



## Materials Declaration Form

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

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2018-02-28
<b>Company Unique ID</b>	NL 008751171801		
<b>Contact Name *</b>	Refer to Supplier Comment section		Refer to Supplier Comment section
<b>Contact Phone *</b>	Refer to Supplier Comment section	<b>Contact Email *</b>	Refer to Supplier Comment section
<b>Authorized Representative *</b>	Giovanni Giacobello	<b>Representative Title</b>	ADG MD CHAMPION
<b>Representative Phone *</b>	Refer to Supplier Comment section	<b>Representative Email *</b>	Refer to Supplier Comment section
<b>Supplier Comment</b>	Online Technical Support - STMicroelectronics : <a href="http://www.st.com/web/en/support/support.html">http://www.st.com/web/en/support/support.html</a>		

**Uncertainty Statement**

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**Legal Statement**

<b>Supplier Acceptance *</b>	true	<b>Legal Declaration *</b>	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
STTH2R02AFY	BA3E*H52F8AQ	A	Z6IA	2018-02-28
	Amount	UoM	Unit type	ST ECOPACK Grade
	26	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
1	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFF	1.75X4.7X0.98	N/A	flat	
Comment	Package: SOD128-FLAT NEP; MD valid for STTH2R02AFY			

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
Exemption Id.	Description		
7a	Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead)		

QueryList : California Prop65 list, dated 15th December 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	0.01	Die	492
Lead	2.61	Soft solder	98977

QueryList : REACH-15th January 2018				
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 : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	BA3E*H52F8AQ					
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	0.823	mg	supplier	die	Silicon (Si)	7440-21-3		0.788	mg	957473	29848
				supplier	metallization	Aluminium (Al)	7429-90-5		0.007	mg	8505	267
				supplier	metallization	Gold (Au)	7440-57-5		0.005	mg	6075	189
				supplier	passivation	Nickel (Ni)	7440-02-0		0.005	mg	6075	189
				supplier	Passivation	Silicon Oxide	7631-86-9		0.007	mg	8505	265
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.001	mg	1215	38
				supplier	back side metallization	Gold (Au)	7440-57-5		0.002	mg	2430	76
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.008	mg	9721	303
Leadframe	M-004 Copper and its alloys	9.807	mg	supplier	alloy	Copper (Cu)	7440-50-8		9.793	mg	998572	370947
				supplier	alloy	Iron (Fe)	7439-89-6		0.011	mg	1122	417
				supplier	alloy	Iron Phosphide (Fe2P)	1310-43-6		0.003	mg	306	114
Clip	M-011 Other inorganic materials	2.526	mg	supplier	alloy	Copper (Cu)	7440-50-8		2.463	mg	975059	93295
				supplier	alloy	Iron (Fe)	7439-89-6		0.059	mg	23357	2235
				supplier	alloy	Zinc (Zn)	7440-66-6		0.003	mg	1188	114
Soft solder	Solder	8.995	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	2.613	mg	290495	98977
				supplier	solder	Tin (Sn)	7440-31-5		0.137	mg	15231	5189
				supplier	solder	Silica	60676-86-0		6.245	mg	694275	236553
Encapsulation	M-011 Other inorganic materials	3.954	mg	supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		1.680	mg	424886	63636
				supplier	mold compound	Metal hydroxide	Proprietary		1.344	mg	339909	50909
				supplier	mold compound	Phenol resin	9003-35-4		0.896	mg	226606	33939
				supplier	mold compound	carbon black	1333-86-4		0.034	mg	8599	1288
connections coating	Solder	0.295	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.295	mg	1000000	11174