



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 *	2016-03-14
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Rossana Bonaccorso	Representative Title	IPD 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

While STMicroelectronics has endeavored to provide information which is accurate and up to date, this document and its contents are provided on a strict 'as is' and 'as available' basis. STMicroelectronics disclaims all warranties, express or implied related to this document and its contents, including but not limited to implied warranties of completeness, truth, accuracy, merchantability, fitness for a particular purpose and non-infringement. ST shall have no responsibility and assumes no liability for any cost, loss or damage of any kind which could arise, directly or indirectly, from the use or inability to use this document and/or its contents.

Legal Statement			
Supplier Acceptance *	true	Legal Declaration *	Standard
Legal Statement	<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
TYN612RG	7AVP*126HNC1	A	SHENZHEN B/E	2016-03-14
Amount		UoM	Unit type	ST ECOPACK Grade
1900.00		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	TO 220 NI CLIP			

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)
7c-I	Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound

QueryList : REACH-17th December 2015				
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*126HNC1									
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	4.530	mg	supplier	die	Silicon (Si)	7440-21-3		3.926	mg	866696	2067				
				supplier	metallization	Nickel (Ni)	7440-02-0		0.079	mg	17436	42				
				supplier	metallization	Gold (Au)	7440-57-5		0.015	mg	3311	8				
				supplier	Passivation	Silicon Oxide	7631-86-9		0.022	mg	4855	12				
				supplier	back side metallization	Gold (Au)	7440-57-5		0.005	mg	1104	3				
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.107	mg	23615	56				
				supplier	glass coating	Glass : Aluminium Oxide	1344-28-1		0.032	mg	7062	17				
				JIG - R	glass coating	Lead-Borate Glass	65997-18-4	7c-I-Electrical and e	0.344	mg	75921	181				
				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
JIG - R	solder	Lead (Pb)	7439-92-1					7a-Lead in high me	4.038	mg	925086	2125				
Soft solder	Solder	4.365	mg	supplier	solder	Silver (Ag)	7440-22-4		0.218	mg	49943	115				
				supplier	solder	Tin (Sn)	7440-31-5		0.109	mg	24971	57				
				supplier	mold compound	Silica, vitreous	60676-86-0		456.086	mg	759999	240045				
				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		61.212	mg	102001	32217				
Encapsulation	Other Organic Materials	600.114	mg	supplier	mold compound	Phenol resin	9003-35-4		36.007	mg	60000	18951				
				supplier	mold compound	Others	Proprietary		30.006	mg	50000	15793				
				supplier	mold compound	Metal hydroxide	21645-51-2		12.002	mg	20000	6317				
				supplier	mold compound	Carbon black	1333-86-4		4.801	mg	8000	2527				
				supplier	solder alloy	Tin (Sn)	7440-31-5		6.362	mg	1000000	3348				
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				