



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 *	2017-09-14
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Giovanni Giacobello	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
STPS5L60	HNBH*Z72Q81U	A	ZA41	2017-09-14
Amount	UoM	Unit type	ST ECOPACK Grade	
1120.00	mg	Each	ECOPACK® 2	

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	
NAC	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
AXL	9X16X5.2	2	Through-hole	
Comment	Package: DO201AD			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-April 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
5 - Product(s) is obsolete, no information is available	false
6 - Product(s) is unknown, no information is available	false
Exemption Id.	Description
7a	Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead)

Query : California Prop65 list, dated 27th January 2017			
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	0.04	die	35
Lead	4.61	solder	4117

QueryList : REACH-12th January 2017				
Query				Response
1 - Product(s) does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH				true
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product

Material Composition Declaration						Mfr Item Name	HNBH*Z72Q81U					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	Other inorganic materials	7.139	mg	supplier	die	Silicon (Si)	7440-21-3		6.914	mg	968483	6173
				supplier	metallization	Aluminium (Al)	7429-90-5		0.046	mg	6443	41
				supplier	metallization	Copper (Cu)	7440-50-8		0.001	mg	140	1
				supplier	metallization	Titanium (Ti)	7440-32-6		0.003	mg	420	3
				supplier	metallization	Tungsten (W)	7440-33-7		0.005	mg	700	4
				supplier	metallization	Nickel (Ni)	7440-02-0		0.015	mg	2101	13
				supplier	metallization	Gold (Au)	7440-57-5		0.015	mg	2101	13
				supplier	Passivation	Silicon Oxide	7631-86-9		0.044	mg	6163	39
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.002	mg	280	2
				supplier	back side metallization	Gold (Au)	7440-57-5		0.005	mg	700	4
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.024	mg	3364	21
				supplier	polymer die coating	Durimide	proprietary		0.065	mg	9105	58
				Leadframe	Copper & its alloys	925.421	mg	supplier	alloy	Copper (Cu)	7440-50-8	
supplier	alloy	Zinc (Zn)	7440-66-6						0.037	mg	40	33
supplier	alloy	Iron (Fe)	7439-89-6						0.093	mg	100	83
supplier	alloy	Iron Phosphide (FeP)	26508-33-8						0.315	mg	341	281
supplier	soft solder	Silver (Ag)	7440-22-4						0.124	mg	24875	111
Soft solder	Solder	4.985	mg	supplier	soft solder	Tin (Sn)	7440-31-5		0.250	mg	50150	223
				JIG - R	soft solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	4.611	mg	924975	4117
				supplier	soft solder	Iron (Fe)	7439-89-6		0.093	mg	100	83
Encapsulation	Other inorganic materials	171.511	mg	supplier	mold compound	Silica fused	7631-86-9		68.604	mg	399998	61254
				supplier	Molding Compound	silica quartz	14808-60-7		98.620	mg	575007	88054
				supplier	Molding Compound	phenolic resin	9003-35-4		3.430	mg	19999	3063
				supplier	Molding Compound	carbon black	1333-86-4		0.857	mg	4996	767
Connections coating	Solder	10.944	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		10.944	mg	1000000	9771