



## Materials Declaration Form

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

Supplier Information			
<b>Company Name *</b>	<b>STMicroelectronics</b>	<b>Response Date *</b>	<b>2015-06-19</b>
<b>Contact Name *</b>	Refer to Supplier Comment section		Refer to Supplier Comment section
<b>Authorized Representative *</b>	Rossana Bonaccorso	<b>Representative Title</b>	IPD 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>	<b>true</b>	<b>Legal Declaration *</b>	<b>Standard</b>
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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
	7AVP*16DNNL1	A	SHENZHEN B/E	2015-06-19
Amount	UoM	Unit type	ST ECOPACK Grade	
1900	mg	Each	ECOPACK2	

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	
NAC	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SIP	10.2, 15.5, 4.5	3	THROUGH HOLE	
Comment	Package: TO 220 NI CLIP, MD valid for CP:TYN616RG			

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-17th December 2014				
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	7AVP*16DNNL1					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die or Dies (choose)	Other inorganic materials	9.166	mg	supplier	die	Silicon (Si)	7440-21-3		9.134	mg	996509	4807
				supplier	Passivation	Silicon Oxide	7631-86-9		0.032	mg	3491	17
Leadframe	Copper & its alloys	1253.004	mg	supplier	alloy	Copper (Cu)	7440-50-8		1251.751	mg	999000	658816
				supplier	alloy	CopperPhosphorous (CuP)	12517-41-8		1.253	mg	1000	659
Soft solder	Solder	7.560	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	6.993	mg	925000	3681
				supplier	solder	Silver (Ag)	7440-22-4		0.378	mg	50000	199
				supplier	solder	Tin (Sn)	7440-31-5		0.189	mg	25000	99
Encapsulation	Other Organic Materials	592.283	mg	supplier	mold compound	Silica, vitreous	60676-86-0		450.135	mg	760000	236913
				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		60.413	mg	102000	31796
				supplier	mold compound	Phenol resin	9003-35-4		35.537	mg	60000	18704
				supplier	mold compound	Others	Proprietary		29.614	mg	50000	15586
				supplier	mold compound	Metal hydroxide	Proprietary		11.846	mg	20001	6235
				supplier	mold compound	Carbon black	1333-86-4		4.738	mg	8000	2494
connections coating	Solder	6.362	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		6.362	mg	1000000	3348
Clip	Copper & its alloys	31.625	mg	supplier	alloy	Copper ( Cu)	7440-50-8		31.625	mg	1000000	16645