



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 *	2016-06-09
Contact Name *	Refer to "Supplier Comment" section	Contact Title	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 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
1N5817	HNPP*Z24Q81Q	A	ZA41	2016-06-09
Amount	UoM	Unit type	ST ECOPACK Grade	
340.00	mg	Each	ECOPACK® 2	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
NAC	NAC	NAC		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable ; if coating is used c	Tin (Sn), matte, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
AXL	5X7.5X2.37	2	Through-hole	
Comment	Package: DO 41 PLASTIC			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
Product(s) meets EU RoHS requirement without any exemptions	false
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
Product(s) meets EU RoHS requirements by application of the selected exemption(s)	true
Product(s) does not meet EU RoHS requirements and is not under exemptions	false
Product(s) is obsolete, no information is available	false
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)

QueryList : REACH-17th December 2015				
Query				Response
The product 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	HNPP*Z24Q81Q						
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)	
Silicon die	Other inorganic materials	0.83	mg	supplier	die	Silicon (Si)	7440-21-3		0.789	mg	950602	2321	
Silicon die				supplier	metallization	Aluminium (Al)	7429-90-5		0.005	mg	6024	15	
Silicon die				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	1205	3	
Silicon die				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	1205	3	
Silicon die				supplier	metallization	Nickel (Ni)	7440-02-0		0.004	mg	4819	12	
Silicon die				supplier	metallization	Gold (Au)	7440-57-5		0.004	mg	4819	12	
Silicon die				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.005	mg	6024	15	
Silicon die				supplier	back side metallization	Gold (Au)	7440-57-5		0.001	mg	1205	3	
Silicon die				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.005	mg	6024	15	
Silicon die				supplier	polymer die coating	Durimide	proprietary		0.015	mg	18072	44	
Leadframe	Copper & its alloys	249.088	mg	supplier	alloy	Copper (Cu)	7440-50-8		248.963	mg	999498	732244	
Leadframe				supplier	alloy	Zinc (Zn)	7440-66-6		0.01	mg	40	29	
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.025	mg	100	74	
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.09	mg	361	265	
Soft solder	solder	2.2	mg	JIG-R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	2.035	mg	925000	5985	
Soft solder				supplier	solder	Tin (Sn)	7440-31-5		0.055	mg	25000	162	
Soft solder				supplier	solder	Silver (Ag)	7440-22-4		0.11	mg	50000	324	
encapsulation	Other inorganic materials	84.403	mg	supplier	Moulding Compound	Silica fused(SiO2)	7631-86-9		30.388	mg	360035	89376	
encapsulation				supplier	Moulding Compound	silica quartz	14808-60-7		48.951	mg	579968	143974	
encapsulation				supplier	Moulding Compound	phenolic resin	9003-35-4		4.22	mg	49998	12412	
encapsulation				supplier	Moulding Compound	carbon black	1333-86-4		0.844	mg	10000	2482	
connections coating	Solder	3.479	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		3.479	mg	1000000	10232	