
				supplier	metallization	Silver (Ag)	7440-22-4		5.958	mg	1083	816
Soft solder	Solder	11.634	mg	SVHC	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	11.343	mg	974987	1554
				supplier	solder	Silver (Ag)	7440-22-4		0.175	mg	15042	24
				supplier	solder	Tin (Sn)	7440-31-5		0.116	mg	9971	16
Bonding wires	M-004 Copper and its alloys	2.392	mg	supplier	wire	Copper (Cu)	7440-50-8		2.392	mg	1000000	328
Encapsulation	M-011 Other inorganic materials	1757.260	mg	supplier	mold compound	Amorphous silica	7631-86-9		1493.670	mg	850000	204612
				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		105.436	mg	60000	14443
				supplier	mold compound	Phenol resin	proprietary		70.290	mg	40000	9629
				supplier	mold compound	Mercaptopropyl trimethoxysilane	4420-74-0		5.272	mg	3000	723
				supplier	mold compound	Other	Proprietary		65.019	mg	37000	8907
				supplier	mold compound	carbon black	1333-86-4		12.301	mg	7000	1685
connections coating	Solder	15.500	mg	supplier	mold compound	Bismuth (Bi)	7440-69-9		5.272	mg	3000	722
				supplier	solder alloy	Tin (Sn)	7440-31-5		15.500	mg	1000000	2123