



## Materials Declaration Form

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

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2016-08-30
<b>Contact Name *</b>	Refer to Supplier Comment section		Refer to Supplier Comment section
<b>Authorized Representative *</b>	Giovanni Giacopello	<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
<b>Legal Statement</b>	<p>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.</p>		

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
VN5E006ASP-E	A2IY*VH22ACY	A	MUAR B/E	2016-08-30
Amount		UoM	Unit type	ST ECOPACK Grade
1140.00		mg	Each	ECOPACK2

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		
3	250	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	Tin (Sn), matte	Copper Alloy		



Package Designator	Size	Nbr of instances	Shape	
CHP	9.5-9.4-3.5	10	FLAT	
Comment	PowerSO-10			

QueryList : ROHS directive 2011/65/EU _ July 2011	
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)

QueryList : REACH-20th June 2016				
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	A2IY*VH2ZACY					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Dies	Other inorganic materials	10.319	mg	supplier	die	Silicon (Si)	7440-21-3		9.799	mg	949700	8596
				supplier	metallization	Titanium (Ti)	7440-32-6		0.269	mg	25974	235
				supplier	Passivation	Silicon Nitride	12033-89-5		0.049	mg	4749	43
				supplier	Passivation	Silicon Oxide	7631-86-9		0.131	mg	12696	115
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.004	mg	388	4
				supplier	back side metallization	Gold (Au)	7440-57-5		0.012	mg	1163	11
Leadframe	Copper & its alloys	632.781	mg	supplier	back side metallization	Nickel (Ni)	7440-02-0		0.055	mg	5330	48
				supplier	alloy	Copper (Cu)	7440-50-8		629.569	mg	994924	552254
				supplier	alloy	Iron (Fe)	7439-89-6		0.290	mg	458	254
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.530	mg	838	465
				supplier	metallization	Silver (Ag)	7440-22-4		2.392	mg	3780	2098
				supplier	tape	epoxy resin	Proprietary		0.518	mg	634027	454
Die attach	Other Organic Materials	0.817	mg	supplier	tape	polyolefin	9003-07-0		0.258	mg	315789	226
				supplier	tape	Diphenol Propane Diglycidyl Ether	1675-54-3		0.041	mg	50184	36
				supplier	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	2.110	mg	925033	1851
Soft solder	Solder	2.281	mg	JIG - R	solder	Indium (In)	7440-74-6		0.114	mg	49978	100
				supplier	solder	Silver (Ag)	7440-22-4		0.057	mg	24989	50
				supplier	wire	Gold (Au)	7440-57-5		0.389	mg	73730	341
Bonding wires	Other inorganic materials	5.276	mg	supplier	wire	Copper (Cu)	7440-50-8		0.002	mg	379	2
				supplier	wire	Palladium (Pd)	7440-05-3		0.001	mg	190	1
				supplier	wire	Aluminium (Al)	7429-90-5		4.884	mg	925701	4284
				supplier	mold compound	Silica, vitreous	60676-86-0		419.700	mg	864002	368158
Encapsulation	Other Organic Materials	485.763	mg	supplier	mold compound	Epoxy Resin	25068-38-6		36.432	mg	75000	31958
				supplier	mold compound	Phenol Resin	29690-82-2		24.288	mg	50000	21305
				supplier	mold compound	3-Mercaptopropyl trimethoxysilane	4420-74-0		2.429	mg	5000	2131
				supplier	mold compound	Quartz	14808-60-7		1.457	mg	2999	1278
				supplier	mold compound	Carbon black	1333-86-4		1.457	mg	2999	1278
Connections coating	Solder	2.763	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		2.763	mg	1000000	2424